Validation Report
Land off Don Street, Middleton

Reference: 14-554-R8-3
Date: February 2025

REMEDIATION AND ENABLING WORKS VALIDATION

Land off Don Street
Middleton
Greater Manchester
M24 2DB

Prepared for:

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Report Ref: 14-554-R8-3
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1. INTRODUCTION

1.1. BACKGROUND

This report details the remediation and enabling works operations that Urban Regen undertook under the part-time supervision of E3P to facilitate the preparation of the low-rise residential development on land off Don Street, Middleton, Manchester, herein referred to as the site.

Kellen Homes appointed E3P as an independent Geo-Environmental Consultant for the site remediation, preparation/enabling, and validation works and the subsequent production of a suitably detailed report to ensure the satisfaction of the relevant planning conditions and geotechnical engineering requirements for Building Control, warranty providers and the future adoption of infrastructure by the Highways Authority and statutory service providers.

1.2. PROPOSED DEVELOPMENT

Kellen Homes intends to construct a low-rise residential development with associated gardens, estate roads and infrastructure. Drawing 14-554-002- (Appendix III) identifies the proposed development layout.

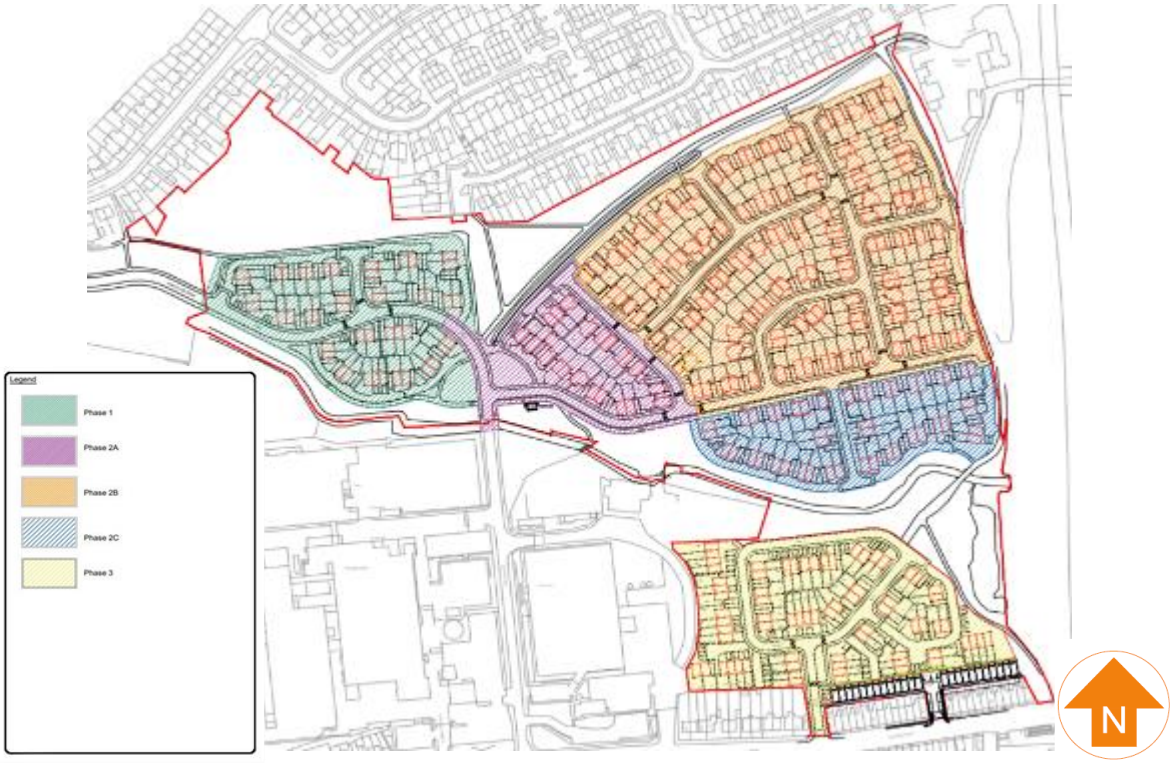
E3P has been provided with a draft planning layout (ref: 21/00744/FUL) detailing the proposed construction of 311 detached, semi-detached and terraced houses, with adopted estate roads and drainage infrastructure. A snapshot of the proposed development layout is indicated in Figure 1.1.

FIGURE 1.1 SNAPSHOT OF PROPOSED DEVELOPMENT



This report refers to Phases 1, 2A, 2B, 2C and 3 throughout, and Figure 1.2 shows the extent of the Phases on site.

FIGURE 1.2 SNAPSHOT OF PROPOSED DEVELOPMENT

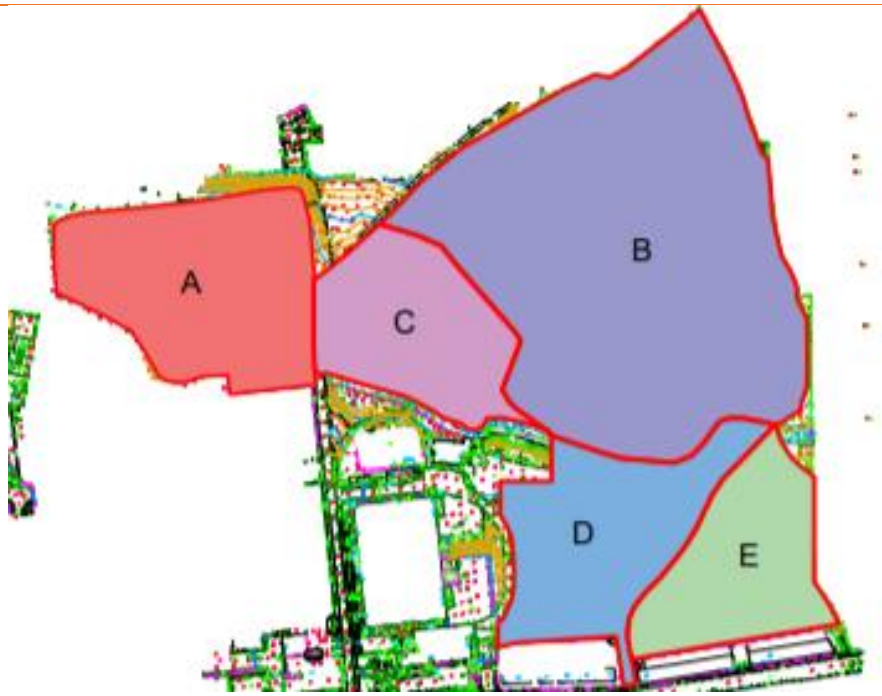


For ease, the site has been divided into the following 5 No. Discrete parcels in line with the previous report completed by Coopers in 2013. The parcels are:

- **Parcel A** - the former Rex Mill (Phase 1);
- **Parcel B** - former playing fields;
- **Parcel C** - apron between Rex Mill and former playing fields (Phase 2A);
- **Parcel D** - Wagon/trailer park, open ground and Hexpol car park (Phase 3); and
- **Parcel E** - Wooded area in the southeastern corner of the site (Phase 3).

A plan showing the defined parcels is presented in Figure 1.3.

FIGURE 1.3 SITE AREAS PLAN



1.3. SUMMARY OF PARTIES INVOLVED

Function/interest	Name of Party
Local Planning Authority	Rochdale Borough Council
Developer	Kellen Homes
Geoenvironmental Consultant	E3P
Main Contractor	Kellen Homes
Remediation/Enabling Works Contractor	Urban Regen
Human Health Regulator	Rochdale Borough Council
Controlled Waters and Waste Regulator	Environment Agency
Highways Adoption Authority	Rochdale Borough Council

1.4. PREVIOUS WORKS

The following previous phases of site investigation and assessment have been completed at the subject site:

- **REFA Consulting Engineers** – Ground Investigation Report. Report Reference: 05122, dated September 2006
- **Coopers** – Site Investigation Report. Report Reference: 5639si, dated 28th May 2013.
- **E3P Ltd** – Phase I & II Geoenvironmental Site Assessment Land off Don Street, Middleton Reference:14-554-R1-2 Date: December 2022
- **E3P Ltd** – Ground Gas Addendum Report Parcel A Don Street, Middleton Reference:14-554-R2-1 Date: December 2021
- **E3P Ltd** – Ground Gas Addendum Report Parcel D & E Don Street, Middleton Reference:14-554-R3-1 Date: December 2021
- **E3P Ltd** – Ground Gas Addendum Report Parcel B & C Don Street, Middleton Reference:14-554-R4-1 Date: December 2021
- **E3P Ltd** - Remediation & Enabling Works Strategy 14-554-R2 Rev 10, dated February 2023

Following the initial draft of the Remediation Strategy, E3P completed additional phases of intrusive investigation of the underlying coal seams. Drill and grout stabilisation of potential underground mine workings was required within Phase 1, 2A and 3; with stabilisation works undertaken by M&J Drilling in January and February 2023, under the supervision of E3P. The following E3P Reports outline the findings of supplementary works, required performance specifications for consolidation of abandoned workings, and mine workings stabilisation completion validation. They should be read in conjunction with this report.

- **E3P Ltd** – Supplementary Assessment Don Street, Middleton Reference:14-554-L5-2 Date: January 2023
- **E3P Ltd** – Performance Specification for Consolidation Of Abandoned Mine Workings, Reference: 14-554-R6-2, Date
- **E3P Ltd** – Mine Specification Completion Report Reference:14-554-R5-2 Date: June 2023

Following the completion of drill and grout works on site phased ground gas monitoring was undertaken in agreed locations with the EHO across Phase 1 (Parcel A). Phase 2A (Parcel C) and Phase 3 (Parcels D & E).

- **E3P Ltd** – Ground Gas Addendum Report (Post-Grouting), Parcel A, Don Street, Middleton Reference: 14-554-R5-1, Date October 2023
- **E3P Ltd** – Ground Gas Addendum Report (Post-Grouting), Parcel C, D & E , Don Street, Middleton Reference: 14-554-R4-1, Date May 2023 (PHASE 2A &3)

The above documents should be read in conjunction with this Validation Report.

2. SUMMARY OF REMEDIATION AND ENABLING WORKS OBJECTIVES

The proposed remediation activities were detailed within the E3P Remediation and Enabling Works Strategy (14-554-R2 Rev 10; dated February 2023) and supplementary supporting documents provided by E3P.

This report has been prepared to document the completion of all necessary land remediation and enabling works and to record the presence of any variation in ground conditions or previously unidentified sources of potential contamination, environmental impact, or potential nuisance to the wider environment.

The Remediation and Enabling Works elements are summarised below:

- RE-1 – Pre-commencement Supplementary Site Investigation
- RE-2 – Pre-commencement Regulatory Compliance
- RE-3 – Decommission of Historical Abstraction Wells
- RE-4 –Temporary De-watering from Excavations to Combined Sewer
- RE-5 – Assessment of On-site Bunds
- RE-6 – Environment and Nuisance Control
- RE-7 – Minimise Risk to Infrastructure and River Irk
- RE-8 – Identification, Isolation and Treatment of Invasive Plants
- RE-9 – Site Clearance Operations
- RE-10– River Corridor Watching Brief
- RE-11– Delineation of WS17
- RE-12– Recovery of Topsoil within Parcel B
- RE-13 – Delineation, Excavation and Treatment of Identified Asbestos Impact
- RE-14 – Delineation, Excavation, Treatment and Disposal of Potential Volatile Contaminants
- RE-15 – Speciation of Mercury
- RE-16 – Excavation, Breaking and Processing of All Above- and Below-Ground Structures
- RE-17 – Investigation of Potentially Impacted Soils
- RE-18 – Delineation, Excavation and Treatment of Infilled Historical Ponds and Streams
- RE-19 – Delineation, Excavation and Treatment of Former Historic Landfill Materials
- RE-20 – Removal of Deleterious Material
- RE-21 – Cut-And-Filling of MADE GROUND to Development Levels

- RE-22 – Placement and Compaction of Upfill Material to Facilitate Ground Improvement by VSC
- RE-23 – Construction of Temporary Working Platform
- RE-24 – Replacement of Materials, Geotechnical Engineering Requirements
- RE-25 – Preparation of Ground for Vibro-Stone Columns Within Tree Influence
- RE-26 – Importation of Bulk Fill
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- RE-28 – Preparation of Garden for Cover System
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- RE-32 – Waste Soils Surplus to Requirements
- RE-33 – Validation of Materials for Potable Water Supply Infrastructure
- RE-34 – Production of Drill and Grout Specification
- RE-35 – Landfill Treatment
- RE-36 – Remedial Verification Report

3. SECOND PHASE MITIGATION AND MANAGEMENT – BUILD PHASE

A second post-demolition phase of works will be required to ensure the proposed development is constructed in a manner that incorporates the required mitigation measures to ensure the development is compliant with UK Building Regulations and the Local Authority Planning requirements.

These obligations are specified in more detail within Section 5 and will be validated under a separate cover.

4. DETAILED REMEDIATION AND ENABLING WORKS ACTIVITIES

The focus of the remediation and enabling works is to address the contaminant issues previously identified within the site investigations that presented an unacceptable risk to human health following the redevelopment of the site.

For completeness, each of these activities has been discussed below within the context of the actual remediation works that were undertaken on-site.

The Remediation and Site Enabling works commenced on the 26th October 2022 and were completed in by February 2024.

RE-1 – PRE-COMMENCEMENT SUPPLEMENTARY SITE INVESTIGATION

DATE OF WORKS UNDERTAKEN
Area 1-4 (Figure 4.1): February 2022 to May 2022 Area 5 (Figure 4.1): February 2023

PHOTOGRAPHS
Plate 1 - 5

SUPPORTING DOCUMENT
E3P Letter Report: 14-554-L1-2, Supplementary Site Assessment Letter, June 2022

CHEMICAL TESTING
Area 1-4 (Figure 4.1): i2 Analytical Report: 22-39659 and 22-57918 Area 5 (Figure 4.1): i2 Analytical Report: 23-21617

GEOTECHNICAL TESTING
Area 1-4 (Figure 4.1): PSL Report: PSL22/1231 Area 5 (Figure 4.1): PSL Report: PSL23/1434

OVERVIEW OF WORKS

Background

The original E3P, Coopers and REFA site investigations were limited due to the presence of buildings, allotments and densely vegetated areas. Five areas were identified requiring further investigation to determine ground conditions and geotechnical constraints and to undertake further chemical analysis.

The locations of areas that required further investigation are shown in Figure 4.1 (overleaf) and have been numbered Area 1 to Area 5.

Works Undertaken

Areas 1-4

Within Areas 1-4, as shown on Figure 4.1 overleaf, multiple phases of supplementary trial pitting were undertaken on the 8th and 9th of February 2022, 8th of March 2022 and 10th May 2022 to record ground conditions and obtain geotechnical and geochemical samples. Additional investigation of potential peat deposits in Area 3 (Phase 2A) were undertaken within these phases of supplementary trial pitting. The further investigation did not identify any true peat deposits, only very soft to soft clays with a shear strength value (Cu) of less than 30 kN/m2, the material is not suitable for vibro stone columns and requires removal with granular replacement during remedial works in this area.

The findings of these investigations, inclusive of exploratory hole logs and chemical/geotechnical results, are presented in E3P letter report 14-554-L1-2, Supplementary Site Assessment Letter, June 2022. The E3P Remediation Strategy (report ref: 14-554-R2, dated February 2023) was updated in October 2022 (Rev5) in line with findings of the supplementary site investigations.

Granular replacement of soft organic clays in Area 3 (Phase 2A) was completed in January and February 2023.

Area 5
Urban Regen demolished and removed the former allotment sheds in December 2022. Following removal of the structures in this area E3P undertook a series of window samples on 16th of February 2023 to record ground conditions and obtain in-situ geotechnical data of the underlying soils to aid in foundation design. Window samples (WS901 to WS909) recorded Made Ground of soft to firm gravelly sandy clay to depths between 0.20 m and 2.30 m bgl overlying loose to medium dense medium SAND deposits. Subsequent trial pitting was undertaken on the 6th of March 2023 within this area to obtain chemical and geotechnical lab samples, in total six soil samples were sent for chemical analysis. Chemical analysis (i2 Report: 23-21617) identified minor exceedances of non-volatile PAHs benzo(b)fluoranthene and benzo(a)pyrene within shallow Made Ground deposits between 0.25 m and 0.30 metres below ground level (m bgl) within Allotment 101 and Allotment 103 samples. Non-volatile PAHs have primary exposure pathways related to dermal contact and ingestion of soils, the soils are to be used as upfill and therefore the presence of hardstanding and cover systems will ensure no viable pathway is present, as such, no future risk to human health is present.

FIGURE 4.1 – AREAS REQUIRING FURTHER INVESTIGATION (YELLOW DASHED AREAS)



Further Works
None.

RE-2 – PRE-COMMENCEMENT REGULATORY COMPLIANCE

DATE OF WORKS UNDERTAKEN
Prior to Commencement

OVERVIEW OF WORKS
The site was granted planning permission, with conditions, for residential development of up to 311 dwellings; with associated infrastructure, landscaping and access under application number 21/00744/FUL, with a decision issued on 13th September 2022. Prior to the commencement of any works on site, E3P and Kellen Homes had extensive correspondence and consultation with the Environment Agency (EA) and Local Planning Authority (LPA). Full written approval of the E3P Remediation Strategy (Ref: 14-554-R2-Rev10, Dated February 2023) was obtained from the LPA and EA. As the proposed volume of soils to be reused (excluding crushed materials) exceeds the parameters of the Standard Rules Permit, a CL:AIRE Materials Management Plan (MMP)-qualified declaration was obtained and kept up to date throughout the works (E3P document Ref: 14-554-R3, March 2023). Urban Regen obtained a Standard Rules Permit (SR2008No27 - mobile plant for the treatment of soils and contaminated material, substances or products) to treat soils within Phase 2C (former landfill). The EA confirmed an agreement to the deployment of mobile plant to undertake waste remediation operations at Don Stree under Reference: EB3704LN/W0009 – EAWML 105688 on 13th February 2023.

RE-3 – DECOMMISSION OF HISTORICAL ABSTRACTION WELLS

DATE OF WORKS UNDERTAKEN
N/A

OVERVIEW OF WORKS
No historical abstraction wells have been identified during the duration of the works. Therefore, no further action was taken.

RE-4 – TEMPORARY DE-WATERING FROM EXCAVATIONS TO COMBINED SEWER

DATE OF WORKS UNDERTAKEN
Throughout

PHOTOGRAPHS
Plates 6 - 7

SUPPORTING DOCUMENT
Urban Regen Dewatering Plan V1.2, Reference No: 367/004, dated January 2022

OVERVIEW OF WORKS
Background Temporary dewatering from excavations will be required on the site in isolated areas. **Works Undertaken** Urban Regen provided a dewatering plan for the operations on site. The management of temporary discharge of surface water was managed in accordance with the Urban Regen Dewatering Plan.

(Reference No: 367/004, dated January 2022), which permitted a discharge rate for discharge to the Sewer at 25m3 / Day at a maximum rate of 50 litres per second (this is lower than the discharge rate provided for the planned development in the Flood Risk Assessment of 81.5 litres per second).

In line with the dewatering plan, silt busters were present on site throughout the works for use in excavations below the water table. Additionally, silt fencing was erected along the boundary of the River Irk during active works and routinely inspected and replaced as necessary.

Further Works
None.

RE-5 – ASSESSMENT OF ON-SITE BUNDS

DATE OF WORKS UNDERTAKEN

20th January 2023 – 9th February 2023

CHEMICAL TESTING

I2 Analytical Reports- 23-13977-1 and 23-17093-1

OVERVIEW OF WORKS

Background
Prior to works on-site bunds of unknown material were present along Don Street which were moved to allow access to the site.

Works Undertaken
Soils were stockpiled in bunds along the east (c 200 m^3) and west (c 300 m^3) of Don Street to prevent access onto the site during its vacant period.

E3P attended site on 20th of January 2023 to obtain samples of the soils. Soils were to be sampled at 1 per 200 m^3, or a minimum of three per source, in line with the frequency outlined within the E3P remediation strategy (Ref: 14-554-R2-Rev10, Dated February 2023). Six samples were taken of stockpiled bunded material, three soil samples were taken to the east of Don Street within Phase 2A (Bunds 101-103), and three soil samples were taken to the west within Phase 1 (Bunds 104-106). Samples were sent to i2 Analytical, an accredited UKAS laboratory, for analysis.

Results of the chemical analysis identified minor exceedances of human health targets of non-volatile PAHs, benzo(a)anthracene, benzo(b)fluoranthene, benzo(a)pyrene and dibenz(a,h)anthracene with a single exceedance of arsenic within Bund 102. Non-volatile PAHs and arsenic have primary exposure pathways related to dermal contact and ingestion of soils, for sustainability the soils are to be used as upfill and therefore the presence of hardstanding and cover systems will ensure no viable pathway is present, as such, no future risk to human health is present.

To determine the risk to controlled waters a return visit was conducted on the 9th of February 2023 to collect a leachate sample of the bund material (I2 report 23-17093), leachate analysis confirmed no exceedance of Environmental Quality Standards for arsenic or PAHs, and therefore is not deemed a risk to controlled waters.

Given the above, the bunded material was used in the filling operations across the site.

Further Works
None.

RE-6 – ENVIRONMENT AND NUISANCE CONTROL

DATE OF WORKS UNDERTAKEN
Throughout

PHOTOGRAPHS
Plate 6-8

OVERVIEW OF WORKS

Background
Management of all works is required so as to ensure that no environmental nuisance is created through dust emissions, noise or vibration levels.

Works Undertaken
All works were completed in a manner so as not to create any structural risk to the adjacent highways. During remediation, works were largely restricted to between 8.00am and 5.30pm.

A road sweeper was present part-time to keep the access and Don Street clean and clear of debris during the importation of materials to the site.

Heras fencing was erected around the site boundary with appropriate health and safety signage. Throughout the works, scrap metal, timber/wood and waste streams were segregated and placed into allotted skips for removal off-site.

Further Works
None.

RE-7 – MINIMISE RISK TO INFRASTRUCTURE AND RIVER IRK

DATE OF WORKS UNDERTAKEN
Throughout

SUPPORTING DOCUMENT
E3P Letter Report: 14-554-L5-2, Supplementary Assessment, January 2023

PHOTOGRAPHS
Plate 7

CHEMICAL TESTING
I2 Analytical Reports- 22-13819, 22-94224, 22-96550, 22-97417, 23-10325, 23-17113, 23-23922, 23-28809, 23-31387, 23-33820, 23-36456, 23-38629, 23-41138, 23-44133, 23-47847, 23-50844, 23-53489, 23-55330, 23-58057, 23-60519, 23-65120, 23-67947, 23-71240, 23-73916, 23-76378 and 24-77486

OVERVIEW OF WORKS

Background
Site works should be completed in a manner that ensures no risk of disturbance to the adjacent infrastructure or the River Irk.

Works Undertaken
Following consultation with the Environmental Agency in 2022, additional rounds of surface and groundwater monitoring were undertaken by E3P in June 2022 and October 2022 to fully determine the risk to controlled waters. This included the installation of new monitoring wells in the previous REFA monitoring locations to obtain representative groundwater samples within the former Rex Mill

area of site. The findings of this report are presented under a separate cover (E3P Letter Report: 14-554-L5-2, Supplementary Assessment, January 2023) that should be read in conjunction with this validation report.

Throughout the works, monthly water sampling was undertaken at locations agreed upon with the Environmental Agency prior to the commencement of the work. Sample locations are given in Figure 4.2. During remedial works immediately adjacent to the river corridor and within the historic landfill area, biweekly surface water sampling was undertaken at the locations agreed with the EHO and EA. Sample locations are given on Drawing 14-554-026 in Appendix III and summarised below:

- Point 1 – Downstream River Irk
- Point 2 – Mid site, River Irk after Hexpol Works
- Point 3 – Mid site, River Irk after "Landfill area"
- Point 4 – Upstream River Irk
- Point 5 – Pond (East of Phase 3)

Samples were scheduled for a full suite of analysis, including heavy metals, suspended solids, PAH and TPH.

In March 2023 no safe access was available to the pond due to overgrowth of vegetation, as such, no water samples were collected for the pond in May 2023. A path through the vegetation was cut in June 2023 and pond samples were obtained; however, bolted fencing and overgrown vegetation was in place from July 2023, as such, no surface water sampling within the pond (Point 5) was undertaken from this time onward.

Water samples taken from the River Irk and eastern pond recorded minor heavy metal (zinc, copper, cyanide, nickel and lead) exceedances in comparison to Environmental Quality Standards (EQS). A summary of EQS exceedances is given in Appendix VII.

Cyanide EQS exceedances were generally recorded within all sampling locations across the majority of monitoring visits, with no obvious increase between upstream and downstream values recorded, indicating this was natural in the watercourse or the source was located upstream.

For exceedances of copper, nickel and zinc, a metal bioavailability assessment (M-BAT) was undertaken to determine the risk to the aquatic environment. The M-BAT is presented in Appendix VII.

The M-BAT assessment has shown that copper, nickel and zinc are not considered bioavailable in the adjacent pond or River Irk, due to the risk characteristic ratio (RCR) values being below 1, for the majority of visits and locations. However, RCR values above 1 were recorded for locations highlighted yellow in Appendix VIII, indicating that heavy metals were potentially bioavailable during these times posing a potential risk to aquatic life. With regard to RCR values above 1, bioavailable zinc exceedances noted on 14th April 2023 relate to the monitoring location immediately after the Hexpol works outflow and are deemed to be related to the works outflow rather than ongoing site works given the lack of bioavailable exceedances across the wider site. Copper and nickel exceedances on May 25th 2023 are noted at all sampling locations, with no obvious increase between upstream and downstream values recorded, indicating this was natural in the watercourse or the source was located upstream. Copper exceedances on 7th July were noted after the Hexpol works outflow and downstream of this, indicating the works outflow is the likely source. Nickel and zinc are bio-available in upstream samples on the 18th December 2023, however, the values do not exceed EQS thresholds and are only present upstream.

Sampling shows that the site works have not had a detrimental impact on the adjacent watercourse.

Further Works
None.

RE-8 – IDENTIFICATION, ISOLATION AND TREATMENT OF INVASIVE PLANTS

DATE OF WORKS UNDERTAKEN
Throughout

SUPPORTING DOCUMENT
Knotweed Eradication Report: IWMP2255A, dated October 2023

CHEMICAL TESTING
I2 Analytical Report 23-28847

OVERVIEW OF WORKS

Background

Invasive plant species have historically been identified along the River Irk. The remediation contractor must satisfy themselves with respect to the extent of all species deemed invasive prior to the commencement of works on site.

Works Undertaken

Urban Regen contractor employed Knotweed Eradication, a qualified invasive species expert, to investigate the presence of invasive plant species on or adjacent to the site. Knotweed Eradication undertook a site inspection in November 2021 and identified four areas of Japanese knotweed impact within the site boundary. Japanese Knotweed-contaminated material was demarked and signed to avoid any cross-contamination prior to the material being removed from site to a licensed landfill. The location of knotweed stands is shown on Figure 4.3, overleaf, presented in Knotweed Eradication Report Ref: IWMP2255A, dated October 2023.

Japanese Knotweed impacted materials were excavated under the supervision of Knotweed Eradication in April and May 2023. Material excavated in April 2023 was placed in a temporary stockpile area on visqueen sheeting, tested by E3P, and subsequently removed from site. Impacted material excavated in May 2023 was placed directly into wagons and removed from site. A validation report was prepared by Knotweed Eradication (IWMP2255A, dated October 2023) that is available upon request to Kellen Homes or Urban Regen.

FIGURE 4.3 – JAPANESE KNOTWEED LOCATIONS



Additionally, Himalayan balsam was identified along the river bank of the River Irk, where identified Urban Regen employed invasive species specialist to undertake a pick and removal from the bank. Further information of invasive species removal and Duty of Care notes are available upon request to Urban Regen.

Further Works
None.

RE-9 – SITE CLEARANCE OPERATIONS

DATE OF WORKS UNDERTAKEN
Throughout

PHOTOGRAPHS
Plate 9-12

OVERVIEW OF WORKS

Background
General site clearance and provision of welfare, offices and site security are to be determined as per the contract requirements.

Works Undertaken
Provision of welfare, offices and site security by Urban Regen and Kellen Homes throughout the works.

No buildings were present on site prior to works commencing.

Within Phase 1 and Phase 3 concrete slabs and asphalt hardstanding were present and required removal. E3P observed the hardstanding being broken out and inspected soils beneath the slabs. No visual or olfactory evidence was identified directly underlying the historic slabs in Phase 1 or Phase 3. The hardcore arisings from historic slab removal were crushed and screened on site for re-use within the development upfill and temporary works mats.

Within Phase 3 allotment gardens and associated sheds were present within the south eastern corner, which were demolished and removed by Urban Regen in December 2022.

Across the site trees were removed by a specialist contractor, shredded and subsequently removed off-site with the bulk of the tree removal works undertaken in October 2022 and continuing throughout as required.

Across the wider site areas of dense vegetation were present. Where previous self-seeded vegetation was present the material was excavated to the base of shallow root beds, stockpiled separately as per the MMP and subsequently removed from the site.

Natural topsoil from Phase 2B was stripped and stockpiled on site as per the MMP for re-use within the proposed development.

Throughout the enabling works, scrap metal, vegetation and other waste streams were separated from demolition materials and placed into allocated skips for subsequent disposal off-site.

Further Works
None.

RE-10 – RIVER CORRIDOR WATCHING BRIEF

DATE OF WORKS UNDERTAKEN
April 2023 – December 2023

OVERVIEW OF WORKS

Background
A watching brief was required to determine if any action was taken within the river corridor between the Landfill in Parcel B (Phase 2C) and the River Irk. If visual or olfactory evidence of contamination is identified this will require assessment, delineation and validation.

Works Undertaken
E3P undertook a watching brief during enabling works within the former landfill area (Phase 2C) immediately adjacent to the river corridor. No visual or olfactory contamination was identified along this boundary, therefore further investigation was not required.

A tree protection order (TPO) was in place on the trees which lined the boundary of the landfill and the river corridor. Therefore, this order prevented excavations to take place within the river corridor and the area remained undisturbed.

Furthermore, biweekly water sampling of the River Irk was undertaken throughout works to the historic landfill (RE-7), water sampling shows that the site works have not had a detrimental impact on the adjacent watercourse.

Further Works
None

RE-11 – DELINEATION OF WS17

DATE OF WORKS UNDERTAKEN
November 2022

PHOTOGRAPHS
Plate 13

CHEMICAL TESTING
I2 Analytical Report 22-95809-1

OVERVIEW OF WORKS

Background
Elevated concentrations of TPH have been identified within Coopers Borehole WS17, which is located just outside the site boundary of Parcel D (Phase 3).

Works Undertaken
E3P attended site on the 3rd of November 2022, as per the remediation strategy a trench was excavated along the western boundary of Parcel D (Phase 3) within close proximity of WS17. The trench was advanced to a depth of 1.50 m bgl. A perched groundwater strike was noted at the base of the trench, however, not enough water was present to obtain a sample. As such, soil samples were taken from the side and base of the excavation with the arisings stockpiled on Visqueen awaiting results.

Soil samples did not identify elevated TPH values above the level 3 remedial target concentrations for the general made ground with respect to controlled waters for Parcel A, C, D & E (Phase 1, 2A, 2B and 3) as per Appendix IV of the E3P Remediation Strategy (Ref 14-554-R2 Rev 10, dated February 2023). Additionally, no visual or olfactory evidence or point source was noted, given that WS17 is located off site, and no TPH impact was recorded within the site boundary, no further remedial works are required.

Further Works
None.

RE-12 – RECOVERY OF TOPSOIL WITHIN PARCEL B

DATE OF WORKS UNDERTAKEN

19th of December 2022

PHOTOGRAPHS

Plate 14-15

CHEMICAL TESTING

I2 Analytical Report - 22-14259-1
Eurofins Report - 24-14785-1

OVERVIEW OF WORKS

Background
Previous investigations identified the topsoil from the northern third of Parcel B (Phase 2B) may be suitable for re-use in garden cover system.

Works Undertaken
Urban Regen undertook a topsoil strip in Parcel B (Phase 2B) in November 2022, Urban Regen stockpiled natural site won topsoil's from within Parcel B (Phase 2B) in line with the MMP.

To date, a total of 15 topsoil samples have been submitted for analysis, at a frequency of 1 per 50m3 in line with the E3P remediation strategy, covering 750 m3 of site won topsoil.

Analysis for topsoil undertaken by UKAS accredited methods where applicable. The chemical analysis suite comprises heavy metals, sulphates, phenols, speciated Polycyclic Aromatic Hydrocarbons (PAHs), speciated and total Petroleum Hydrocarbons (TPH) and asbestos.

Chemical analysis did not identify any exceedances when compared to human health remediation target for use within 600m cover system and are therefore soils are suitable for use in private gardens.

Further Works
Ongoing sampling (1 per 50m3).

RE-13 – DELINEATION, EXCAVATION AND TREATMENT OF IDENTIFIED ASBESTOS IMPACT

DATE OF WORKS UNDERTAKEN

8th of November 2022 – 13th of March 2023

PHOTOGRAPHS

Plate 16-18

CHEMICAL TESTING

I2 Analytical Report - 22-95879-1 (WS402) *Arisings and N/E/S/W/BASE*
I2 Analytical Report - 23-11122-3 (WS402) *South A and B*
I2 Analytical Report - 22-98397-1 (TP48) *Arisings and N/E/S/W/BASE*
I2 Analytical Report - 22-97516-1 (TP305 And TP516) *Arisings and N/E/S/W/BASE*
I2 Analytical Report - 23-22839-1 (WS203) *Arisings and N/E/S/W/BASE*

OVERVIEW OF WORKS

Background

Locations requiring hotspot delineation due to quantification being above limit of detection (>0.001%) are:

- WS402 1.20 m bgl (0.001%) - Parcel A
- TP516 at 0.80m bgl (0.001 %) – Parcel A
- TP305 at 0.50 m bgl (0.002%) - Parcel B & C
- WS203 at 1.50 m bgl (0.002%) - Parcel D & E

Further investigation and quantification are required where asbestos was identified at Coopers TP48 in Parcel D & E.

Works Undertaken

Phase 1 (Parcel A)

On the 8th of November 2022 an area of approximately 5.0 m by 5.0m was excavated in the vicinity of WS402. Samples of the sides, base and arisings of the excavation were obtained for further analysis. Results of the chemical analysis did not identify asbestos fibres within the north, east, base arisings of the excavation (I2 Analytical report- 22-95879-1). Asbestos fibres of chrysotile and amosite were identified with the southern wall with a quantification of 0.127%. Within the western wall amosite was detected, quantification identified that <0.001% of contained asbestos. The pit was surveyed in and backfilled with the asbestos free made ground arisings. E3P returned to site on 6th January 2023 and excavated a further circa 5.00m south of the previous excavation, inclusive of the area comprising the previous southern pit wall. Additional samples were obtained from the southern wall of the extended excavation with one sample positive for chrysotile and amosite and crocidolite loose fibres, quantified <0.001% (I2 Analytical report- 23-11122-3). Arisings of the extended excavation were removed from site. Where soils recorded asbestos values <0.1% these were used as upfill below 1.00 m in phase one in line with the asbestos conceptual site model.

On the 16th of November 2022 an area of approximately 5.0 m by 5.0 m in the vicinity of TP516 underwent excavation and further analysis with samples of the sides, base and arisings of the excavation taken. Results of the chemical analysis identified asbestos fibres of chrysotile and amosite within the northern and southern wall of the excavation with quantification identifying that <0.001% of these samples contained asbestos (I2 Analytical report- 22-97516). This material was used as made ground upfill within Phase 1, with soils placed at least one metre below ground level in order to remove the risk to future end users in line with the asbestos conceptual site model.

Phase 2 (Parcels B & C)

On the 16th of November 2022 an area of approximately 5.0 m by 5.0 m in the vicinity of TP305 underwent excavation and further analysis with samples of sides, base and arisings of the excavation taken. Results of the chemical analysis identified asbestos fibres of chrysotile and amosite within the north (0.001%), west (<0.001%), south (<0.001%) and arisings (0.002%) of the excavation (I2 Analytical report- 22-97516). Given all soils contained <0.1% asbestos, this material was used as made ground upfill within Phase 2, with soils placed at least one metre below ground level in order to remove the risk to future end users in line with the asbestos conceptual site model.

Throughout treatment works within the historic landfill soils in Phase 2C, rare asbestos-containing material (ACM) was identified during screening works. Visual asbestos was picked, double bagged and removed from site. Remaining treated fine soils were sampled at 1 per 500m3, trace asbestos was identified throughout the treated Made Ground soils (37 of 74 samples) and quantified as containing between <0.001 % to 0.011 % (Stockpile 3A) loose fibres of chrysotile and amosite. Since the trace volumes did not exceed 0.1%, this material was used as upfill within Phase 2C, with soils placed at least one metre below ground level in order to remove the risk to future end users in line with the asbestos conceptual site model as agreed with the EA and LPA.

Phase 3 (Parcels D & E)
On the 21st of November 2022 an area of approximately 5.0 m by 5.0 m in the vicinity of TP48 underwent excavation and further analysis with samples of sides, base and arisings of the excavation taken. Results of the chemical analysis identified asbestos fibres of chrysotile and amosite within the eastern wall of the excavation, quantification identified that <0.001% of these sample contained asbestos. As such, this material was used as made ground upfill within Phase 3, with soils placed at least one metre below ground level in order to remove the risk to future end users in line with the asbestos conceptual site model.

On the 13th of March 2023, an area of approximately 5.0 m by 5.0 m in the vicinity of WS203 underwent excavation and further analysis with samples of sides, base and arisings of the excavation taken. Results of the chemical analysis identified asbestos fibres of chrysotile and amosite within the northern and southern walls of the excavation. Quantification identified that <0.001% of the southern wall and 0.002% of the northern wall contained chrysotile asbestos. Given all soils contained <0.1% asbestos, this material was used as made ground upfill within Phase 3, with soils placed at least one metre below ground level in order to remove the risk to future end users in line with the asbestos conceptual site model.

Further Works
None.

RE-14 – DELINEATION, EXCAVATION, TREATMENT AND DISPOSAL OF POTENTIAL VOLATILE CONTAMINANTS

DATE OF WORKS UNDERTAKEN
November 2022 – March 2023

PHOTOGRAPHS
Plate 19-24

CHEMICAL TESTING
I2 Analytical Report- 23-22451-1 (TP204 and BH2)
I2 Analytical Report- 23-26216-1 (TP1)
I2 Analytical Report- 22-14305-1 (TP5, TP6, BH4 and BH1)
I2 Analytical Report- 22-97516-1 (TP11 and TP41)
I2 Analytical Report- 22-97517-2 (BH1 BH3)
I2 Analytical Report- 23-28075-1 (TP351)
I2 Analytical Report- 22-95884-1 (TP409, WS5)
I2 Analytical Report- 22-11549-2 (TP409 Delineation and WS5 Delineation)

OVERVIEW OF WORKS

Background

E3P has identified elevated levels of naphthalene, and low-end TPH above human health targets for residential end retention within plots and/or within gardens and landscaped areas. Such contaminants present a potential volatilisation to indoor air risk. These elevated concentrations have only been identified within isolated areas of the site and are therefore potentially localised hotspots as outlined below:

Elevated naphthalene has been identified within:

- TP409 at 2.20 m bgl (14 mg/kg) - Parcel D & E
- Coopers TP11 at 0.15 m bgl (3.2 mg/kg) – Parcel B & C
- Coopers WS5 at 1.30 -1.90 m bgl (2.8 mg/kg) – Parcel D & E
- TP204 at 0.80 m bgl (5 mg/kg) - Parcel A
- Coopers TP1 at 0.50 m bgl (4.8 mg/kg) - Parcel A
- REFA TP5 at 0.50 m bgl (3.1 mg/kg) – Parcel A
- REFA TP6 at 0.30 m bgl (5.0 mg/kg) – Parcel A
- REFA BH1 at 0.50-1.00 m bgl (10 mg/kg) – Parcel A
- REFA BH2 at 0.50-1.00 m bgl (3.1 – 8.5 mg/kg) – Parcel A
- REFA BH3 at 0.50-1.00 m bgl (4.1 – 6.1 mg/kg) – Parcel A
- REFA BH4 at 0.50-1.00 m bgl (3.4 – 4.9 mg/kg) – Parcel A

Elevated volatile TPHs have been identified within:

- TP204 at 0.80 m bgl (9100 mg/kg) - Parcel A

Works Undertaken

Phase 1 (Parcel A)

On the 15th of November 2022 an area of approximately 5.0 m by 5.0 m in the vicinity of BH1 and BH3 underwent hotspot removal and further analysis with samples of the sides, base and arisings of the excavation taken. Results of the chemical analysis did not identify any exceedances of naphthalene within the sides or base of the excavation. Therefore, no further action was required.

On the 7th of March 2023 an area of approximately 5.0 m by 5.0 m in the vicinity of TP1 underwent a hotspot removal and further analysis with samples of the sides, base and arisings of the excavation taken. Results of the chemical analysis did not identify any exceedances of naphthalene within the sides or base of the excavation. Therefore, no further action was required.

On the 9th of March 2023 an area of approximately 8.0 m by 8.0 m in the vicinity of TP204 and BH2 underwent a hotspot removal and further analysis with samples of the sides, base and arisings of the excavation taken. Results of the chemical analysis did not identify any exceedances of naphthalene or TPHs within the sides or base of the excavation. Therefore, no further action was required.

On the 19th of December 2022 an area of approximately 5.0 m by 5.0 m in the vicinity of BH4, TP5 and TP6 underwent separate hotspot removals and further analysis with samples of the sides, base and arisings of all excavations taken. Results of the chemical analysis identified exceedances of naphthalene within the northern wall of BH4 (3.5mg/kg) and the southern wall of TP5 (4.8mg/kg). However, due to the soil organic matter (SOM) content being recorded above 2.5% (3.78%) the chemical results were compared to modified naphthalene screening values for 2.5% SOM (5.6mg/kg). Results of the chemical analysis did not identify any exceedances of naphthalene within the sides or base of the excavation at TP6. Using the modified naphthalene value, no exceedance of human health screening criteria were recorded and no further works were required.

All excavations arisings from volatile hotspots within Phase 1 (Parcel A) were stockpiled and removed from site by Urban Regen. E3P undertook a watching brief and PID sampling during the turnover of Made Ground Soils in Phase 1 (Parcel A). No visual or olfactory evidence of contamination was noted during the turnover of soils, no point source was identified. Additionally, no PID readings were noted > 50 ppm, as such, soils outside of hotspot areas were used within the upfill of the development platform in Phase 1.

Phase 2A (Parcel C)
On the 16th of November 2022 an area of approximately 5.0 m by 5.0m in the vicinity of TP11 underwent a hotspot removal and further analysis with samples of the sides, base and arisings taken. Results of the chemical analysis showed the SOM to be above 2.5% (5.5%) and therefore the modified screening value of 5.6 mg/kg naphthalene was utilised during assessment. No exceedances of the human health screening target were recorded and therefore no further action was required.

E3P undertook a watching brief and PID sampling during turnover of Made Ground soils in Phase 2A (parcel C) in the vicinity of TP522, TP523, TP609 and TP611 where odours had been noted. No visual or olfactory evidence of contamination was noted during the turnover of soils, no point source was identified. Additionally, no PID readings were noted > 50 ppm, as such, soils outside of hotspot areas were used within the upfill of the development platform in Phase 2A.

All excavations arisings from volatile hotspots within Phase 2A (Parcel C) were stockpiled and removed from site by Urban Regen.

Phase 3 (Parcel D and E)
On the 8th of November 2022 an area of approximately 5.0 m by 5.0m in the vicinity of WS5 and TP409 underwent a hotspot removal(s) with samples of the sides, base and arisings of both exactions taken. Results of the chemical analysis identified exceedances of naphthalene within all sides and base of the excavation with WS5 and within the northern, eastern, western, arisings and base of TP409. However, due to the soil organic matter (SOM) value above 2.5% which allowed the modified naphthalene of screening value of 5.6mg/kg. Using the modified naphthalene value further delineation was required to the base and southern wall of WS5. This was undertaken on the 19th of December 2022, results from the chemical analysis did not identify any exceedances, therefore no further delineation was required and the arisings were removed off site. Using the modified naphthalene value further delineation was required to the northern wall of TP409. This was undertaken on the 1st of December 2022, results from the chemical analysis did not identify any exceedances, therefore no further delineation was required, and the arisings were removed off site.

During supplementary works exceedances of naphthalene were noted within TP351 in Parcel E. On the 11th April 2023 an area of approximately 5.0 m by 5.0m in the vicinity of TP351 underwent a hotspot removal and further analysis with samples of the sides, base and arisings taken. No exceedances of the human health screening target were recorded and therefore no further action was required.

E3P undertook a watching brief and PID sampling during turnover of Made Ground soils in Phase 3 (Parcel D and E) in the vicinity of TP44 where odours had been noted. No visual or olfactory evidence of contamination was noted during the turnover of soils, no point source was identified. Additionally, no PID readings were noted > 50 ppm, as such, soils outside of hotspot areas were used within the upfill of the development platform in Phase 3.

All excavations arisings from volatile hotspots within 3 (Parcel D and E) were stockpiled and removed from site by Urban Regen.

Further Works
None.

RE-15 – SPECIATION OF MERCURY

DATE OF WORKS UNDERTAKEN
November 2022 – April 2023

PHOTOGRAPHS
Plate 25-27

CHEMICAL TESTING
I2 Analytical Report: 22-97517-2 (BH1, BH3, TP8 and TP342)
I2 Analytical Report: 22-97516-1 (TP519 and TP27)
I2 Analytical Report: 23-28075 -1 (TP501, TP505+TP25, TP507 and WS2)
I2 Analytical Report: 23-22451-1 (BH2)

OVERVIEW OF WORKS

Background
Elevated total mercury has been identified within the Made Ground deposits in TP342 (Parcel B & C) and TP501, TP505, TP507 (Parcel B & C), TP519 (Parcel A). This will require speciation to assess if elemental mercury is above the GAC of 1.2 mg/kg.

In addition to the above, elevated concentrations of total mercury were identified within Coopers TP25, TP27, WS2 and REFA TP8, BH1, BH2, BH3.

During remediation and enabling works, speciated mercury analysis should be completed to assess whether elemental mercury is present which may pose a risk to future site users through vapour inhalation.

Works Undertaken
E3P attended site on the 15th of November 2022 and excavated an area of approximately 5.0 m by 5.0 m in the vicinity of BH1, BH3, TP8 and TP342 as part of a hotspot removal and further analysis with samples of the sides, base and arisings of the excavation taken. Results of the chemical analysis within BH1 and TP8 did not identify any exceedances of mercury within the sides or base of the excavation. Therefore, no further action was required. Within the base of BH3 mercury was recorded above the GAC (7.1 mg/kg) specification was undertaken and elemental mercury was recorded below the GAC (1.164 mg/kg) and therefore no volatile risk is present. Within all the side walls and arisings of TP342 mercury was recorded above the GAC (4.5 to 6.4 mg/kg) specification was undertaken on the highest mercury result (6.4 mg/kg in the western pit wall) and elemental mercury was recorded below the GAC (0.887 mg/kg) and therefore no volatile risk is present.

E3P attended site on the 16th of November 2022 and excavated an area of approximately 5.0 m by 5.0 m in the vicinity of TP519 and TP27 as part of a hotspot removal and further analysis with samples of the sides, base and arisings of the excavation taken. Results of the chemical analysis within TP27 did not identify any exceedances of mercury within the sides or base of the excavation. Therefore, no further action was required. Within the northern wall of TP519 mercury was recorded marginally above the GAC (1.5 mg/kg), it is unlikely that the elemental mercury will exceed the GAC and therefore no volatile risk is present. Within all the remaining side walls, base and arisings of TP519 mercury was recorded below the GAC and therefore no risk is present.

E3P attended site on the 9th of March 2023 and excavated an area of approximately 5.0 m by 5.0 m in the vicinity of BH2 as part of a hotspot removal and further analysis with samples of the sides, base and arisings of the excavation taken. Results of the chemical analysis BH2 did not identify any exceedances of mercury within the sides or base of the excavation. Therefore, no further action was required.

E3P attended site on the 11th of April 2023 and excavated an area of approximately 5.0 m by 5.0 m in the vicinity of TP501, TP505+TP25, TP507 and WS2 as part of a hotspot removal and further analysis with samples of the sides, base and arisings of the excavation taken. Results of the chemical analysis within TP501, TP507 and WS2 did not identify any exceedances of mercury within the sides or base of the excavation. Therefore, no further action was required. Within the base, south and west of TP505+TP25 mercury was recorded above the GAC (1.3 to 4.5 mg/kg), specification was not undertaken given mercury values of higher exceedances (TP342) did not record elemental mercury above the GAC and therefore no volatile risk is deemed present. Within the arisings of TP505+TP25 mercury was recorded above the GAC (7.2 mg/kg), to ensure no future indoor volatile risk these soils were used as upfill beneath areas of POS.

Further Works
None.

RE-16 – EXCAVATION, BREAKING AND PROCESSING OF ALL ABOVE- AND BELOW-GROUND STRUCTURES

DATE OF WORKS UNDERTAKEN
Throughout

PHOTOGRAPHS
Plate 28-34

CHEMICAL TESTING
I2 Analytical – 23-23959-1 (SW Crush 001-003)
I2 Analytical – 23-53714-1 (SW Crush 101-103)
I2 Analytical – 23-51281-1 (6F Road 6-8)
I2 Analytical – 23-41866-1 (LF Crush 101-103)
I2 Analytical – 23-23959-1 (LF Crush 007-009)

GEOTECHNICAL TESTING
Site Won Generated 6F2
PSL Report- PSL8101 Don Street- (Crush 001 Parcel C)
PSL Report- PSL0368 - Don Street-(Crush 002 Parcel A)
PSL Report- PSL1056 - Don Street-(Crush 003 and 004 Parcel D and E)
Murray Rix Report: MRN 4588/48 – Parcel A Crush
Murray Rix Report: MRN 4588/74 – Parcel B Crush
Murray Rix Report: MRN 4588/151 – Parcel B Crush

OVERVIEW OF WORKS
Background Obstructions, relict foundations and infrastructure (apart from live services) are to be removed from the areas of proposed residential development, to include plot footprints, rear gardens, private driveways, adopted highway and utilities infrastructure (road box) in their entirety. **Works Undertaken** Prior to E3Ps attendance areas of hardstanding and concrete slabs were still in situ. Removal of concrete slabs and oversized material started within Phase 3 (Parcels D and E), before moving into Phase 1 (Parcel A) and Phase 2 (Parcel B-C). All sub-structures were excavated using controlled mechanical techniques under the strict control of the Urban Regen Site Manager and under part time supervision of E3P. The site was subject to a turnover to the top of natural stratum to ensure the full removal and excavation of all below-ground obstructions and relict foundations and slabs. This process allowed for the removal of any oversize materials and the identification of any previously unidentified areas of contamination. However, no unexpected visual or olfactory contamination was noted, furthermore, E3P undertook PID sampling of soils beneath slabs with no elevated PID readings recorded. Inert suitable oversized hardcore materials were stockpiled prior to crushing/processing to nominal 6F5 grading with chemical validation in accordance with the validation sampling protocol (1 per 1000m3). Chemical analysis confirmed suitability for use. Particle size distribution testing showed the crushed material complied with 6F5 grading. Any steel re-enforcements present within the concrete hardstanding, or waste in the form of wood, scrap metal, plastic was removed prior to the crushing of demolition material stockpiles and allocated to skips for subsequent disposal. The provided Urban Regen Depth of Turnover Drawing denotes the full extent of turnover to confirm removal of foundations and slabs. **Further Works** None.

RE-17 – INVESTIGATION OF POTENTIALLY IMPACTED SOILS

DATE OF WORKS UNDERTAKEN
Throughout

PHOTOGRAPHS
Plate 35-39

CHEMICAL TESTING
I2 Analytical - 22-95877-1 (409 and TP411) I2 Analytical - 22-96290-1 (TP522, TP609 and TP611) I2 Analytical - 23-14757-1(Tank Parcel C N/E/S/W/BASE/ARISINGS)

OVERVIEW OF WORKS

Background

Hydrocarbon odours have been identified across the site, in particular in the following locations:

- Coopers - TP44, WS17, WS18
- E3P – WS202B, WS203, TP204, TP348, TP409, TP411, TP501, TP503, TP504, TP506, TP510, TP516, TP522, TP523, TP604, TP609, TP611, TP704, CP401

These areas require further investigation to see if there is a risk posed to site end users or controlled waters assessment. If visual/olfactory evidence of contamination is identified, this will be the subject of further investigation including laboratory analysis and subsequent assessment of risk within the context of the agreed parameters. Where a theoretical risk to either human health, controlled waters or the wider environs is identified, appropriate remediation works are to be instigated.

Works Undertaken

E3P attended site throughout November 2022 and undertook trial pits within the location of all aforementioned locations. E3P inspected soil arisings, excavation pit walls and undertook PID monitoring at all locations. With the exception of TP522, TP609 and TP611 (within Phase 2A) and TP409 and TP411 (Phase 3), no visual or olfactory evidence of contamination was noted, additionally, no elevated (>5 PPM) PID readings were recorded.

Within TP522, TP609 and TP611 (Phase 2A) and TP409 and TP411 (Phase 3), a slight hydrocarbon/organic odour was noted within excavation arisings, however, no elevated PID recordings were recorded. Given the presence of a slight odour a sample of the arisings at TP409, TP411, TP522, TP609 and TP611 was sent for chemical analysis. Chemical analysis did not record any exceedances for remedial thresholds (for placement below hardstanding or clean cover systems) and as such soils were confirmed to be suitable for use as upfill.

Along the boundary of Don Street within Parcel C a previously unidentified tank was uncovered during the turnover works, denoted on the sample location plan in Appendix III. The tank was removed, and chemical samples were obtained from the sides and base of the excavation to determine whether any leaching had occurred into the surrounding soils. During the excavation no visual or olfactory contamination was noted. Results from the chemical analysis did not exceed remediation thresholds and therefore soils were used in the upfill of Phase 2A.

Further Works

None.

RE-18 – DELINEATION, EXCAVATION AND TREATMENT OF INFILLED HISTORICAL PONDS AND STREAMS

DATE OF WORKS UNDERTAKEN

November 2022 - December 2023

PHOTOGRAPHS

Plate 41-43

CHEMICAL TESTING

I2 Analytical – 23-23948 (Pond 001, Pond 002, Pond 003)

OVERVIEW OF WORKS

Background

The location of known historic infilled ponds, streams and rivers are identified within the E3P Historical Features Plan (Drawing 14-554-003) in Appendix III and in Figure 4.4 below.

FIGURE 4.4 LOCATION OF IDENTIFIED INFILLED PONDS, STREAMS AND RIVERS



Works Undertaken

Within Phase 1 a former stream and historical River Irk layout is present through much of the south and west of the parcel. E3P maintained part time supervision during turnover in this parcel, no soft alluvial deposits or geotechnically unsuitable material resembling historic river or stream deposits was noted, as such, it is assumed this was grubbed out prior to the construction of the former Rex Mill. No further works were required in this area.

The ''former stream'' marked across the northern boundary of Phase 2 is present on site as a seasonal drainage ditch. This stream is culverted below Phase 2C and connects to the River Irk. The culvert was located and not disturbed during works, no additional works are required in relation to this stream.

A historically infilled pond is present in the northeast, located within Phase 2B. The pond was delineated in January 2024 through mechanical excavation by Urban Regen under the supervision of E3P. The feature was excavated to a maximum of 2.17 m with geotechnically unsuitable organic material removed from the base and side walls chased out and stockpiled on site for removal. The excavation was surveyed and shown to be located within the rear gardens of Plots 104-105. The excavation has been left low for the placement of surplus civil arisings to be deposited and engineered to development levels. The feature is noted on Urban Regen AsBuilt Drawing Sheet 2 of 10 (APPENDIX III). Chemical analysis of the pond arisings (lab report ref: 23-23948) identified a zinc exceedance in sample Pond 002 and a copper exceedance in sample Pond 003 when compared to the remediation targets for the protection of controlled waters. No exceedances were identified with respect to human health. The pond arisings were removed from site, therefore there is considered to be no unacceptable risk to controlled waters.

Further Works

Backfill and engineering of civil arisings placed within historic in Phase 2B. The civil arisings will likely comprise site won Made Ground and natural arisings. The soils will be tested at a frequency of 1 per 1000 m^3 in accordance with the testing frequency listed in the remediation strategy for general Made Ground backfill.

RE-19 – DELINEATION, EXCAVATION AND TREATMENT OF FORMER HISTORIC LANDFILL MATERIALS

DATE OF WORKS UNDERTAKEN

April 2023 – December 2023

SUPPORTING DOCUMENTS

14-554-L5-2 Supplementary Assessment (January 2023)

PHOTOGRAPHS

Plate 64-80

CHEMICAL TESTING

I2 Analytical Reports: 23-30021-2, 23,30824-1, 23-31573-1, 23-32252-1, 23-32496-1, 23-35733-1, 23-350005-1, 23-35717-1, 23-37201-1, 23-38013-1, 23-39718-1, 23-40134-1, 23-41466-1, 23-41964-1, 23-52298-1, 23-54571-1, 23-41964-2, 23-23716-2, 23-23402-2, 23-57174-1, 23-60537-1, 23-46404-1, 23-51249-1, 23-50909-1, 23-63462-1, 23-53528-1, 23-57174-1, 2360537-1, 23-59928-1, 23-54566-1, 23-58048-1, 23-62548-1, 23-59928-1, 23-65157-1, 23-71252-1, 23-73588-1.

GEOTECHNICAL TESTING

Murray Rix Reports: MRN 4588-47, MRN 4588-48, MRN 4588-50, MRN 4588-56, MRN 4588-62, MRN 4588-64, MRN 4588-68, MRN 4588-72, MRN 4588-73, MRN 4588-74, MRN 4588-85, MRN 4588-86, MRN 4588-105, MRN 4588-106, MRN 4588-107, MRN 4588-121, MRN 4588-140A, MRN 4588-148, MRN 4588-151, MRN 4588-210, MRN 4588-213.

OVERVIEW OF WORKS

Background

A historic landfill is recorded on-site within Parcel B. As part of the remediation works, the landfill area will be processed in order to ensure the remaining soils don't pose a risk to human health or controlled waters. Human health screening levels have been developed for the site; following discussion with the EA it was decided that Level 3 Site Specific Remediation Targets for controlled waters were required for the landfill material. The Assessment for how these were generated is presented within letter report 14-554-L5 dated 22nd November 2022 which should be read in conjunction with this report.

Once excavated, the waste was sorted to remove any hazardous elements and materials that can be recycled in a regulatory compliant manner. The material will then be subject to further testing to assess its suitability to remain on site.

Works Undertaken

Urban Regen obtained a Standard Rules Permit (SR2008No27 - mobile plant for the treatment of soils and contaminated material, substances or products) to treat soils within Phase 2C (former landfill). The EA confirmed agreement to the deployment of mobile plant to undertake waste remediation operations at Don Stree under Reference: EB3704LN/W0009 – EAWML 105688 on 13th February 2023.

Prior to treatment works commencing heras fencing was erected around the perimeter of the historic landfill area. A processing, storage and impacted soils area was set up and sign posted. The impacted soils area consisted of a bunded and clay lined above ground storage pit, with visqueen membrane across the base and side walls to prevent any potential cross contamination. Temporary waste bins (skips) were set up and marked to accept anticipated waste streams generated through the treatment process.

Treatment of the historic landfill commenced in the west of the landfill in April 2023 and progressed eastward until completion in December 2023. The treatment of soils was split into four operations as outlined below.

- Operation 1 – Primary Physical Treatment
- Operation 2 – Manufacture of Recycled Aggregates
- Operation 3 – Validation of Fines
- Operation 4 – Solidifcation & Stabilisation of Fines

All works were undertaken in line with the Urban Soil Solutions Method Statement, (Mechanical Mixing, Screening, Particle Size Reduction Remedial Works, Don Street. Rochdale, Rev 4, February 2023) that was submitted to Environment Agency for approval prior to the commencement of treatment works.

Operation 1 - Primary Physical Treatment
Made ground materials within the landfill were excavated to the top of natural material. Large, clearly identifiable waste material types (brick, metal, timber etc) were removed by the plant operator and segregated in readiness for further treatment where appropriate (see operation 2) or removal from site. Where wastes were to be removed from site, they were placed within temporary storage skips based on material type (metal, wood, general waste) prior to removal.

The remaining soils were then fed via a hopper onto a three way screening system that formed a >50mm stockpile, 20 – 50mm stockpile and <20 mm fines stockpile. Within the larger waste stockpiles (>20 mm), operatives manually removed clearly identifiable waste fractions such as metal, timber, visual ACM and general waste (plastic and textile) into temporary waste skips for removal from the site. Inert fractions such as stone, concrete and brick were stockpiled on-site for further recycling (operation 2). The fine product (<20 mm) was stored as per the MMP in 1000m3 stockpiles for further validation testing (operation 3). Circa 37,000m3 of fine soils were processed, with each 1000m3 stockpile (37 in total) tracked from origin, stockpile location and final placement by the Urban Regen surveyor.

Operation 2 - Manufacture of Recycled Aggregates
The WRAP Quality Protocol for the manufacture of recycled aggregates from inert waste is a protocol that allows defined inert waste materials to be regarded as having achieved 'end of waste' status in line with Article 6 of the Waste Framework Directive 2008.

Following the removal of all oversized material from within the landfill, in November 2023 inert oversized fractions (brick, stone and concrete), segregated during the initial physical treatment (Operation 1), were crushed on site to manufacture a suitable 6F5 recycled aggregate product. Prior to loading the crusher, an Urban Regen operative undertook a final visual inspection to remove any non-conforming materials for placement into temporary waste containers as per Operation No. 1. The crusher teeth were set to meet the maximum particle size of the required product specification (125mm for 6F5).

Following crushing the recycled aggregate product was tested as per Section 4.9, Table 4.2 within the E3P Remediation Strategy (Report Ref: 14-554-R2 Rev 10, dated February 2023). Testing is summarised below:

- Particle Size Distribution - 1 per week
- Particle Density and Water Absorption – 1 per month
- Resistance to Fragmentation (LA Co-efficient) – 1 per 6 months
- Classification of Constituents (inclusive of bitumen content) – 1 per month
- Water Soluble Sulphate – 1 per month

Geotechnical testing was undertaken by Murray Rix UKAS accredited geotechnical laboratory with results confirming suitability for the recycled aggregate as a 6F5 product. Results are provided on geotechnical laboratory certificates MRN 4588/151 and MRN 4588/74 in Appendix VI.

Chemical samples were obtained of the site won crush at a frequency of 1 per 1000m3 in accordance with the E3P remediation strategy (Report Ref: 14-554-R2 Rev 10, dated February 2023). Trace chrysotile and amosite asbestos (0.014 % - 0.003 %) were identified in three of six samples, however, given the quantity (<0.1% asbestos) these soils are deemed to be suitable for placement below hardstand in line with the asbestos conceptual site model. Additionally, minor exceedances of non-volatile PAH's (benzo[b]fluoranthene, benzo[a]pyrene and Dibenz[a,h]anthracene were identified within the recycled aggregate. Non-volatile PAH's identified have primary exposure pathways related to dermal contact and ingestion. Soils were placed below hardstanding (plots, driveways and roads) that will serve to cut the exposure pathway. Therefore, no future risk will be present, and the soils are considered suitable for use.

Operation 3 – Validation Of Fines

Following Operation 1, "batches" of treated fine soils (<20mm) were separated into 1000m3 stockpiles, demarked, geotechnically, forensically and chemically tested to ensure suitability. A total of 37 stockpiles were formed with the following validation testing and frequency completed in order to meet and 'end of waste' criteria as prior to placement within Parcel 2C.

Chemical Analysis

Chemical analysis including US EPA16 speciated PAHs, TPH C5-C35, asbestos ID, CLEA inorganic metals, semi volatile organic compounds (SVOC) and volatile organic compounds (VOC) was undertaken at 1 per 500 m3. Chemical analysis was compared to 'target' levels provided in Appendix IV.3 (Site Specific End of Waste Criteria) and Appendix IV.4 (Level 3 Remedial Target Concentrations For The Former Landfill Area With Respect To Controlled Waters) within the E3P Remediation Strategy. The 'target' level for asbestos was raised from 0.001% as recorded within Appendix IV.3, to the human health upfill threshold of 0.1 % following agreement with the EHO and EA.

Chemical analysis confirmed the soils suitability for use with regard to end of waste, controlled waters and human health. The results of the chemical analysis are summarised below:

- No exceedance of site specific end of waste criteria (Remediation Strategy Appendix IV.3).
- Occasional minor exceedances of heavy metals (zinc, lead and arsenic) in comparison to remedial target concentrations with respect to controlled waters (Remediation Strategy Appendix IV.4). In these instances, leachate samples were obtained and recorded heavy metals below EQS values. Additionally, water sampling of the adjacent River Irk (primary controlled water receptor) showed the site works had not had a detrimental impact on the adjacent watercourse (RE-7 and RE-10). Given that no detrimental impact was recorded during active disturbance of these soils, soils are considered a very low risk to controlled waters once the soils are placed and not disturbed. Furthermore, leachate analysis confirms that the low-solubility heavy metals are unlikely to be mobilised.
- Occasional minor exceedances of heavy metals (arsenic and lead) and non-volatile PAH (Benzo[a]pyrene, Benzo[b]fluoranthene and Dibenz[a,h]anthracene) have been recorded in comparison to human health remediation targets (Remediation Strategy Appendix IV.1). Non-volatile PAHs and heavy metals have primary exposure pathways related to dermal contact and ingestion of soils; for sustainability the soils are to be used as upfill and therefore the presence of hardstanding and cover systems will ensure no viable pathway is present, as such, no future risk to human health is present.
- A threshold for controlled waters in relation to the non-volatile PAH compounds was not provided, however, no exceedances of PAH compounds against EQS values were recorded

during the River Irk sampling (primary controlled waters receptor). Given the lack of exceedances of PAHs within water sampling, leachate analysis confirming heavy metals below EQS values and installation of hardstanding and surface water drainage that will limit infiltration and thus reduce the mobilisation of contaminants, no future risk to controlled water receptors is considered to be present with respect to minor heavy metal and non-volatile PAH exceedances recorded within the fines product.

- Rare exceedances of naphthalene in comparison to human health remediation targets (Remediation Strategy Appendix IV.1) were recorded in SP25 and SP32. Naphthalene has a primary pathway through vapour inhalation. Both stockpiles were placed in a dedicated laydown area and subject to further mechanical treatment. Following this process, stockpiles were re-sampled by E3P. For both SP25 and SP32 re-tests, naphthalene was recorded below the human health threshold and soils deemed suitable for use. Naphthalene was recorded below the controlled waters threshold outlined in the remediation strategy Appendix IV.4 on all occasions and is not considered to be a risk to controlled waters.

- Minor concentrations of SVOC's 2-Methylnaphthalene, Dibenzofuran and Carbazole above the laboratory limit of detection (LOD) were recorded occasionally throughout the sampling. The aforementioned compounds do not have published threshold's, E3P has undertaken an internal risk assessment of SVOC's 2-Methylnaphthalene, Dibenzofuran and Carbazole and determined that there is no vapour risk to human health with respect to these compounds and there is a low risk within the context of the developed CSM. This assessment has been agreed with the EHO. Additionally, the soils are to be used as upfill and therefore, the presence of hardstanding and cover systems will ensure no viable pathway is present, as such, there is no future risk to human health. With regards to the risk to controlled waters, the presence of hardstanding and surface water drainage will limit infiltration and thus reduce the mobilisation of contaminants.

Forensic Analysis
Based on Table 4.4 within the E3P Remediation Strategy and RB17 Appendix C, E3P undertook forensic analysis at one per 1000m³ to assess the volume of undesirables. E3P obtained forensic samples across the stockpiles from a minimum of 10 random locations to obtain a representative sample.

Samples were screened with a 10mm sieve with oversized materials remaining on the sieve split based on waste type with und

In line with the remediation strategy requirements, one sample per month was submitted to Murray Rix UKAS accredited laboratory and scheduled for classification of constituents testing to confirm the E3P forensic testing findings.

Furthermore, E3P undertook a visual inspection of each stockpile (surpassing the 1 per 1000m3 requirement) prior to sampling to ensure soils were visually clear of waste streams.

For all stockpiles unacceptable materials were confirmed to comprise <1% of the total volume of the sample and therefore suitable to achieve end of waste status. A materials forensic constituents' certificate confirming suitability is provided for each stockpile in Appendix VIII. Where classification of constituents was undertaken by the geotechnical laboratory, E3P did not undertake additional in-house forensic assessment. Classification of constituent testing is provided in Appendix VI.

Geotechnical Analysis
E3P undertook geotechnical testing to confirm compliance with SHW600 for class Class 1 or Class 2 soils. Sampling, analysis and approval were undertaken prior to any backfilling into the former landfill

void spaces. Geotechnical sampling was undertaken in accordance with Section 4.9, Table 4.3 in the E3P Remediation Strategy (Report Ref: 14-554-R2 Rev 10, dated February 2023). Testing is summarised below:

- Particle Size Distribution - 1 per 1000m3
- Water Content – 1 per 1000m3
- Classification of Constituents (inclusive of bitumen content) – 1 per month
- Total Sulphur and Sulphide – 1 per 1000m3

Geotechnical testing was undertaken by Murray Rix UKAS accredited geotechnical laboratory with results confirming suitability for Class 2C, with the exception of SP20, which was Class 1A. Generally, soils were proven to be within 3% of the optimum moisture content. Sulphide was recorded between <0.01 – 0.04 % across the stockpiles, with total sulphur recorded between <0.1 – 0.2 %. Results are provided on geotechnical laboratory certificates in Appendix VI.

Geotechnical test results confirmed the soils to be geotechnically suitable as engineered Class 2 products.

Operation 4 – Solidifcation & Stabilisation of Fines
As per Operation 3, fine soils were compliant with end of waste criteria and do not pose a future human health or controlled waters risk. As such, solidification/stabilisation (S/S) treatment was not required to reduce mobility or bind contaminants within the soils.

The bulk of the landfill works were completed during the drier months (April-October 2023), during the wetter months (November-December 2023) placement and engineering of soils was only undertaken during dry weather periods. Stockpiles were sealed and soils were generally recorded to be within 3% of the optimum moisture content. Where soils were recorded to be sufficiently wet of the optimum 1-2% of OPC was added to improve the moisture content to allow suitable engineering in line with MCHW Series 600.

Further Works
None.

RE-20 – REMOVAL OF DELETERIOUS MATERIAL

DATE OF WORKS UNDERTAKEN
Throughout

PHOTOGRAPHS
Plate 44-48

OVERVIEW OF WORKS
Background
The E3P Ground Investigation identified plastic sheeting and other potentially deleterious wastes across all parcels albeit minimal across the majority of the site.

All potentially deleterious materials will be delineated, stockpiled and removed from the site by the contractor to a licensed waste facility.

Works Undertaken
E3P maintained part-time supervision during excavation and turnover works, E3P witnessed the separation of deleterious materials with materials segregated and placed in appropriate skips or stockpiles. Following the screening of material, no deleterious material was identified by E3P within placed materials.

All potentially deleterious materials including wood, roots, metal, plastic and building waste was delineated, stockpiled and removed from the Site by the contractor to a licensed waste facility.

Within the former landfill area (Parcel 2C), deleterious materials were removed and segregated in line with RE-19.

Further Works
None.

RE-21 – CUT-AND-FILLING OF MADE GROUND TO DEVELOPMENT LEVELS

DATE OF WORKS UNDERTAKEN
Throughout

PHOTOGRAPHS
Plate 49-56

CHEMICAL TESTING
i2 Analytical Report - 22-14722 and 22-14849 (Phase 1 Made Ground)
i2 Analytical Report - 23-35715, 23-38015 and 23-38628 (Phase 1 Natural Class 1A)
i2 Analytical Report - 23-14763 and 23-15243 (Parcel 2A Import)
i2 Analytical Report - 23-28846 (Phase 2A [C1-C3], Phase 3 [D1-D5 & E1-E3])
i2 Analytical Report - 23-46719 (Phase 3)

GEOTECHNICAL TESTING
PSL Report – PSL7966 (Phase 1)
Murray Rix Report – MRN 4287/110 (Parcel 2A Bulkfill 001-007).
PSL Report – PSL6972, PSL7079 and PSL7248 (Phase 3)
Urban Regen CBR Plan and results (Appendix III and IV)

OVERVIEW OF WORKS

Background
Prior to enabling works, the site topography was undulating. As such, a significant phase of cut and fill works were required to construct a development platform.

The overarching aim of the remediation and enabling earthworks will be the construction of a development platform that will ensure suitability for vibro stone columns (VSC). Depending on ground conditions, it is likely that VSC can be used in all areas where the Made Ground depth does not exceed 8 m.

Where the development levels require material to be filled, site derived Made Ground must be sorted in a controlled manner prior to replacement, in accordance with the requirements of this specification for the intended land use.

Works Undertaken
The area was subject to a process of enabling earthworks completed by the appointed contractor, Urban Regen, under the supervision of E3P. The ground levels for the subject site were subject to cut and fill as summarised below:

- Cut From Phase 2B
- Fill within Phase 1 (material sourced from Phase 2)
- Cut and Fill (balance) within Phase 3
- Cut and Fill (balance) within Phase 2C (former landfill)

In order to provide the final development platforms there was a requirement to undertake a significant cut and filling process of Made Ground across the site. Excavated materials and imported materials were used to build final development levels. The area was subject to a process of enabling earthworks completed by the appointed contractor, Urban Regen, under the part time supervision of E3P. The ground levels for the subject site were subject to cut and fill with circa 165,000 m3 of material turned over.

All unsuitable materials were removed in their entirety to ensure the removal of relict hardstanding, foundations and infrastructure. Soils from within areas of reduced level excavation underwent careful selection prior to placement in a manner that accords with the geotechnical engineering specification & contamination compliance criteria in areas of upfill.

Where the proposed enabling works levels required the current landform to be cut, extreme care was taken so as not to disturb the underlying stratum prior to the placement of the appropriate platform, in compliance with the E3P Geotechnical Specification. Where the development levels required material to be filled, site-derived Made Ground and natural clays and sands were utilised. Where there was a shortfall of material (Phase 2A) imported 6F5 material was utilised to build up levels. Upfill materials were sorted in a controlled manner prior to replacement, in accordance with the requirements of the specification for the intended land use.

All soils were tested at 1 per 1000 m3 in accordance with the agreed specification. Across the site, upfill recorded minor exceedances against generic assessment criteria for non-volatile PAH (Benzo(b)fluoranthene, Dibenz(a,h)anthracene, Benzo(a)anthracene and Benzo(a)pyrene). All identified elevated concentrations have primary exposure pathways related to dermal contact and ingestion. Soils were used as upfill and therefore any risk to human health is mitigated by the installation of a chemically suitable cover systems within all proposed garden areas and areas of soft standing, additionally, where hardstanding is present (plots, driveways and roads) the pathway is cut. Therefore no risk will be present and the soils are suitable for use. With regards to the risk to controlled waters, the presence of hardstanding and surface water drainage will limit infiltration and thus reduce the mobilisation of contaminants. The identified contaminants are generally of low solubility and mobility. There is considered to be no unacceptable risk to controlled waters with respect to minor PAH exceedances.

Within Phase 1 Made Ground was turned over to the top of natural, with the development platform constructed of upfill comprising site won Made Ground within Phase 1 and circa 6000m3 of granular (Class 1A) natural soils from across Phase 2. Phase 1 was upfilled for suitability for vibro stone columns (VSC). Site won Made Ground upfill was classified as 2C material and fell within (± 2%) of the tolerable moisture limit (PSL Report – PSL7966). Class 2C Made Ground was placed outside of plot footprints and used as fill beneath roads, gardens and POS. Site won Class 1A soils were used to raise levels below plot footprints (plus circa 2m). Given the granular nature of the natural upfill, no requirement for in-situ density testing was required as per the E3P upfill specification. E3P undertook chemical sampling of the site won Made Ground (i2 Analytical Reports 22-14722 and 22-14849) and natural Class 1A soils (i2 Analytical Reports 23-35715, 23-38015 and 23-38628). Samples confirmed soils were suitable for use.

Within Phase 2A Made Ground was turned over to the top of natural, with the development platform constructed of upfill comprising site won Made Ground soils from Phase 2A and circa 2,880m3 of imported 6F5 from a source site named Lightmore. Phase 2A was upfilled for suitability for vibro stone columns (VSC). Site won Made Ground upfill was classified as 2C material generally within (± 2%) of

the tolerable moisture limit (MRN 4287/110), where soils were outside of tolerable moisture limits OPC was added to control moisture content to appropriate levels. Where Class 2C Made Ground was placed NNDG testing was undertaken to confirm >95% compaction. Given the granular nature of 6F5 material, no requirement for in-situ density testing was required in areas where 6F5 was used as upfill. E3P undertook chemical sampling of the imported 6F5 (I2 Analytical Reports 23-14763 and 23-15243, with results confirming imported soils were suitable for use as upfill. Chemical sampling of Made Ground upfill from Phase 2A confirmed soils were suitable for use as upfill. Chemical certificates are provided as i2 Analytical reports 23-28846 (C1-C3) in Appendix III.

Phase 2B comprised a cut exercise with natural soils encountered throughout. Soils generated during the cut process were utilised for upfill in Phase 1. Given the shallow depth of natural material and findings of the multiple phases of intrusive investigation, foundations in this area of the site are to comprise standard strip and mass trench foundations.

Phase 2C was upfilled with Class 2C made ground soils from the landfill treatment activities as described in RE-19. Fill materials were placed and compacted in a manner that accords with the geotechnical engineering specification & contamination compliance criteria, in order to prepare the site for a piled foundation solution and achieve a 5% CBR. The results of the CBR tests confirm that all locations met the compaction specification, which is presented in Appendix VI. Chemical sampling of upfill from Phase 2C confirmed soils were suitable for use as upfill (RE-19).

Within Phase 3 Made Ground was turned over to the top of natural, with the development platform constructed with upfill comprising site won Made Ground soils and natural subsoils from Phase 3 with cut and fill in balance. Phase 3 was upfilled for suitability for driven piled solution. Fill materials were placed and nominally compacted in a manner that accords with the geotechnical engineering specification & contamination compliance criteria, in order to prepare the site for a piled foundation solution and achieve a 5% CBR. The results of the CBR tests confirm that all locations met the compaction specification and are presented within Appendix VI. Chemical sampling of upfill from Phase 3 confirmed soils were suitable for use as upfill. Chemical certificates are provided as i2 Analytical reports 23-28846 (D1-D5 and E1-E3) and 23-46719 in Appendix III. E3P undertook geotechnical sampling of the site won Made Ground, upfill was classified as 2C material and generally fell within (± 2%) of the tolerable moisture limit (PSL Reports – PSL6972, PSL7079 and PSL7248), where soils were outside of tolerable moisture limits OPC was added to control moisture content to appropriate levels.

Plots that were due to have VSC / driven piled foundations were left 450 mm below the finished level, whilst gardens were finished to 600 mm below finished level.

All data and certificates are presented within Appendix IV and VI of this report.
Urban Regen has produced an As-Built Survey of each phase of the site, included within Appendix III.

Further Works
None.

RE-22 – PLACEMENT AND COMPACTION OF UPFILL MATERIAL TO FACILITATE GROUND IMPROVEMENT BY VSC

DATE OF WORKS UNDERTAKEN
Throughout

PHOTOGRAPHS
Plate 49-56

GEOTECHNICAL TESTING

PSL Report – PSL7966 (Phase 1)
Murray Rix Report – MRN 4287/110 (Parcel 2A Bulkfill 001-007).
PSL Report – PSL6972, PSL7079 and PSL7248 (Phase 3)
Urban Regen CBR Plan and Results (Appendix III and IV)

OVERVIEW OF WORKS

Background

Where plots are to be prepared in a manner that will facilitate ground improvement by VSC, materials must be either compliant with the specified grading requirements for a nominally placed and tracked granular aggregate, or alternatively, they should be engineered to a defined geotechnical standard.

Works Undertaken

Where the proposed enabling works levels required the current landform to be cut, extreme care was taken so as not to disturb the underlying stratum prior to the placement of the appropriate platform, in compliance with the E3P Geotechnical Specification. Where the development levels required material to be filled, site-derived Made Ground, sand and imported 6F5 materials were sorted in a controlled manner prior to replacement, in accordance with the requirements of the specification for the intended land use.

Within Phase 1 Made Ground was turned over to the top of natural, with the development platform constructed of upfill comprising site won Made Ground within Phase 1 and circa 6000m3 of granular (Class 1A) natural soils from across Phase 2. Phase 1 was upfilled for suitability for vibro stone columns (VSC). Site won Made Ground upfill was classified as 2C material and fell within (± 2%) of the tolerable moisture limit (PSL Report – PSL7966). Class 2C Made Ground was placed outside of plot footprints and used as fill beneath roads, gardens and POS. Site won Class 1A soils were used to raise levels below plot footprints (plus circa 2m). Given the granular nature of the natural upfill, no requirement for in-situ density testing was required as per the E3P upfill specification. In areas of tree influenced within these parcels turnover depths were locally deepened (where required) to remove cohesive deposits. The resultant void was infilled with granular material - Class 1A materials to prevent future heave issues.

Within Phase 2A Made Ground was turned over to the top of natural, with the development platform constructed of upfill comprising site won Made Ground soils from Phase 2A and circa 2,880m3 of imported 6F5 from a source site named Lightmore. Phase 2A was upfilled for suitability for vibro stone columns (VSC). Site won Made Ground upfill was classified as 2C material generally within (± 2%) of the tolerable moisture limit (MRN 4287/110), where soils were outside of tolerable moisture limits OPC was added to control moisture content to appropriate levels. Where Class 2C Made Ground was placed NNDG testing was undertaken on layers to confirm >95% compaction. In areas of tree influenced within these parcels turnover depths were locally deepened (where required) to remove cohesive deposits. The resultant void was infilled with granular material - imported 6F5 to prevent future heave issues.

Within the north of Phase 2A, within an area formally occupied by trees and vegetation, a localised soft spot was encountered within natural clay deposits. In January 2023 E3P undertook a series of trial pits with in-situ hand shear vane testing undertaken to delineate the area of soft clay. In February 2023 Urban Regen excavated the soft clays with E3P in attendance undertaking a watching brief. Approximately 1000m^3 of material was removed and stockpiled within Parcel B. The resultant void was infilled with imported granular (6F5 + quarried stone) materials nominally compacted to facilitate a VSC foundation.

Plots within the majority of Phase 2B (former landfill) were prepared for a driven piled solution. However, plots immediately north of Road 3 were prepared for a VSC utilising class 2C product produced by the landfill treatment 9discussed in RE-19). Where Class 2C Made Ground was placed NNDG testing was undertaken on layers to confirm >95% compaction. All results confirmed adequate compaction >95%.

Phase 2C, was an area of cut, standard strip and mass trench foundations are proposed to be set within the suitable natural soils.

Phase 3 was upfilled for suitability for driven piled solution.

Plots that were due to have VSC / driven piled foundations were left 450 mm below the finished level.

The results of the CBR and NNDG tests confirm that all locations met the compaction specification and are given in Appendix III and IV.

Urban Regen has produced an As-Built Survey of the Phases completed to date, these are included within Appendix III.

Further Works
None.

RE-23 – CONSTRUCTION OF TEMPORARY WORKING PLATFORM

DATE OF WORKS UNDERTAKEN
Throughout

PHOTOGRAPHS
Plate 57-58

CHEMICAL ANALYSIS
I2 Analytical Report - 23-19920 (Import 105-107 6F5)
I2 Analytical Report - 23-26301 (Import 108-109 6F5)
I2 Analytical – 23-23959-1 (SW Crush 001-003)
I2 Analytical – 23-53714-1 (SW Crush 101-103)
I2 Analytical – 23-41866-1 (LF Crush 101-103)
I2 Analytical – 23-23959-1 (LF Crush 007-009)

GEOTECHNICAL TESTING
PSL Report- PSL8101 Don Street- (Crush 001 Parcel C)
PSL Report- PSL0368 - Don Street-(Crush 002 Parcel A)
PSL Report- PSL1056 - Don Street-(Crush 003 and 004 Parcel D and E)
Murray Rix Report: MRN 4588/48 – Parcel A Crush
Murray Rix Report: MRN 4588/74 – Parcel B Crush
Murray Rix Report: MRN 4588/151 – Parcel B Crush
Urban Regen CBR Plan and Results (Appendix III and IV)

OVERVIEW OF WORKS
Background
Plots were prepared in a manner to facilitate a combination and driven piles, as such, a temporary working platform was required.

Works Undertaken
A temporary working platform was constructed comprising 300mm of 6F5 from site won and imported crush material. 6F5 was tested to confirm chemical suitability.

Particle size distribution testing of crush confirmed compliance with 6F5.

Urban Regen had full-time supervision with E3P providing part-time supervision of the following:

- CBR plate load tests to be completed on roads and piling mats.
- Geotechnical testing of the site won material was undertaken for PSD.
- CBR tests were undertaken beneath roads and plots to ensure compaction of 5%.

The results of the CBR tests confirm that all locations met the compaction specification and are given in Appendix III and IV.

Further Works
None.

RE-24 – REPLACEMENT OF MATERIALS, GEOTECHNICAL ENGINEERING REQUIREMENTS

DATE OF WORKS UNDERTAKEN
Throughout

PHOTOGRAPHS
Plate 49-56

GEOTECHNICAL TESTING
PSL Report – PSL7966 (Phase 1)
Murray Rix Report – MRN 4287/110 (Parcel 2A Bulkfill 001-007).
PSL Report – PSL6972, PSL7079 and PSL7248 (Phase 3)
Urban Regen CBR Plan and Results (Appendix III and IV)

OVERVIEW OF WORKS

Background
Upfill material required to be backfilled in compliance with the E3P Geotechnical Engineering Specification for VSC and piled foundation, as presented in detail within Section 5 of the E3P Remediation and Enabling Works Strategy.

Works Undertaken
Upfill material was backfilled in compliance with the E3P Geotechnical Engineering Specification for a piled foundation, as presented in detail within Section 5 of the E3P Remediation and Enabling Works Strategy.

Where required, to achieve the proposed EWLs, Urban Regen undertook a process of fill works, with materials sourced from a combination of site-won natural subsoils and Made Ground soils as discussed earlier in this report (RE-21).

Within Phase 1 the development platform constructed of upfill comprising site won Made Ground within Phase 1 and circa 6000m3 of granular (Class 1A) natural soils from across Phase 2. Phase 1 was upfilled for suitability for vibro stone columns (VSC). Site won Made Ground upfill was classified as 2C material and fell within (± 2%) of the tolerable moisture limit (PSL Report – PSL7966). Class 2C Made Ground was placed outside of plot footprints and used as fill beneath roads, gardens and POS. Site won Class 1A soils were used to raise levels below plot footprints (plus circa 2m). Given the granular nature of the natural upfill, no requirement for in-situ density testing was required as per the E3P upfill specification.

Within Phase 2A the development platform constructed of upfill comprising site won Made Ground soils from Phase 2A and circa 2,880m3 of imported 6F5 from a source site named Lightmore. Phase 2A was upfilled for suitability for vibro stone columns (VSC). Site won Made Ground upfill was classified as 2C material generally within (± 2%) of the tolerable moisture limit (MRN 4287/110), where soils were outside of tolerable moisture limits OPC was added to control moisture content to appropriate levels. Where Class 2C Made Ground was placed NNDG testing was undertaken to confirm >95% compaction. Given the granular nature of 6F5 material, no requirement for in-situ density testing was required in areas where 6F5 was used as upfill.

Within Phase 2A a localised soft spot was encountered within natural clay deposits. In January 2023 E3P undertook a series of trial pits with in-situ hand shear vane testing undertaken to delineate the area of soft clay. In February 2023, Urban Regen excavated the soft clays with E3P in attendance, undertaking a watching brief. Approximately 1000m^3 of material was removed and stockpiled within Parcel B. The resultant void was infilled with imported granular (6F + quarried stone) materials nominally compacted to facilitate a VSC foundation.

Within Phase 2B (former landfill) the development platform has been constructed with compacted upfill comprising site-derived Made Ground soils and natural subsoils from Phase 2B. Soils were formed as a product as per RE-19. The majority of Phase 2B was upfilled in a manner that ensures suitability for driven piled solution. Fill materials were placed and nominally compacted in a manner that accords with the geotechnical engineering specification & contamination compliance criteria, in order to prepare the site for a piled foundation solution and achieve a 5% CBR. Plots immediately north of Road 3 were prepared for a VSC utilising class 2C product produced by the landfill treatment (discussed in RE-19). Where Class 2C Made Ground was placed, in-situ density testing was undertaken on layers to confirm >95% compaction of the laboratory determined maximum (to ensure no creep settlement in engineered fill). All results confirmed adequate compaction >95% of the MDD. The results of the in-situ geotechnical tests confirm that all locations met the compaction specification and are presented in Appendix VI.

Within Phase 2C the works comprised cut operations, with surplus soils used to form the development platform across the wider site.

Within Phase 3 the development platform was constructed with upfill comprising site derived Made Ground soils and natural subsoils from Phase 3. Phase 3 was upfilled in a manner that ensures suitability for driven piled solution. Fill materials were placed and nominally compacted in a manner that accords with the geotechnical engineering specification & contamination compliance criteria, in order to prepare the site for a piled foundation solution and achieve a 5% CBR. The results of the CBR tests confirm that all locations met the compaction specification and are presented within Appendix VI. E3P undertook geotechnical sampling of the site won Made Ground, upfill was classified as 2C material and generally fell within (± 2%) of the tolerable moisture limit (PSL Reports – PSL6972, PSL7079 and PSL7248), where soils were outside of tolerable moisture limits OPC was added to control moisture content to appropriate levels.

Urban Regen had full-time supervision with E3P providing part-time supervision of the following:

- General cut and fill of natural and anthropogenic soils in accordance with the E3P geotechnical & contamination performance criteria to create a development platform for a piled foundation.
- Management of all materials to maximise the retention of soils on site to ensure suitable development.
- Turnover of any Made Ground soils to remove slabs and foundations.
- CBR plate load tests completed on all roads and piling mats.
- In-situ density testing (NNDGT) testing on upfill to confirm compaction.
- Geotechnical testing of the site-won material was undertaken for PSD.
- CBR tests were undertaken beneath roads and plots to ensure compaction of 5%.

The results of the CBR and NNDG tests confirm that all locations met the compaction specification and are given in Appendix III and IV.

Further Works
None.

RE-25 – PREPARATION OF GROUND FOR VIBRO-STONE COLUMNS WITHIN TREE INFLUENCE

DATE OF WORKS UNDERTAKEN
Throughout

PHOTOGRAPHS
Plate 49-56

OVERVIEW OF WORKS

Background
Where trees are present, or within their total zone of influence, the contractor must ensure that all cohesive soils are removed to the required depth with the subsequent replacement with a granular blanket to fully mitigate the potential for volumetric instability in the clay soils.

Works Undertaken
Coopers have completed the FZP for the site, this should be read in conjunction with this validation report. The Coopers FZP denotes plots affected by tree influence across the site.

Phase 1 and 2A utilised VSC foundations. In areas of tree influence within these parcels, turnover depths were locally deepened (where required) to remove cohesive deposits. The resultant void was infilled with granular material - Class 1A materials (Phase 1) and imported 6F5 (Phase 2A) to prevent issues associated with volumetric instability in clay soils.

Within the north of Phase 2A, within an area formally occupied by trees and vegetation, a localised soft spot was encountered within natural clay deposits. In January 2023, E3P undertook a series of trial pits, and in-situ hand shear vane testing was undertaken to delineate the area of soft clay. In February 2023, Urban Regen excavated the soft clays with E3P in attendance, undertaking a watching brief. Approximately 1000m^3 of material was removed and stockpiled within Parcel B. The resultant void was infilled with imported granular (6F + quarried stone) materials nominally compacted to facilitate a VSC foundation.

VSC plots in Phase 2C were outside the influence of trees. However, given the nature of the turnover works the Made Ground Soils were removed to the top of natural with the resulting void upfilled with Class 2C materials achieving >95% compaction of the Maximum Dry Density.

Phase 3 and 2C utilised a pre-cast piled foundation, and no further works were required in these areas.

The site E3P site investigation (14-554-R1-2, December 2022) recorded the underlying clays to be of "low volume change potential" in accordance with the classification system utilised by the LABC/NHBC industry guidance.

As such, a relevant pile design was utilised to account for low volume change clays to prevent any potential heave.

Further Works
None.

RE-26 – IMPORTATION OF BULK FILL

DATE OF WORKS UNDERTAKEN
January 2023

PHOTOGRAPHS
Plate 59

CHEMICAL TESTING
I2 Analytical-23-14763-1 Don Street 14-554. – (Import 101-102)
I2 Analytical-2323-15243-1 Don Street 14-554.- (Import 103-104)

GEOTECHNICAL TESTING
Murray Rix – MRN 4643/3

OVERVIEW OF WORKS

Background
Where there is a net shortfall of material required to achieve the proposed ground levels, it will be necessary to import natural inert soils and aggregate as per the engineering requirements.

Imported material must be certified as suitable for use in strict accordance with the E3P chemical and geotechnical performance criteria.

Works Undertaken
Up-filling with imported bulk fill was undertaken within Phase 2C (Parcel C). 6F5 material was imported by John O'Sheas. Invoices related to this material are available from the Remediation Contractor on request.

E3P undertook chemical sampling of the imported 6F5 (Import 101-104 and Import 105 6F5-107 6F5) for confirmation of use within site. Imported samples did not record any exceedances of remediation/validation values and therefore are suitable for use as upfill.

Grading certificates (MRN 4643/3) classified the material as 6F5.

No further import of bulk fill was required across the wider site.

Further Works
None.

RE-27 – POST REMEDIATION GAS MONITORING

DATE OF WORKS UNDERTAKEN

April 2023 to October 2024

SUPPORTING DOCUMENT

14-554-R5-1 October 2023 Parcel A (Phase 1)
14-554-R4-1 May 2023 Parcel C, D and E (Phase 2A and 3)
14-554-R9-1 October 2024 Parcel B

OVERVIEW OF WORKS

Background
Upon completion of the grouting works within the underlying coal seams and remediation works, further gas monitoring wells will need to be installed within Parcel A and a post remediation gas assessment undertaken.

Works Undertaken
Following completion of all remediation, enabling and drill and grout works, additional ground gas monitoring installations were installed with a four week gas monitoring program and further assessment undertaken. The location, frequency and duration of post remediation ground gas monitoring was agreed with the Rochdale Borough Council Environmental Health Officer in March 2023.

Additional ground gas monitoring was phased and undertaken within Phase 2A (Parcel C) and Phase 3 (Parcel D and E) throughout April and May 2023. The full assessment is presented within E3P Ground Gas Addendum, 14-554-R4-1, May 2023 Parcel C, D and E (Phase 2A and 3).

Additional ground gas monitoring was undertaken within Phase 1 (Parcel A) throughout July and August 2023. The full assessment is presented within E3P Ground Gas Addendum, 14-554-R5-1, October 2023 Parcel A (Phase 1).

Additional ground gas monitoring was undertaken within Phase 2B/C (Parcel B) July and August 2024. The full assessment is presented within E3P Ground Gas Addendum, 14-554-R9-1 October 2024 Parcel B.

Prior to the installation of gas protective measures, the ground gas zoning plan was agreed with the Rochdale Borough Council Environmental Health Officer in June 2023 (Phase 2A and 3) and October 2023 (Phase 1).

A snapshot showing the location of post remediation monitoring wells, and ground gas zoning plan within completed phases is given as Figure 4.5 below and Drawing 14-554-036 in Appendix III.

FIGURE 4.5 – GROUND GAS LOCATION AND ZONING PLAN



Further Works
Further monitoring within the remaining area of Parcel B.

RE-28 – PREPARATION OF GARDEN FOR COVER SYSTEM

DATE OF WORKS UNDERTAKEN
Throughout

PHOTOGRAPHS
Plates 60-61

OVERVIEW OF WORKS

Background
As part of the land remediation works, garden areas will be prepared in a manner that will facilitate the placement of the clean cover system during the development phase of the works.

Works Undertaken
Across the site all gardens were prepared to 600mm below finished level to allow the placement of a clean cover system. Levels of the gardens to regrade level were brought to the intended elevation with imported materials and site won Made Ground.

Further Works
None.

RE-29 – PROVISION OF SUBSOIL

DATE OF WORKS UNDERTAKEN
Throughout

PHOTOGRAPHS
Plate 62-63

CHEMICAL TESTING
i2 Analytical Report – 22-14266 Eurofins Report – 24-14785

OVERVIEW OF WORKS

Background

Natural superficial deposits (predominantly granular soils) are deemed suitable for use within the upper 600 mm of clean cover in residential gardens and areas of soft landscaping. It is therefore deemed viable to reuse materials that are cut as part of the wider earthworks or through a soil inversion (regulated by an MMP) to generate the required volumes of material. However, a shortfall of material was recorded on site, as such, there was a need to import subsoil to site for use in the soft cover systems.

Works Undertaken

Site won subsoils have been generated from cut operations within natural strata within Phase 2B and from civil arising across the site. To date circa 5000 m3 of site won subsoil has been generated. To date, a total of 10 subsoil samples have been submitted for analysis, at a frequency of 1 per 250m3 in line with the E3P remediation strategy, covering 2,500 m3 of site won subsoil.

Analysis for subsoil undertaken using UKAS accredited methods where applicable. The chemical analysis suite comprises heavy metals, sulphates, phenols, speciated Polycyclic Aromatic Hydrocarbons (PAHs), speciated and total Petroleum Hydrocarbons (TPH) and asbestos. No exceedances of human health screening values were recorded within the five samples, confirming the soils suitability for use within private garden cover systems

Further testing of the material will be required at 1 per 250 m3, this will be recorded and issued on plot specific validation certificates throughout the build phase.

A total of 16,000 m3 of subsoil is required to complete the development, as such, import of naturally occurring suitable subsoil is likely to be required as works progress.

Sampling frequency following the agreed Remediation Strategy. Laboratory analysis certificates are provided in Appendix IV.

Further Works

Further validation testing of imported and site won subsoils. All garden areas where a cover system is required will be subject to plot specific independent validation. The subsoil source and associated chemical testing for soils used within plots will be issued as part of the garden validation letters for these plots. The MMP should be updated to include any future import of clean naturally occurring soils.

RE-30 – PROVISION OF TOPSOIL

DATE OF WORKS UNDERTAKEN
December 2022 – January 2023

PHOTOGRAPHS
Plate 14-15

CHEMICAL TESTING
I2 Analytical Report - 22-14259-1 (Phase 2B) I2 Analytical Report - 23-14759-1 (Phase 2A) Eurofins Report - 24-14785

OVERVIEW OF WORKS

Background

Natural Topsoil from the northern third of parcel B (football pitch area) may be suitable for re-use in garden cover system. Further chemical analysis will be required to confirm this.

Import of suitable topsoil material for use within the proposed development will most likely be required.

Works Undertaken

Urban Regen undertook a topsoil strip in Parcel B (Phase 2B) and Parcel C (Phase 2A) in November 2022, Urban Regen stockpiled natural site won topsoil's from within Phase 2A and 3 separately in line with the MMP.

To date circa 5200 m3 of site won topsoil has been generated.

To date, a total of 15 topsoil samples have been obtained from the stockpiled topsoil generated from Parcel 2B. In line with the specified frequencies within the remediation strategy this covers 750 m3 of topsoil (1 sample per 50m3).

E3P attended site on the 30th of January 2023 and obtained 3 topsoil samples from the stockpiled topsoil generated from Parcel 2A. In line with the specified frequencies within the remediation strategy this covers 150 m3 of topsoil (1 sample per 50m3).

Analysis for subsoil undertaken by I2 Analytical Laboratory using UKAS accredited methods where applicable. The chemical analysis suite comprises heavy metals, sulphates, phenols, speciated Polycyclic Aromatic Hydrocarbons (PAHs), speciated and total Petroleum Hydrocarbons (TPH) and asbestos.

Phase 2B topsoil recorded no exceedances of human health screening values within the 10 topsoil samples, confirming the soils suitability for use within private garden cover systems (i2 Analytical Report 22-14259). However, further testing of the material will be required at 1 per 50 m3, this will be recorded and issued on plot specific validation certificates throughout the build phase.

Phase 2C topsoil recorded minor exceedances of non-volatile PAHs (Benzo(b)fluoranthene, Benzo(a)pyrene and Dibenz(a,h)anthracene) against human health screening criteria for private garden cover systems. However, no exceedances of public open space cover system values have been recorded (i2 Analytical Report 23-14759). As such, topsoil from Phase 2C was utilised within areas of public open space and soft landscaping across the development.

A total of circa 6,000 m3 of topsoil is required to complete the development, as such, import of naturally occurring suitable topsoil is required as works progress.

Sampling frequency following the agreed Remediation Strategy. Laboratory analysis certificates are provided in Appendix IV.

Further Works
Ongoing sampling of site won and imported topsoil (1 per 50m3). All garden areas where a cover system is required will be subject to plot specific independent validation. The topsoil source and associated chemical testing for soils used within plots will be issued as part of the garden validation letters for these plots.

RE-31 – INDEPENDENT VALIDATION: WATCHING BRIEF

DATE OF WORKS UNDERTAKEN
Throughout

PHOTOGRAPHS
Plate 1-63

OVERVIEW OF WORKS

Background
Given the site history and potential contamination sources identified within the ICSM, a degree of uncertainty remains with regard to the potential for as yet unidentified contamination impact within the near-surface soils and groundwater.

It will therefore be necessary to instigate the site-wide remediation and enabling works under the supervision of a suitably qualified and independent specialist.

Works Undertaken
E3P maintained a part-time watching brief throughout the duration of remediation and enabling works to monitor works, record ground conditions and fully investigate all potential sources of as yet unidentified contamination.

Further Works
None.

RE-32 – WASTE SOILS SURPLUS TO REQUIREMENTS

DATE OF WORKS UNDERTAKEN
Throughout

CHEMICAL TESTING
RJT Consulting report dated 6th April 2023
I2 Analytical Report - 23-28847 (Knotweed 101)

OVERVIEW OF WORKS

Background
In the event that a surplus of excavation material is present on-site, this, in most cases, will be deemed to be a waste in accordance with the Waste Framework Directive (Article 3(1) Waste Framework Directive 2008/98/EE). The waste producer – but ultimately, the landowner – is responsible for the compliant disposal of such materials.

Works Undertaken
Across the development the earthworks have been designed to be in balance, as such, soils generated from excavation activities (cut) have been re-used on site within the earthworks balance in areas requiring upfill, as such, no surplus soil generation was created.

The exception to the above is where hotspot arisings have been deemed unsuitable for use within the development and soils in areas affected by knotweed.

In relation to hotspot arisings, Urban Regen used results of the arisings obtained by E3P (Re points 13, 14, 15 and 17) and removed the soils to waste facilities.

Where soils were impacted with knotweed E3P undertook chemical analysis (I2 Analytical Report - 23-28847) and WM3 waste classification (RJT Consulting report dated 6th April 2023). Urban Regen then removed these soils to a licenced waste facility.

Deleterious materials, vegetation and small quantities of asbestos waste were removed from site by Urban Regen.

Waste consignment notes and tracking notes are available upon request to Urban Regen.

Further Works
None.

RE-33 – VALIDATION OF MATERIALS FOR POTABLE WATER SUPPLY INFRASTRUCTURE

DATE OF WORKS UNDERTAKEN
May 2023 to August 2023

CHEMICAL TESTING
i2 Analytical Report - 23-35715, 22-14849 & 23-38628 (Phase 1) i2 Analytical Report - 23-28846-1, 23-26301-1, 23-19920-1, 23-15243-1 & 23-14763-1 (Phase 2A) i2 Analytical Report - 23-28846 & 21-51712 (Phase 3)

SUPPORTING DOCUMENTS
14-554 - UURA - Don Street, Phase 1 - August 2023 UURA - Don Street Parcel - Phase 2A- Show Homes - May 23 UURA - Don Street Phase 3 - May 2023 UURA - Don Street Phase 2B and 2C – February 2024

OVERVIEW OF WORKS

Background
A contaminant risk assessment, completed during pervious works in accordance with the UKWIR assessment framework identified elevated concentrations of potentially volatile/soluble hydrocarbon compounds that necessitate the use of protected water supply pipe-work.

Works Undertaken
Phase 1 has been turned over to depths as per E3P drawing 037 attached and built up to levels of 90.10 - 92.65 AoD. Site won Made Ground Soils have been re-used at depth as bulk fill, approximately 2-3m below the proposed pipeline depth. The remaining upfill, inclusive of the material in which the

pipe will be laid has been completed using site won natural sands from the wider site (Phase 2C and 3). Prior to placement in the upper 3m, site won natural sands were sampled (i2 Chemical Certificate - 23-35715, 22-14849 & 23-38628). A UKWIR assessment (14-554 - UURA - Don Street, Phase 1 - August 2023) was undertaken by E3P and recommended PE pipe was used within Phase 1 of the development.

Phase 2A has been turned over and upfilled with site won made ground soils and imported 6F5 material to raise levels within Parcel C. All import material is compliant with the remediation target values for human health stated in the Remediation Strategy. Within Phase 2 site levels have changed in line with FFLs given on Coopers Foundation Zoning Plan 5639/Fd/02 (March 2022) and a series of window samples were undertaken at FFL to obtain samples at pipeline depth in April 2023 (i2 Analytical - 23-28846-1, 23-26301-1, 23-19920-1, 23-15243-1 & 23-14763-1). A UKWIR assessment (14-554 - UURA - Don Street, Phase 2A – May 2023) was undertaken by E3P and recommended barrier pipe was used within Phase 2A of the development due to the presence of TPH above PE thresholds in the existing soils and imported soils that have been re-used across Phase 2A.

Phase 2B is located within an area of cut, with natural soils present. Phase 2C is a former "landfill", soils in this area have been processed to ensure remaining soils do not pose a risk to human health or controlled waters with remaining soils falling below remedial and end of waste thresholds. Remedial works undertaken in line with RE-19, RE-35 and Section 4 of E3P Remediation and Enabling Works Strategy (Ref 14-554-r2-rev10, February 2023). The soils have been re used on site within the earthworks balance, as such, no shortfall or surplus soil generation. Site levels have changed in line with FFLs given on Coopers Foundation Zoning Plan 5639/Fd/02 (March 2022). A UKWIR assessment (14-554 - UURA - Don Street, Phase 2B and C – February 2024) was undertaken by E3P and recommended barrier pipe was used within Phase 2B and C of the development due to the presence of TPH above PE thresholds in the existing soils.

Phase 3 has been turned over and upfilled with site won Made Ground and natural soils. Within Phase 3 soils have been re used on site within the earthworks balance, as such, no shortfall or surplus soil generation. Site levels have changed in line with FFLs given on Coopers Foundation Zoning Plan 5639/Fd/02 (March 2022) and a series of window samples were undertaken at FFL to obtain samples at pipeline depth in April 2023 (i2 Analytical - 23-28846 & 21-51712). A UKWIR assessment (14-554 - UURA - Don Street, Phase 3 – May 2023) was undertaken by E3P and recommended barrier pipe was used within Phase 3 of the development due to the presence of TPH above PE thresholds in the existing soils soils that have been re-used across Phase 3.

Further Works
None.

RE-34 – PRODUCTION OF DRILL AND GROUT SPECIFICATION

DATE OF WORKS UNDERTAKEN
January 2023 - February 2023

SUPPORTING DOCUMENTS
E3P Performance Specification for the Consolidation of Abandoned Mine Workings : Report ref: 14-554-R6 Rev 2, February 2023. E3P Mine Workings Stabilisation Report : Report ref: 14-554-R5 Rev2, dated June 2023).

OVERVIEW OF WORKS
Background Due to the sites location withing a Coal Authority Development High Risk Area associated with several coal seams sub-cropping beneath the Site, there is a requirement to complete drill and grout treatment works prior to development of the site. As such, a drill and grout specification should be agreed prior to stabilisation works. **Works Undertaken** E3P prepared a Performance Specification for the Consolidation of Abandoned Mine Workings (report ref: 14-554-R6 Rev 2). Treatment works were completed by M&J drilling in accordance with the specification between January 5th 2023 and February 21st 2023, under Coal Authority Permit 24676. Details and validation of the treatment works are reported in E3P Mine Workings Stabilisation Report (ref: 14-554-R5 Rev2, dated June 2023). **Further Works** None.

RE-35 – LANDFILL TREATMENT

DATE OF WORKS UNDERTAKEN
April 2023 – December 2023

OVERVIEW OF WORKS
Background Treatment of the former landfill will incorporate excavation of made ground materials from within the extent of the landfill boundary to the required depth. **Works Undertaken** Treatment of landfill soils was undertaken in line with methods and testing outlined in RE-19. **Further Works** None.

RE-36 – REMEDIAL VERIFICATION REPORT

DATE OF WORKS UNDERTAKEN
October 2022 – December 2023

PHOTOGRAPHS
Plate 1 - 80

OVERVIEW OF WORKS
This report outlines works undertaken relating to site clearance, chemical testing, remedial works, remedial verification and waste transfer. This report should be submitted to the local authority for approval following completion.

5. POST REMEDIATION BUILD PHASE REQUIREMENTS

This document details the construction works that are required to ensure full compliance with the remediation Strategy, Regulatory Authorities, Building Control & Warranty Providers. The following should be implemented during the build phase of the development:

- Chemical validation of any additional topsoil imported for use within gardens;
- Chemical validation of any additional subsoil imported for use within gardens;
- Placement and validation of sub-soil (clean material) in a 450mm layer within any plots where the material was not placed during the Remediation & Enabling works;
- Placement and validation of imported topsoil (clean material) in a 150mm later within all gardens and areas of soft landscaping; and,
- Installation and validation of ground gas plot specific protection measures.

The validation protocols are presented within the E3P Remediation and Enabling Works Strategy and are presented below.

5.1.1. PROCEDURE FOR PLACEMENT OF CHEMICALLY SUITABLE COVER SYSTEM

Garden and landscaped areas need to be backfilled with 450mm chemically validated subsoil, with 150mm topsoil overlaying this. Topsoil is required to be confirmed as chemically suitable prior to placement. Where sub-soil is not placed during Remediation & Enabling works, E3P will be required to return to site and undertake independent validation of the correct placement of sub-soil.

The placement of 600mm of clean material will be undertaken during the build phase works of the project.

The placement of subsoil and corresponding validation will be documented within the Garden Validation Letters (to be issued on completion of the contractor's works).

If proposed utilities are to be placed within the cover system, the clean cover should be placed prior to installation of these utilities.

If natural drift deposits are encountered, excavation can cease here.

E3P will collect photographic evidence of the placement of 150mm of certified topsoil and 450mm of subsoil on completion of construction works. This element will also be checked by the Building Control Officer as part of the site completion prior to issuing of a CML certificate.

The garden validation procedure is detailed in Table 5.1.

TABLE 5.1 GARDEN VALIDATION PROCEEDURE

PROCEDURE	METHOD
Chemical Validation	Imported sub-soils and topsoil will need to be chemically analysed to confirm suitability for use with the proposed cover system prior to installation and completion of the garden systems. E3P will issue an email to the Countryside Properties Development Engineer with an assessment of the chemical suitability of both sub soils and top soils. If acceptable the materials can be installed to the required depth at which time the plot will be deemed complete following a validation procedure by a suitability qualified E3P engineer.
Trial Holes	Trial holes are deemed necessary for the all plots given that the 600mm cover system will need to be placed on each plot during the build phase.
Validation	Photographic evidence will be taken by E3P of the topsoil placement demonstrating the depth of topsoil and practical completion of works are required for each and every plot. For plots where sub-soil depths require validation by E3P during the build phase, photographs will be taken and collated by E3P.
Validation Certificate	Once the photographs of the placement of topsoil (over the clean material) have been provided, E3P will issue a plot specific validation certificate to demonstrate that the required subsoil and topsoil has been placed in the required garden plots along with the chemical analysis.
Completion Report	Upon completion of all garden and landscaped areas within the development, a Completion Report will be issued providing the confirmation that all remediation requirements have been achieved.

Plate 1 provides an example of a garden validation photographs that will be required for each plot.

PLATE 1 EXAMPLE PLOT COVER SYSTEM VALIDATION

Plot No: 4 (Car Park Landscaping)		
Depth of Strata (m bgl)	0.00-0.30	Validated TOPSOIL
Depth of Cover System Materials	***Depth of Cover System Materials***	
		
Depth of Cover System at Ground Level and in Relation to Unit / Structure		
		

5.2. GROUND GAS PROTECTION MEASURES

Post remediation ground gas monitoring was undertaken within Phase 1, 2A and 3.

Post remediation gas monitoring data within Phase 1 shows plots to vary between Characteristic Situation 1 and Characteristic Situation 3, with a plot specific ground gas zoning plan given as E3P drawing 14-554-036 in Appendix III.

Post remediation gas monitoring data within Phase 2A shows plots to fall within Characteristic Situation 1.

Post remediation gas monitoring data within Phase 3 shows plots to vary between Characteristic Situation 1 and Characteristic Situation 2, with a plot specific ground gas zoning plan given as E3P drawing 14-554-036 in Appendix III.

Where plots have been deemed to fall within Characteristic Situation 2 or 3, these plots will require specialist mitigation measures to be constructed in accordance with BS8485 (2015)+A1(2019).

The validation inspection is to include the items that are detailed within Table 5.2.

TABLE 5.2 GROUND GAS MITIGATION MEASURES VALIDATION ITEMS

INSPECTION	METHOD
Product Verification	Confirmation that suitable products have been installed to consist of photographs of product types, labels on packaging and delivery tickets.
Wall Cavity Inspection	Confirmation that gas membrane spans the external wall cavity above the periscopic vents.
General Condition	The membrane is to be inspected to ensure there are no tears, punctures or rips.
Jointing	The engineer is to check the overlaps between membranes are correctly sealed with sufficient overlaps.
Service Entry Points	Verification of the presence of preformed tophats sealed to the pipe and membrane as per the construction detail.
Passive Venting Systems	The engineer should verify the presence of vents at 2m centres on at least 3 of the external walls. Verification of the stone venting layer and presence of pipes to be supplied by photographic records from site.

Examples of gas membrane verification photographs provided in Plate 2.

It should be noted that these are for illustrative purposes only as each site will have a site-specific gas membrane specification.

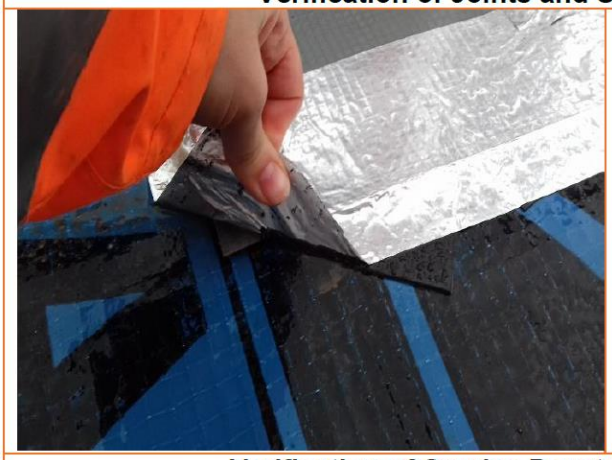
PLATE 2 EXAMPLE GAS MEMBRANE VERIFICATION

Plot – 236

General Condition of Membrane-Good Condition




Verification of Joints and Seals-Good Condition




Verification of Service Penetrations-Good Condition




5.3. POTABLE WATER SUPPLY – CONTAMINANT ASSESSMENT CRITERIA

CONTAMINANT GROUP	PE-THRESHOLD[A]	MAXIMUM PERMISSIBLE CONCENTRATION AT PROPOSED PIPELINE DEPTH[A]	MAXIMUM PERMISSIBLE SITE CONCENTRATION[A]
Total VOC	0.5	N/A	N/A
Total BTEX And MTBE	0.1	N/A	N/A
Total SVOCs (Excluding PAH and those substances marked with an *)	2	N/A	< 0.3
EC5-EC10 Aliphatic and Aromatic Hydrocarbons	2	< 0.1	< 0.1
EC10-EC16- Aliphatic and Aromatic Hydrocarbons	10	5.7	5.7
EC16-EC40 Aliphatic and Aromatic Hydrocarbons	500	49	149
Phenols (From SVOC Analysis)*	2	< 0.3	< 0.3
Cresols and Chlorinated Phenols (From SVOC Analysis)	2	< 0.3	< 0.3

Notes

A. All concentrations in mg/kg.

END OF REPORT

APPENDIX I
LIMITATIONS

1. This report and its findings should be considered in relation to the terms of reference and objectives agreed between E3P and the Client as indicated in Section 1.2.

2. For the work, reliance has been placed on publicly available data obtained from the sources identified. The information is not necessarily exhaustive and further information relevant to the site may be available from other sources. When using the information it has been assumed it is correct. No attempt has been made to verify the information.

3. This report has been produced in accordance with current UK policy and legislative requirements for land and groundwater contamination which are enforced by the local authority and the Environment Agency. Liabilities associated with land contamination are complex and requires advice from legal professionals.

4. During the site walkover, reasonable effort has been made to obtain an overview of the site conditions. However, during the site walkover, no attempt has been made to enter areas of the site that are unsafe or present a risk to health and safety, are locked, barricaded, overgrown, or the location of the area has not been made known or accessible.

5. Access considerations, the presence of services and the activities being carried out on the site limited the locations where sampling locations could be installed and the techniques that could be used.

6. Site sensitivity assessments have been made based on available information at the time of writing and are ultimately for the decision of the regulatory authorities.

7. Where mention has been made to the identification of Japanese Knotweed and other invasive plant species and asbestos or asbestos-containing materials, this is for indicative purposes only and do not constitute or replace full and proper surveys.

8. The executive summary, conclusions and recommendations sections of the report provide an overview and guidance only and should not be specifically relied upon without considering the context of the report in full.

9. E3P cannot be held responsible for any use of the report or its contents for any purpose other than that for which it was prepared. The copyright in this report and other plans and documents prepared by E3P is owned by them and no such plans or documents may be reproduced, published or adapted without written consent. Complete copies of this may, however, be made and distributed by the client as is expected in dealing with matters related to its commission. Should the client pass copies of the report to other parties for information, the whole report should be copied, but no professional liability or warranties shall be extended to other parties by E3P in this connection without their explicit written agreement there to by E3P.

10. New information, revised practices or changes in legislation may necessitate the re-interpretation of the report, in whole or in part.

APPENDIX II
GLOSSARY

TERMS

ACM	Asbestos-containing material	**MMP**	Materials management plan
ADS	Acoustic design statement	**ND**	Not detected
AST	Above-ground storage tank	**NDP**	Nuclear density probe
BGS	British Geological Survey	**NMP**	Noise management plan
BSI	British Standards Institute	**NPSE**	Noise policy statement for England
BTEX	Benzene, toluene, ethylbenzene, xylenes	**NR**	Not recorded
CA	Coal Authority	**PAH**	Polycyclic aromatic hydrocarbon
CBR	California bearing ratio	**PCB**	Polychlorinated biphenyl
CIEH	Chartered Institute of Environmental Health	**PI**	Plasticity index
CIRIA	Construction Industry Research Association	**PID**	Photo ionisation detector
CLEA	Contaminated land exposure assessment	**POS**	Public open space
CML	Council of Mortgage Lenders	**PPE**	Personnel protective equipment
CoC	Contaminants of concern	**ProPG**	Professional practice guidance
CSM	Conceptual site model	**QA**	Quality assurance
DNAPL	Dense non-aqueous phase liquid (chlorinated solvents, PCB)	**SGV**	Soil guideline value
DWS	Drinking water standard	**SPH**	Separate-phase hydrocarbon
EA	Environment Agency	**SPT**	Standard penetration test
EQS	Environmental quality standard	**SVOC**	Semi-volatile organic compound
FFL	Finished floor level	**TPH**	Total and speciated petroleum hydrocarbon
GAC	General assessment criteria	**TPH CWG**	Total Petroleum Hydrocarbon (Criteria Working Group)
GL	Ground level	**UKWIR**	United Kingdom Water Infrastructure Risk
GSV	Gas screening value	**UST**	Underground storage tank
HCV	Health criteria value	**VCC**	Vibro-concrete column
ICSM	Initial conceptual site model	**VOC**	Volatile organic compound
LEL	Lower explosive limit	**VRSC**	Vibro-replacement stone columns
LMRL	Lower method reporting limit	**VSC**	Vibro-stone columns
LNAPL	Light non-aqueous phase liquid (petrol, diesel, kerosene)	**WHO**	World Health Organisation
MCV	Moisture condition value	**WRAP**	Waste and Resources Action Programme
MIBK	Methyl isobutyl ketone	**WTE**	Water table elevation

m	Metres	**ppm**	Parts per million
km	Kilometres	**mg/m^3**	Milligram per metre cubed
% v/v	Percent volume in air	**m bgl bgl**	Metres below ground level
mb	Millibars (atmospheric pressure)	**m bcl**	Metre below cover level
l/hr	Litres per hour	**mAOD**	Metres above ordnance datum (sea level)
µg/l	Micrograms per litre (parts per billion)	**kN/m^2**	Kilonewtons per metre squared
ppb	Parts per billion	**µm**	Micrometre
mg/kg	Milligrams per kilogram (parts per million)	**SSRT**	Site Specific Remediation Target
PSD	Particle Size Distribution	**DD**	Dry Density
CL:AIRE	Contaminated Land: Applications in Real Environments	**Mc**	Moisture Content
ρ	Bulk Density	**GPR**	Ground Penetrating Radar
NDP	Nuclear Density Probe	**FFL**	Finished Floor Level
LEL	Lower Explosive Limit	**UKWIR**	UK Water Industry Research
CIRIA	Construction Industry Research and Information Association	**LOD**	Limit of Detection

APPENDIX III
DRAWINGS



Drawing Features

- 25m Grid across Landfill
- 50m Grid across the rest of the site

Notes:

Client:

Kellen Homes

Job No: 14-554

Date: 02.03.2023

Drawing No: 033

Scale: NTS@ A3

Phase	Issue	Date	Drawn	Checked
P1	REVB	02.03.2023	LM	MD
P1	REVA	25.01.2023	LM	CB

Job Title:

Donn Street,
Middleton

Drawing Title:

Landfill Location Proposed Development Plan

Environmental Engineering Partnership Ltd
Taylor Road, Trafford Park
Urmston, Manchester, M41 7JQ
Tel: 0161 707 9612
E-mail: info@e3p.co.uk
Website: www.e3p.co.uk

The client must not amend any drawing, design or other intellectual property produced by E3P Ltd without permission in writing from E3P Ltd in advance of any amendments being made. In the event that such written permission is not obtained in advance of the amendments being made, E3P Ltd shall not be liable for any damage and/or losses occurring as a result of the amended drawing, design or intellectual property.



C3
C2
C1
D1
D2
D5
D4

N

Location Symbols

- Approximate Window Sample Probehole Location (E3P - 2021)
- Approximate Window Sample Probehole Location with Install (E3P - 2021)
- Approximate Trial Pit Location (E3P - 2021)
- Approximate Rotary Borehole Location (E3P - 2021)
- Approximate Window Sample Probehole Location (E3P - 2014)
- Approximate Window Sample Probehole Location with Install (E3P - 2014)
- Approximate Trial Pit Location (E3P - 2014)
- Approximate Rotary Borehole Location (E3P - 2014)
- Approximate Window Sample Probehole Location with Install (Coopers - 2013)
- Approximate Window Sample Probehole Location (Coopers - 2013)
- Approximate Trial Pit Location (Coopers - 2013)
- Approximate Cable Percussive Borehole Location (Coopers - 2013)
- Approximate Trial Pit Location (REFA - 2006)
- Approximate Cable Percussive Borehole Location (REFA - 2006)
- Approximate Rotary Borehole Location (REFA - 2006)
- Approximate Cable Percussive Borehole Location (Norwest Holst - February 1983)
- Approximate Cable Percussive Borehole Location (E3P - May 2022)
- Approximate Trial Pit Location (E3P - May 2022)
- Approximate Window Sample Probehole Location (E3P - May 2022)
- Approximate Window Sample Probehole Location (E3P - February 2023)
- Approximate Post Remediation Monitoring Wells

Notes:

Phase	Issue	Date	Drawn	Checked
P1	REVC	21.01.2023	OW	MD
P1	REVB	20.02.2023	LM	MD
P1	REVA	07.10.2022	EB	MD

Client: Kellen Homes

Job No: 14-554

Date: 21.04.2023

Drawing No: 005

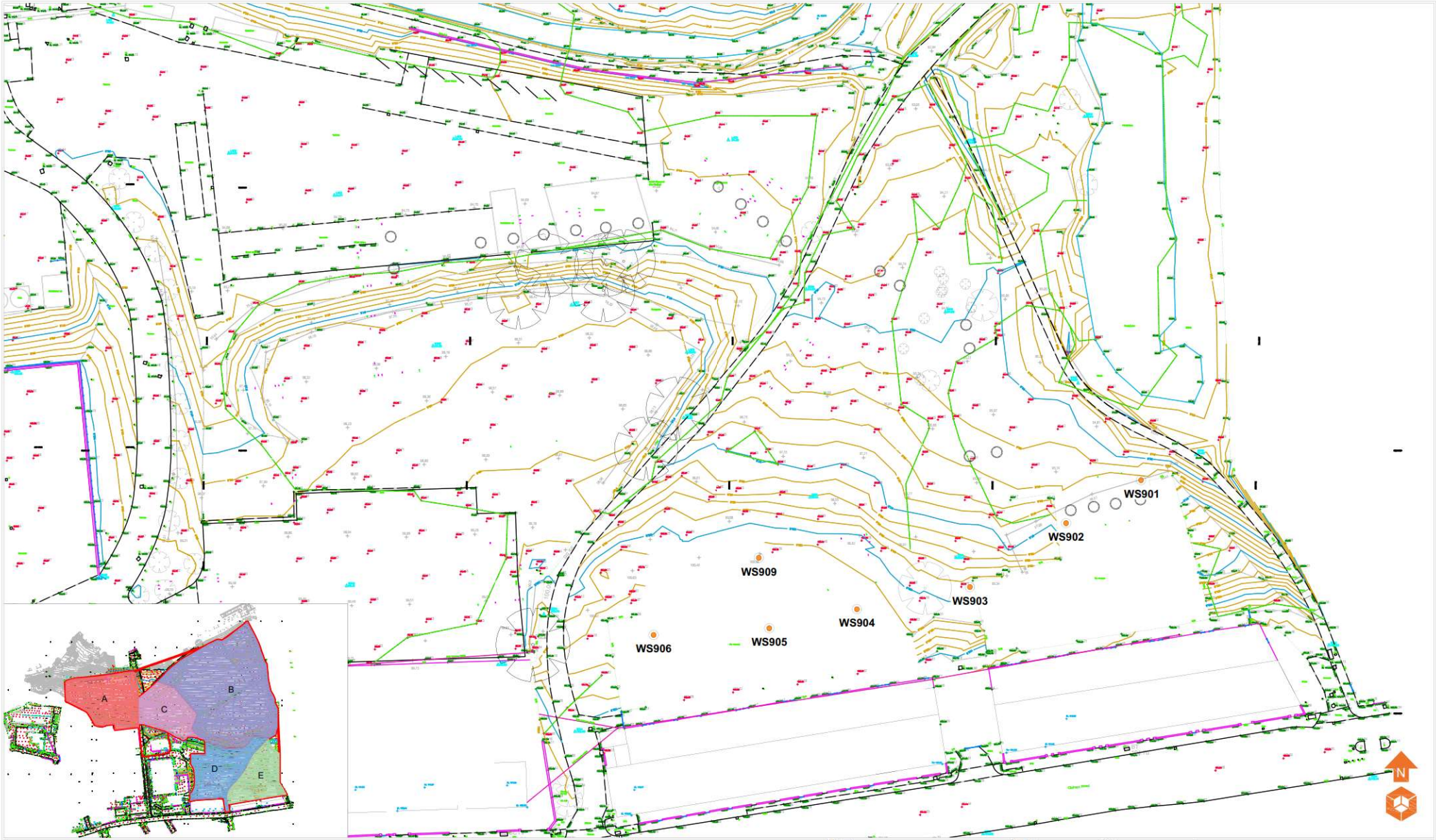
Scale: NTS@ A3

Job Title: Donn Street, Middleton

Drawing Title: Exploratory Hole Location Plan (Full Site)

e3p
Environmental Engineering Partnership Ltd
Taylor Road, Trafford Park
Urmston, Manchester, M41 7JQ
Tel: 0161 707 9612
E-mail: info@e3p.co.uk
Website: www.e3p.co.uk

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Location Symbols

Approximate Window Sample Probehole Location (E3P February- 2023)

Notes:

Client:
Kellen Homes

Job No: 14-554

Date: 20.02.2022

Drawing No: 030

Scale: NTS@ A3

e3p
Environmental Engineering Partnership Ltd
Taylor Road, Trafford Park
Urmston, Manchester, M41 7JQ
Tel: 0161 707 9612
E-mail: info@e3p.co.uk
Website: www.e3p.co.uk

Phase	Issue	Date	Drawn	Checked
P1	REVA	20.02.2023	LM	MD

Job Title:
Donn Street,
Middleton

Drawing Title:
900 Series Exploratory Hole Location Plan (Full Site)

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Location Symbols

- Approximate Window Sample Probehole Location (E3P - 2021)
- Approximate Window Sample Probehole Location with Install (E3P - 2021)
- Approximate Trial Pit Location (E3P - 2021)
- Approximate Rotary Borehole Location (E3P - 2021)
- Approximate Window Sample Probehole Location (E3P - 2014)
- Approximate Window Sample Probehole Location with Install (E3P - 2014)
- Approximate Trial Pit Location (E3P - 2014)
- Approximate Rotary Borehole Location (E3P - 2014)
- Approximate Window Sample Probehole Location with Install (Coopers - 2013)
- Approximate Window Sample Probehole Location (Coopers - 2013)
- Approximate Trial Pit Location (Coopers - 2013)
- Approximate Cable Percussive Borehole Location (Coopers - 2013)
- Approximate Trial Pit Location (REFA - 2006)
- Approximate Cable Percussive Borehole Location (REFA - 2006)
- Approximate Rotary Borehole Location (REFA - 2006)
- Approximate Cable Percussive Borehole Location (Norwest Holst - February 1983)
- Approximate Cable Percussive Borehole Location (E3P - May 2022)
- Approximate Trial Pit Location (E3P - May 2022)
- Approximate Window Sample Probehole Location (E3P - May 2022)

Remediation Issues

- Elevated Asbestos
- Elevated Volatile PAH and TPH
- Elevated Mercury
- Archeology Investigation Areas

Notes:

Phase	Issue	Date	Drawn	Checked
P1	REVE	20.02.2023	LM	MD
P1	REVD	17.11.2022	LM	GC
P1	REVC	03.11.2022	OW	NS
P1	REVB	24.10.2022	LM	SE
P1	REVA	10.10.2022	EB	SE

Client: Kellen Homes

Job No: 14-554

Date: 20.02.2023

Drawing No: 019

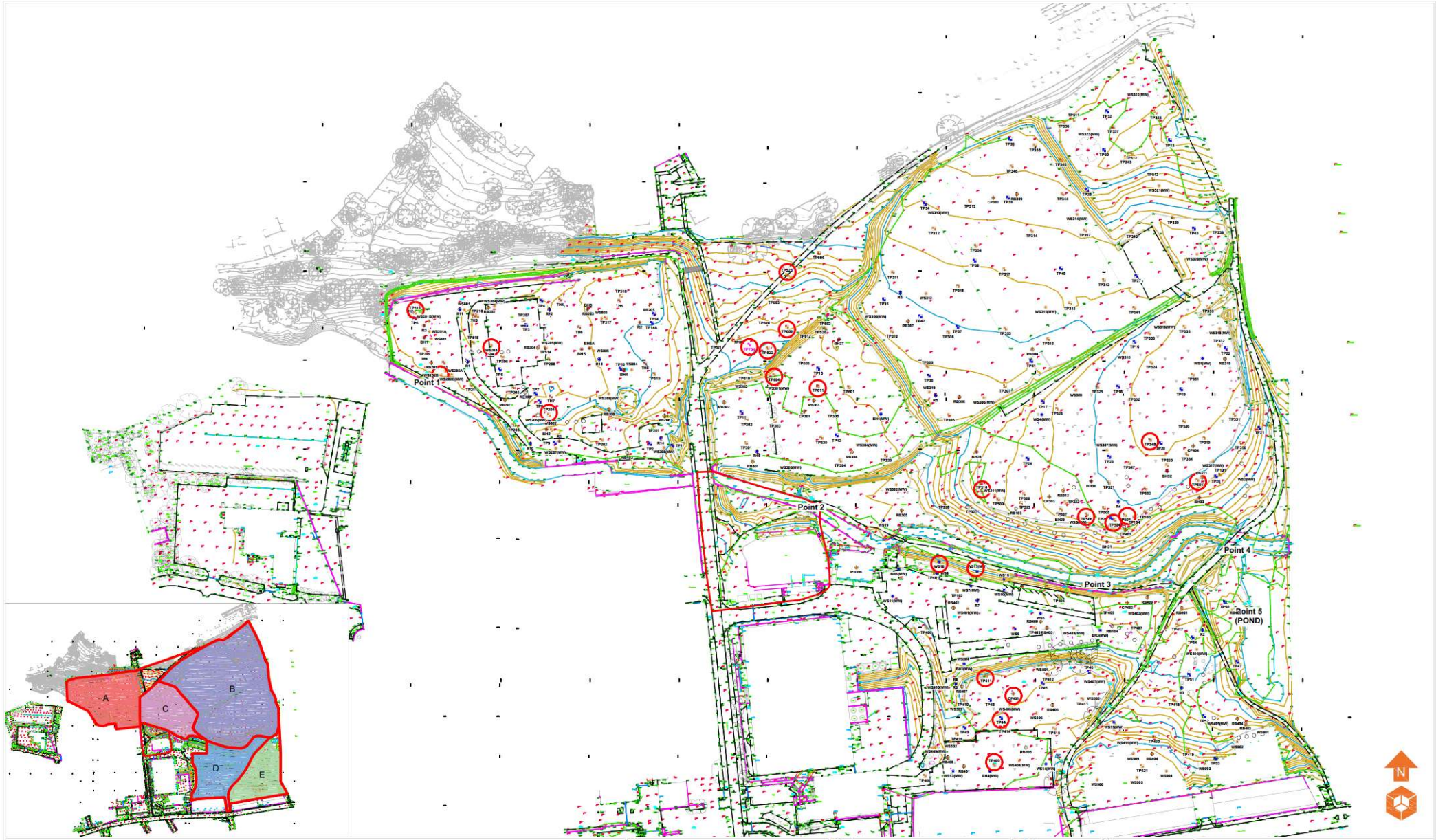
Scale: NTS@ A3

Job Title: Donn Street, Middleton

Drawing Title: Remediation Issues Plan (Full Site)

e3p
Environmental Engineering Partnership Ltd
Taylor Road, Trafford Park
Urmston, Manchester, M41 7JQ
Tel: 0161 707 9612
E-mail: info@e3p.co.uk
Website: www.e3p.co.uk

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Location Symbols

- Approximate Window Sample Probehole Location (E3P - 2021)
- Approximate Window Sample Probehole Location with Install (E3P - 2021)
- Approximate Trial Pit Location (E3P - 2021)
- Approximate Rotary Borehole Location (E3P - 2021)
- Approximate Window Sample Probehole Location (E3P - 2014)
- Approximate Window Sample Probehole Location with Install (E3P - 2014)
- Approximate Trial Pit Location (E3P - 2014)
- Approximate Rotary Borehole Location (E3P - 2014)
- Approximate Window Sample Probehole Location with Install (Coopers - 2013)
- Approximate Window Sample Probehole Location (Coopers - 2013)
- Approximate Trial Pit Location (Coopers - 2013)
- Approximate Cable Percussive Borehole Location (Coopers - 2013)
- Approximate Trial Pit Location (REFA - 2006)
- Approximate Cable Percussive Borehole Location (REFA - 2006)
- Approximate Rotary Borehole Location (REFA - 2006)
- Approximate Cable Percussive Borehole Location (Norwest Holst - February 1983)
- Approximate Cable Percussive Borehole Location (E3P - May 2022)
- Approximate Trial Pit Location (E3P - May 2022)
- Approximate Window Sample Probehole Location (E3P - May 2022)
- Visual / Olfactory Impact

Notes:

Phase	Issue	Date	Drawn	Checked
P1	REVD	20.02.2022	LM	MD
P1	REVC	04.11.2022	OW	NS
P1	REVB	03.11.2022	OW	NS
P1	REVA	28.10.2022	EB	NS

Client: Kellen Homes

Job Title: Donn Street, Middleton

Job No: 14-554

Date: 20.02.2023

Drawing No: 024

Scale: NTS@ A3

Drawing Title: Visual / Olfactory Impact Location Plan (Full Site)

Environmental Engineering Partnership Ltd
Taylor Road, Trafford Park
Urmston, Manchester, M41 7JQ
Tel: 0161 707 9612
E-mail: info@e3p.co.uk
Website: www.e3p.co.uk

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Point 1

Point 2

Point 3

Point 4

Point 5 (POND)

N

Site Features

Approximate Water Sample Location

Notes:

Client:

Kellen Homes

Job No: 14-554

Date: 16.11.2022

Drawing No: 026

Scale: NTS@ A3

Phase	Issue	Date	Drawn	Checked
P1	REVA	16.11.2022	LM	GC

Job Title:

Donn Street, Middleton

Drawing Title:

Water Sample Location Plan

e3p

Environmental Engineering Partnership Ltd
Taylor Road, Trafford Park
Urmston, Manchester, M41 7JQ
Tel: 0161 707 9612
E-mail: info@e3p.co.uk
Website: www.e3p.co.uk

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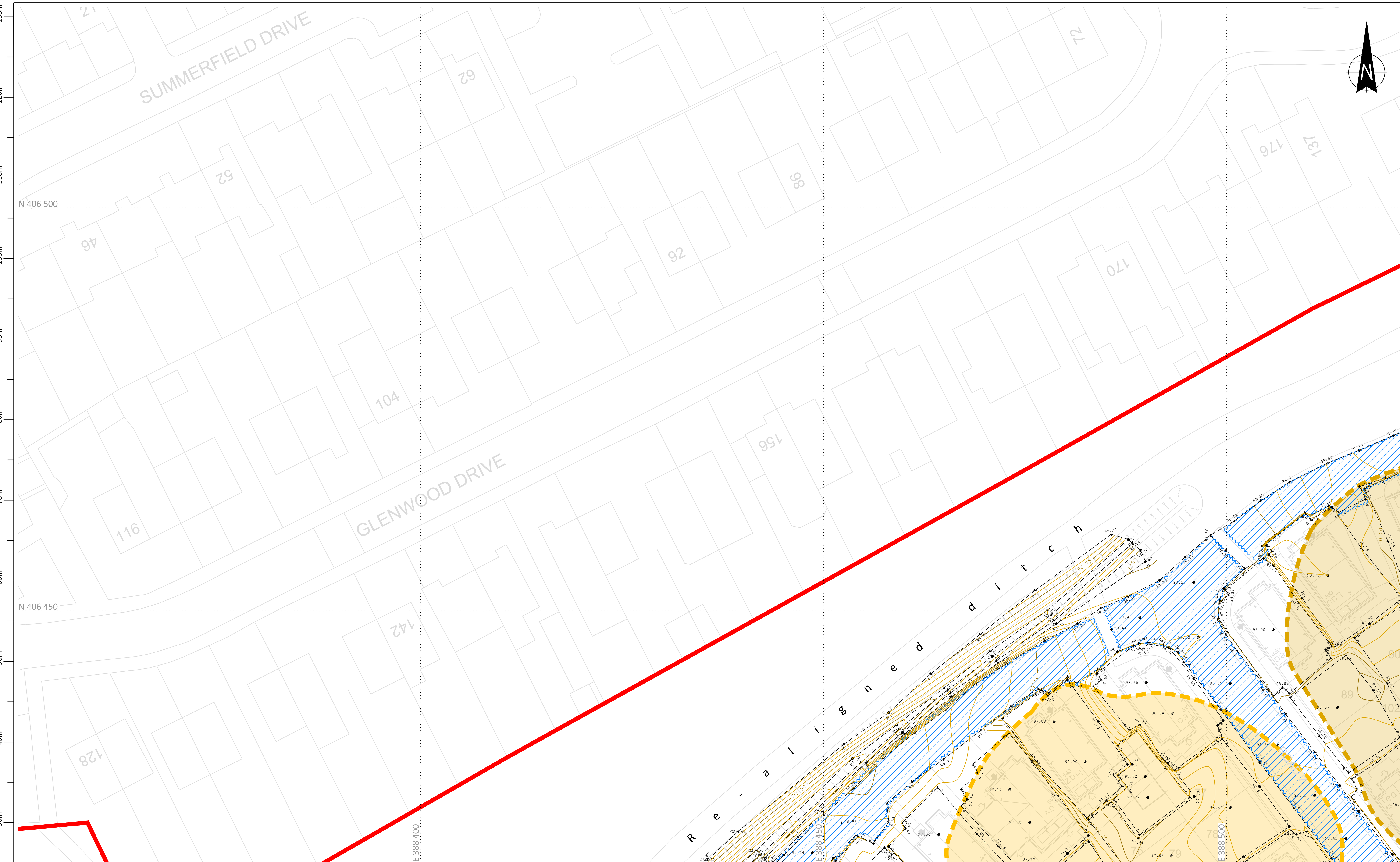
Location Symbols

Approximate Sample Location

Notes:					*Client:* Kellen Homes	*Job No:* 14-554	*Date:* 23.03.2023
						Drawing No: 035	*Scale:* NTS@ A3
P1	REVA	23.03.2023	HM	GC	*Job Title:* Donn Street, Middleton	*Drawing Title:* Sample Location Plan	
Phase	Issue	Date	Drawn	Checked			

e3p
Environmental Engineering Partnership Ltd
Taylor Road, Trafford Park
Urmston, Manchester, M41 7JQ
Tel: 0161 707 9612
E-mail: info@e3p.co.uk
Website: www.e3p.co.uk

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Legend

Site boundary	
Spot level (Base of excavation)	+33.48
Spot level (As built)	+33.48
As built top/bottom of bank	
As built major contour (1.0m interval)	
As built minor contour (0.2m interval)	
6F2/6F5 piling mats and road box (approximate extent only)	
Capping CBR location/reference	R3 MRN...
Untrimmed area (see Note 5)	
Low area (see Note 6)	

Stockpiles

Topsoil	5,142m³
Topsoil (landfill area)	2,569m³
Organic soil	2,105m³
Subsoil	6,928m³
Pond arisings	163m³
6F2/6F5	703m³

Notes

1. This plan is to be read in conjunction with the E3P completion report and all other associated reports/drawings/information including ***Handover Forms 3***, ***4/A1***, ***5/A1***, ***6/A1***, ***7/A1***, ***8/A4***, and ***9/A3***.
2. The residential layout depicted on this plan is extracted from drawing ***40-22 External works bound.dwg***, supplied digitally by Kellen Homes.
3. All fill materials have been placed using method compaction; being validated by E3P as the works were progressed.
4. Urban Regen Ltd., recommend that Kellen Homes should consult with E3P with regard to secondary settlement/creep to deeper zones of engineered fill within Areas 1, 2, 4, and 5, with potential consideration for geogrid underbuild to the development drainage and infrastructure, or other engineering solutions, as necessary.
5. As instructed, and detailed on ***Handover Form 8/A4***, the area detailed has been left untrimmed to facilitate continued works by Kellen Homes.
6. Due to a shortfall of fill materials, the area detailed has been left low to accommodate suitable developer arisings. These arisings are to be engineered in accordance with site requirements by Others, as agreed with Kellen Homes.

Client responsibilities post handover

To minimise any impact to the constructed landform, the site is to be suitably managed with the following recommendations considered prior to/during construction activities:

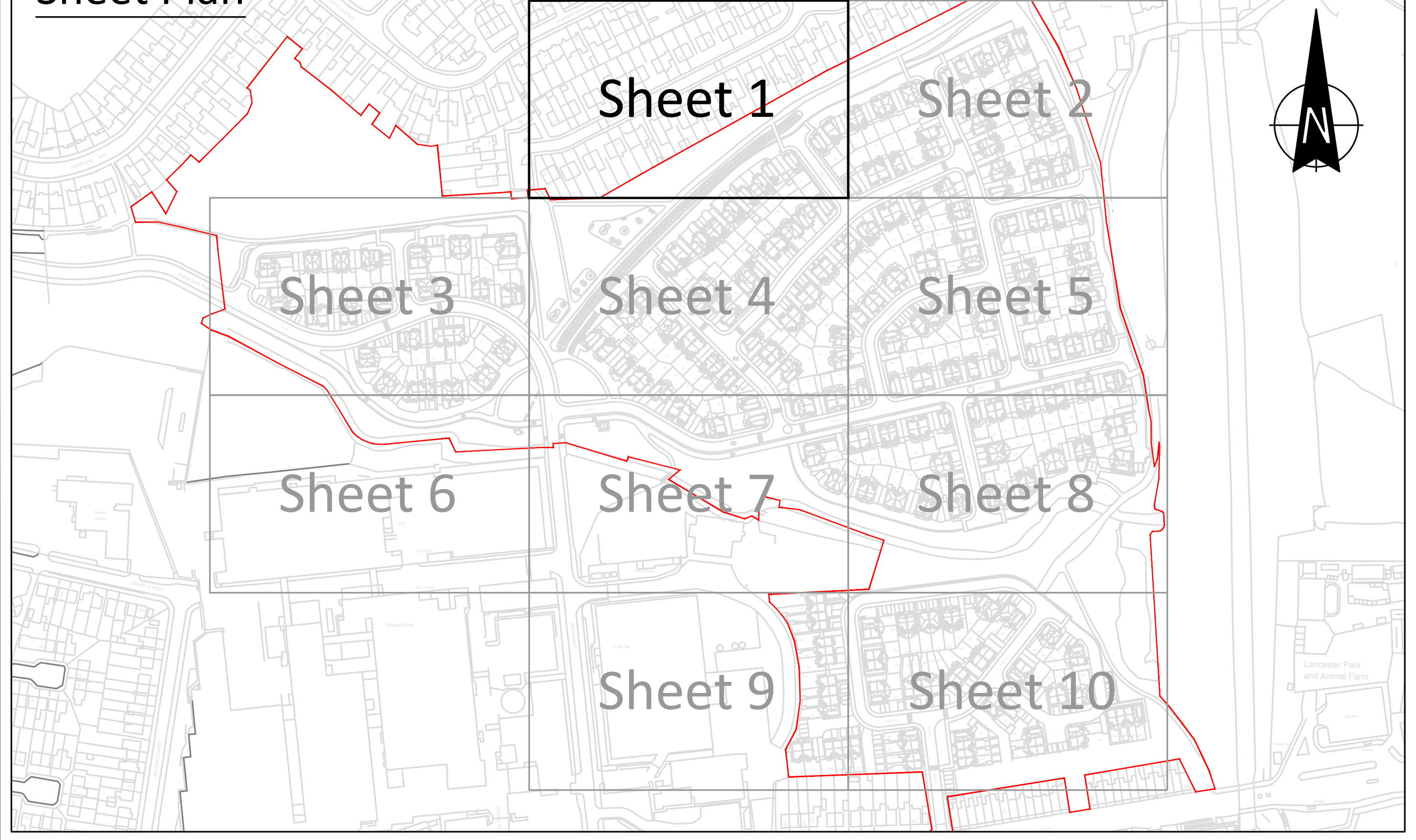
- The up-fill/6F5 materials will degrade if trafficked when saturated, or during wet weather conditions. Any degradation of the materials is likely to require maintenance.
- Due to the potential degradation of fill materials from trafficking/wet weather, pile mats should be re-assessed to inform temporary works requirements, prior to use.
- When trafficking the site, vehicle movements should be restricted to designated haul routes i.e., site roads.
- To facilitate drainage/drying of the site, any standing water is to be pumped to non-construction areas, or discharged into the River Irk. Any discharge into surface waters is to be in accordance with Regulatory Position Statement 261 '*Temporary de-watering from excavations to surface water*', or an associated discharge permit.
- When ponding waters have been removed, the site is to be left for a suitable period of time to allow residual moistures to drain through the fill materials.
- Excavated materials should be well managed, with different materials stored separately on areas not prone to ponding; the materials being sealed to minimise moisture ingress.

Survey Information:

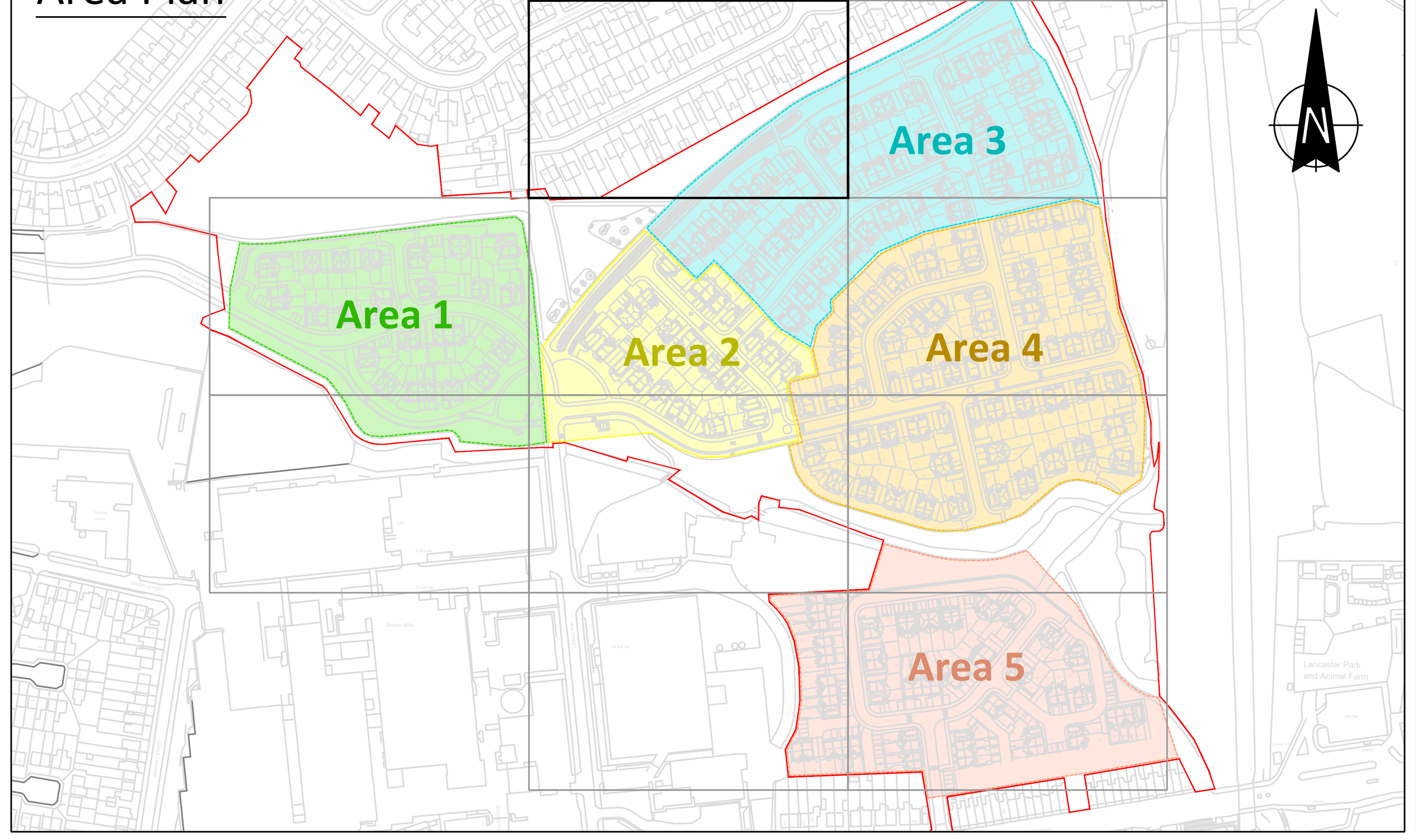
Co-ord System:	Co-ord Type:	Primary Survey Control:	Secondary Survey Control:
OSGB36(15)	Grid	SmartNet	Site

Rev	Date	Amendment	Drawn	Checked

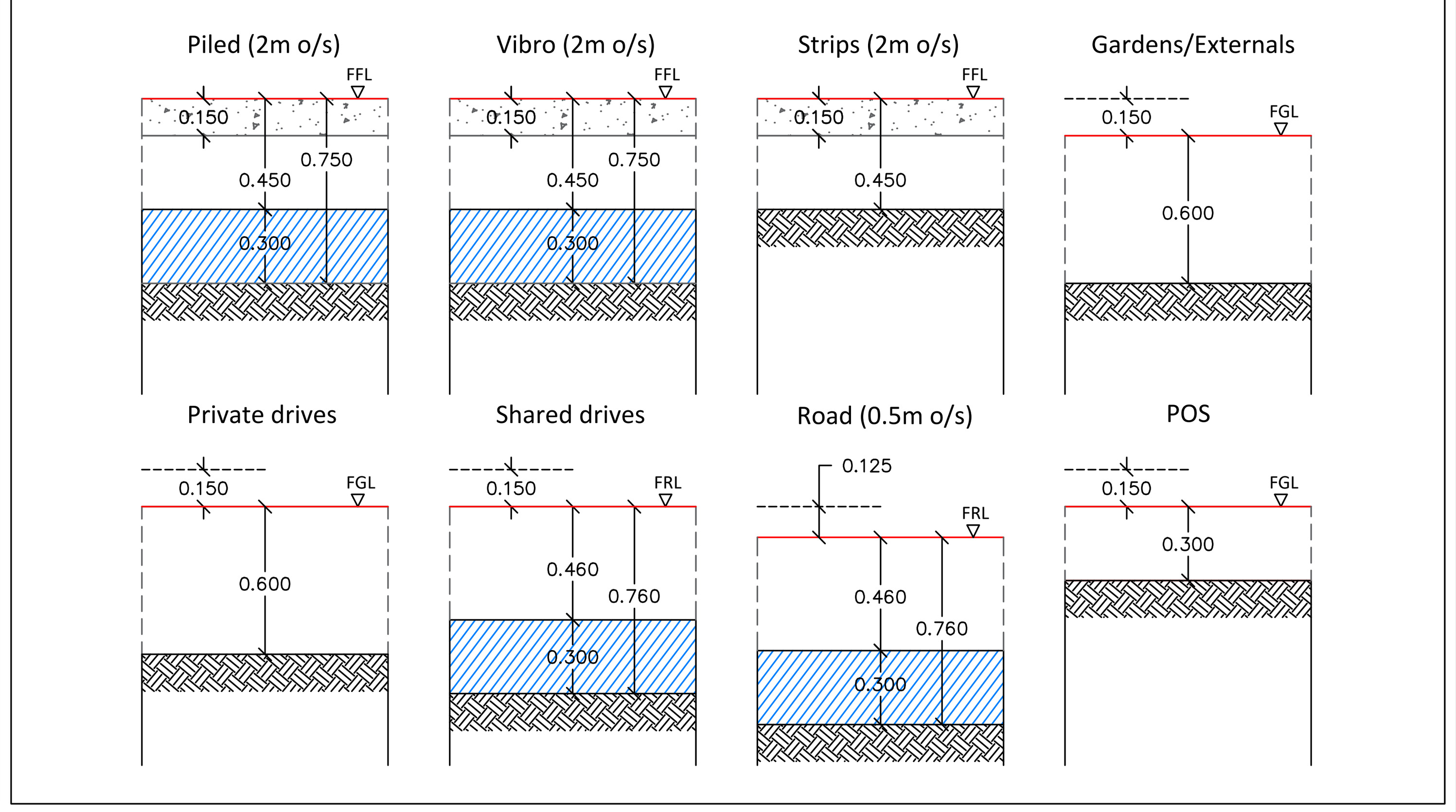
Sheet Plan



Area Plan



Trim specification



Urban Regen
ESTABLISHED 2001

Client:

Kellan Homes Limited

Project:

Don Street, Middleton

Title:

As built topographic survey and constraints (Sheet 1 of 10)

Scale:	First Issue:	Drawn:	Checked:
1:250 @ A1	1st March 2024	G.Bailey	D.J.Woodrow

Drawing No: 367-23-001-01

Revision:

Historic pond (see Note 6)

Temporary access road (indicative alignment)

Farm

N 406 500

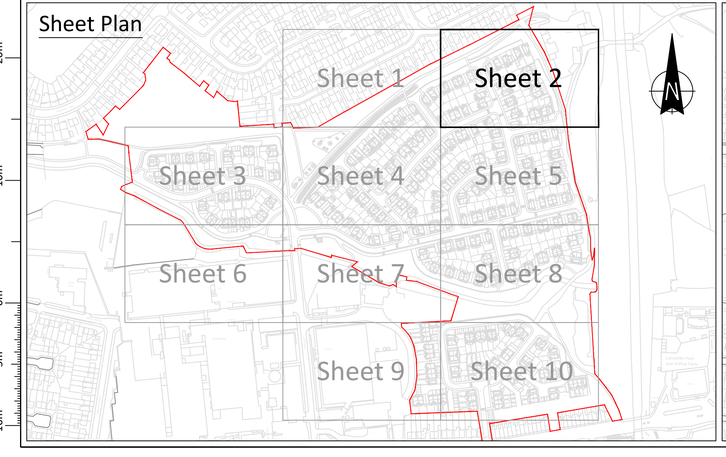
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E 388 550

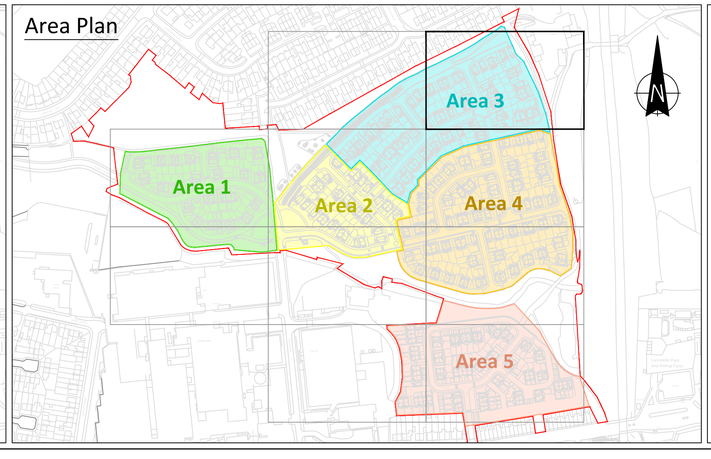
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06
MRN24078/2

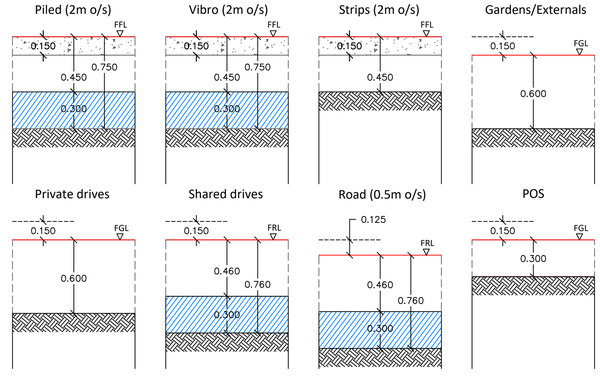
Sheet Plan



Area Plan



Trim specification



Legend

Site boundary	
Spot level (Base of excavation)	+33.48
Spot level (As built)	+33.48
As built top/bottom of bank	
As built major contour (1.0m interval)	
As built minor contour (0.2m interval)	
6F2/6F5 piling mats and road box (approximate extent only)	
Capping CBR location/reference	R3 MRN...
Untrimmed area (see Note 5)	
Low area (see Note 6)	

Stockpiles

Topsoil	5,142m³	
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6F2/6F5	703m³	

Notes

1. This plan is to be read in conjunction with the E3P completion report and all other associated reports/drawings/information including ***Handover Forms 3***, ***4/A1***, ***5/A1***, ***6/A1***, ***7/A1***, ***8/A4***, and ***9/A3***.
2. The residential layout depicted on this plan is extracted from drawing ***40-22 External works bound.dwg***, supplied digitally by Kellen Homes.
3. All fill materials have been placed using method compaction; being validated by E3P as the works were progressed.
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- When trafficking the site, vehicle movements should be restricted to designated haul routes i.e., site roads.
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- When ponding waters have been removed, the site is to be left for a suitable period of time to allow residual moistures to drain through the fill materials.
- Excavated materials should be well managed, with different materials stored separately on areas not prone to ponding; the materials being sealed to minimise moisture ingress.

Survey Information:

Co-ord System:	Co-ord Type:	Primary Survey Control:	Secondary Survey Control:
OSGB36(15)	Grid	SmartNet	Site

Rev	Date	Amendment	Drawn	Checked

Urban Regen
ESTABLISHED 2001

Client:
Kellan Homes Limited

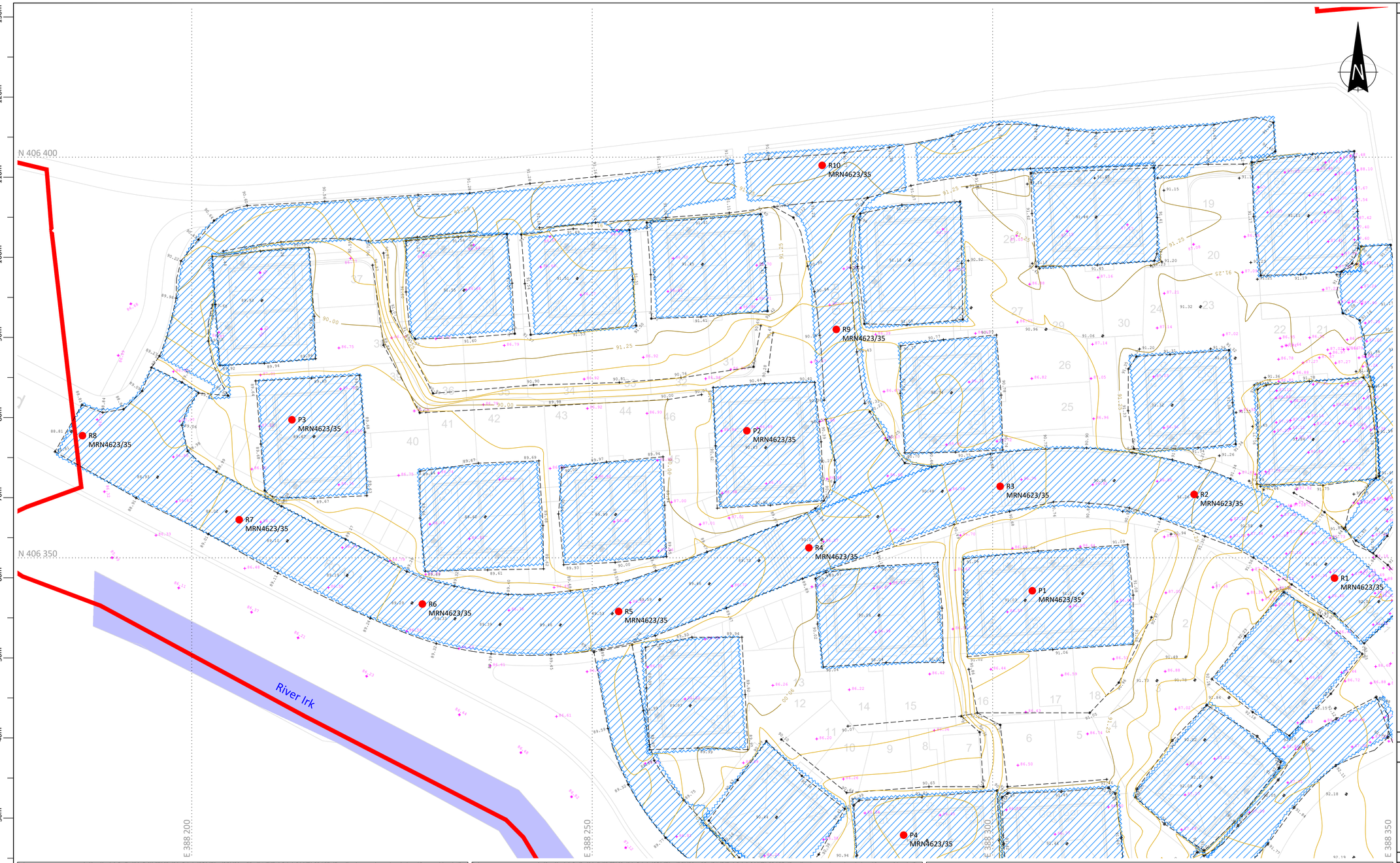
Project:
Don Street, Middleton

Title:
As built topographic survey and constraints (Sheet 2 of 10)

Scale:	First Issue:	Drawn:	Checked:
1:250 @ A1	1st March 2024	G.Bailey	D.J.Woodrow

Drawing No:
367-23-001-02

Revision:



Legend

Site boundary	
Spot level (Base of excavation)	+33.48
Spot level (As built)	+33.48
As built top/bottom of bank	
As built major contour (1.0m interval)	
As built minor contour (0.2m interval)	
6F2/6F5 piling mats and road box (approximate extent only)	
Capping CBR location/reference	R3 MRN...
Untrimmed area (see Note 5)	
Low area (see Note 6)	

Stockpiles

Topsoil	5,142m³
Topsoil (landfill area)	2,569m³
Organic soil	2,105m³
Subsoil	6,928m³
Pond arisings	163m³
6F2/6F5	703m³

Notes

1. This plan is to be read in conjunction with the E3P completion report and all other associated reports/drawings/information including ***Handover Forms 3***, ***4/A1***, ***5/A1***, ***6/A1***, ***7/A1***, ***8/A4***, and ***9/A3***.
2. The residential layout depicted on this plan is extracted from drawing ***40-22 External works bound.dwg***, supplied digitally by Kellen Homes.
3. All fill materials have been placed using method compaction; being validated by E3P as the works were progressed.
4. Urban Regen Ltd., recommend that Kellen Homes should consult with E3P with regard to secondary settlement/creep to deeper zones of engineered fill within Areas 1, 2, 4, and 5, with potential consideration for geogrid underbuild to the development drainage and infrastructure, or other engineering solutions, as necessary.
5. As instructed, and detailed on ***Handover Form 8/A4***, the area detailed has been left untrimmed to facilitate continued works by Kellen Homes.
6. Due to a shortfall of fill materials, the area detailed has been left low to accommodate suitable developer arisings. These arisings are to be engineered in accordance with site requirements by Others, as agreed with Kellen Homes.

Client responsibilities post handover

To minimise any impact to the constructed landform, the site is to be suitably managed with the following recommendations considered prior to/during construction activities:

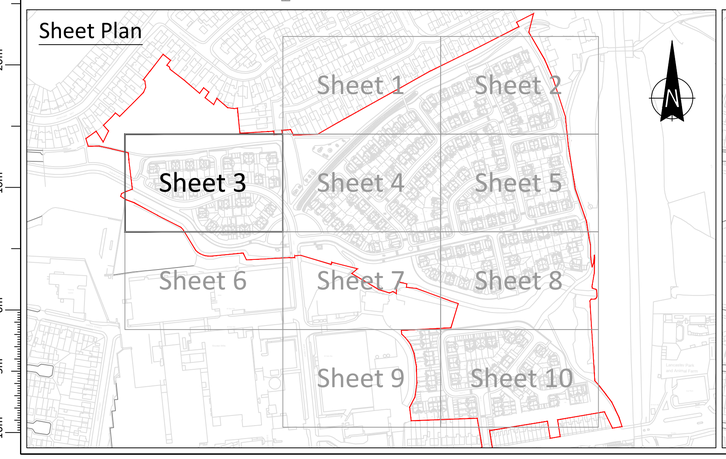
- The up-fill/6F5 materials will degrade if trafficked when saturated, or during wet weather conditions. Any degradation of the materials is likely to require maintenance.
- Due to the potential degradation of fill materials from trafficking/wet weather, pile mats should be re-assessed to inform temporary works requirements, prior to use.
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- Excavated materials should be well managed, with different materials stored separately on areas not prone to ponding; the materials being sealed to minimise moisture ingress.

Survey Information:

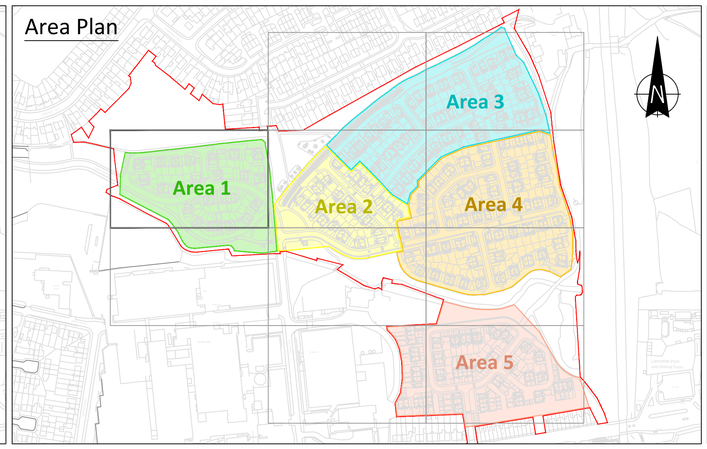
Co-ord System:	Co-ord Type:	Primary Survey Control:	Secondary Survey Control:
OSGB36(15)	Grid	SmartNet	Site

Rev	Date	Amendment	Drawn	Checked

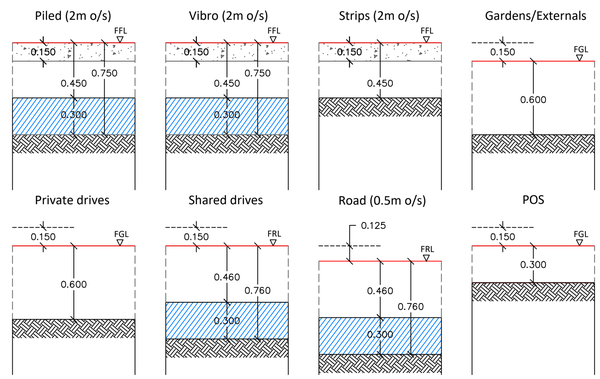
Sheet Plan



Area Plan



Trim specification



Urban Regen
ESTABLISHED 2001

Client:
Kellan Homes Limited

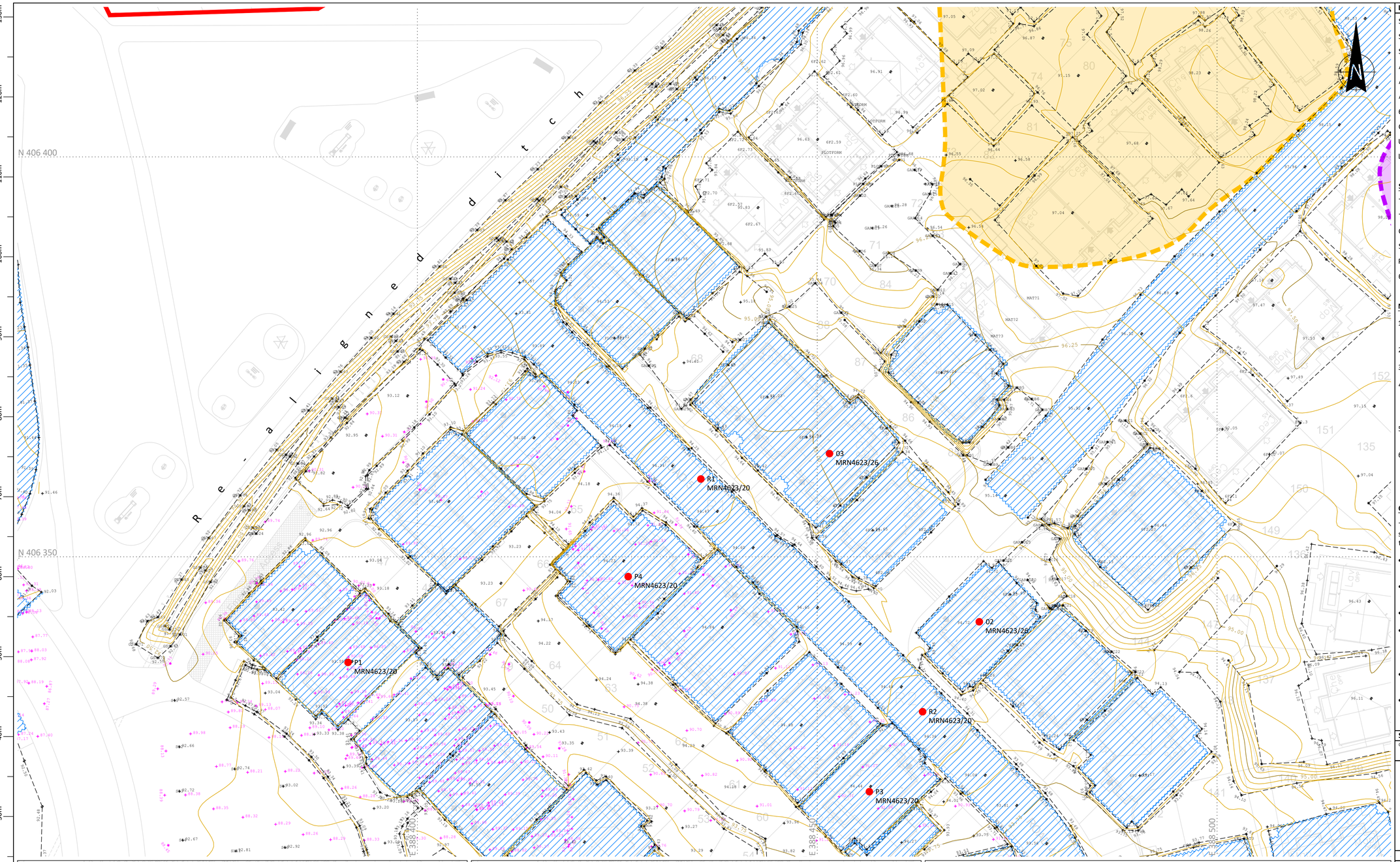
Project:
Don Street, Middleton

Title:
As built topographic survey and constraints (Sheet 3 of 10)

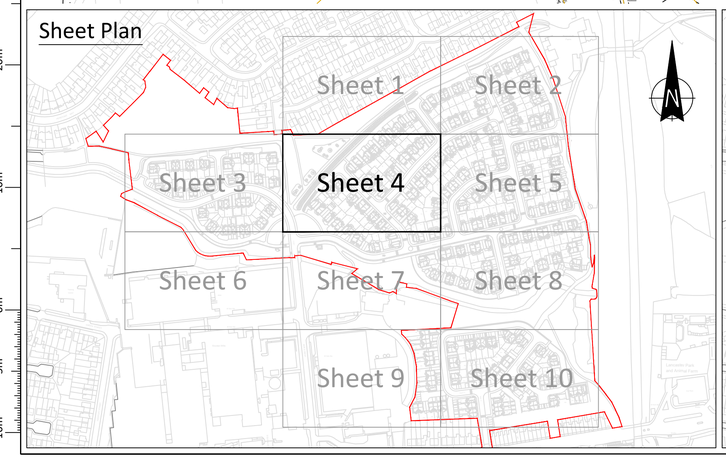
Scale:	First Issue:	Drawn:	Checked:
1:250 @ A1	1st March 2024	G.Bailey	D.J.Woodrow

Drawing No: 367-23-001-03

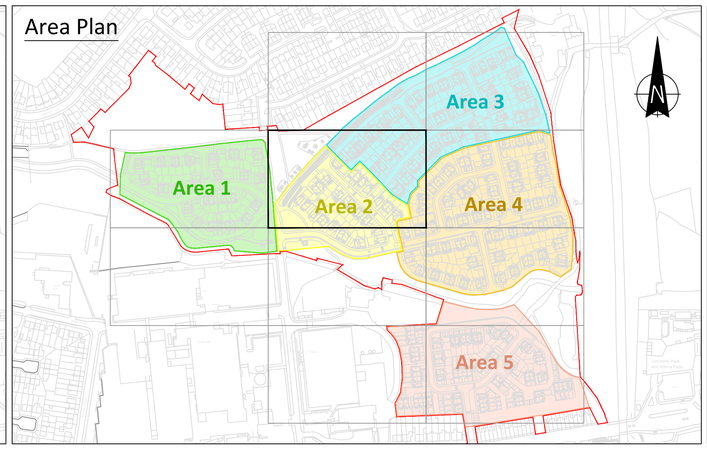
Revision:



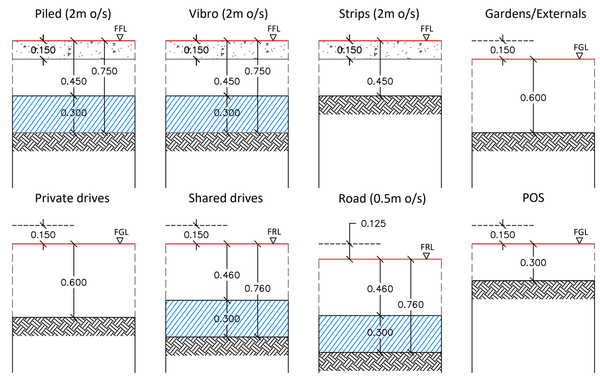
Sheet Plan



Area Plan



Trim specification



Legend

Site boundary	
Spot level (Base of excavation)	+33.48
Spot level (As built)	+33.48
As built top/bottom of bank	
As built major contour (1.0m interval)	
As built minor contour (0.2m interval)	
6F2/6F5 piling mats and road box (approximate extent only)	
Capping CBR location/reference	R3 MRN...
Untrimmed area (see Note 5)	
Low area (see Note 6)	

Stockpiles

Topsoil	5,142m³
Topsoil (landfill area)	2,569m³
Organic soil	2,105m³
Subsoil	6,928m³
Pond arisings	163m³
6F2/6F5	703m³

Notes

1. This plan is to be read in conjunction with the E3P completion report and all other associated reports/drawings/information including ***Handover Forms 3***, ***4/A1***, ***5/A1***, ***6/A1***, ***7/A1***, ***8/A4***, and ***9/A3***.
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3. All fill materials have been placed using method compaction; being validated by E3P as the works were progressed.
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6. Due to a shortfall of fill materials, the area detailed has been left low to accommodate suitable developer arisings. These arisings are to be engineered in accordance with site requirements by Others, as agreed with Kellen Homes.

Client responsibilities post handover

To minimise any impact to the constructed landform, the site is to be suitably managed with the following recommendations considered prior to/during construction activities:

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- Excavated materials should be well managed, with different materials stored separately on areas not prone to ponding; the materials being sealed to minimise moisture ingress.

Survey Information:

Co-ord System:	Co-ord Type:	Primary Survey Control:	Secondary Survey Control:
OSGB36(15)	Grid	SmartNet	Site

Rev	Date	Amendment	Drawn	Checked

Urban Regen
ESTABLISHED 2001

Client: Kellan Homes Limited

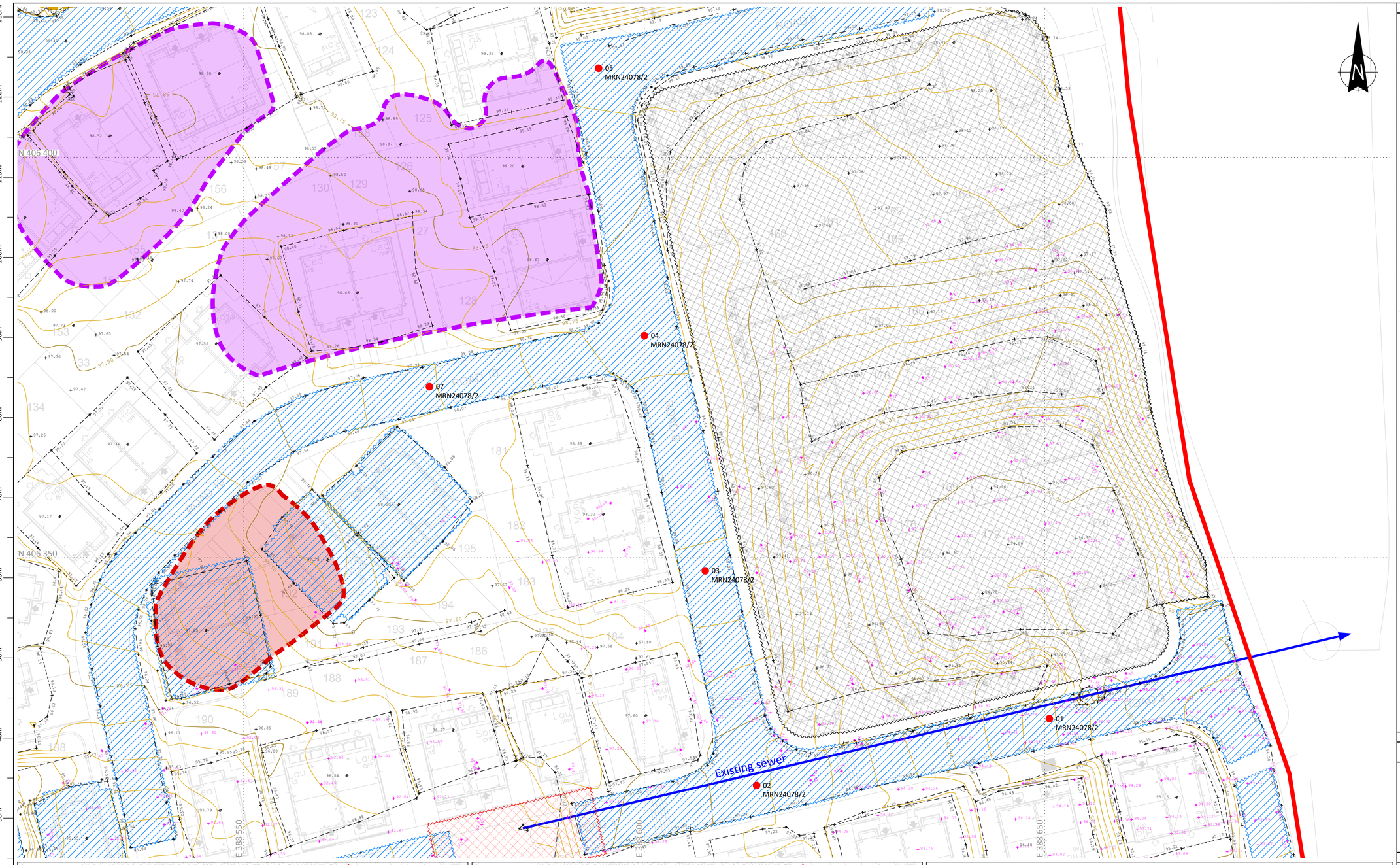
Project: Don Street, Middleton

Title: As built topographic survey and constraints (Sheet 4 of 10)

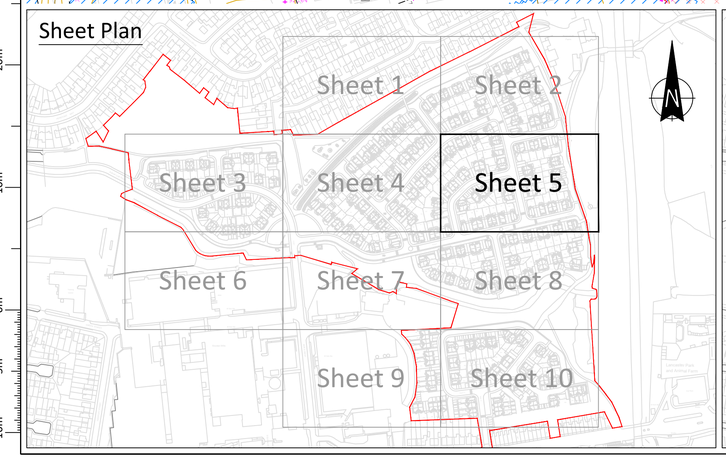
Scale:	First Issue:	Drawn:	Checked:
1:250 @ A1	1st March 2024	G.Bailey	D.J.Woodrow

Drawing No: 367-23-001-04

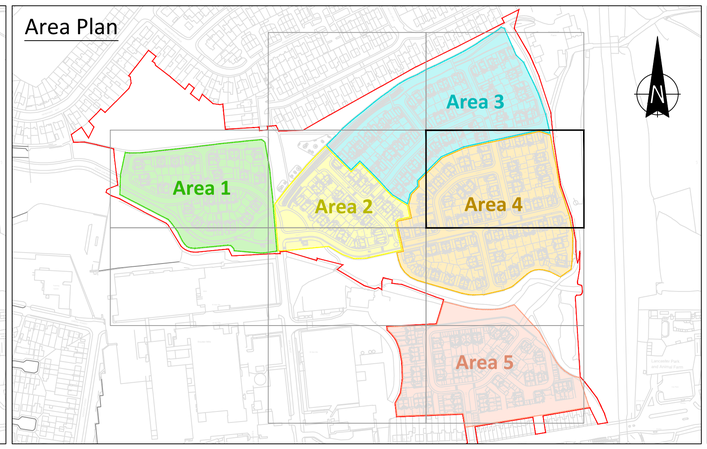
Revision:



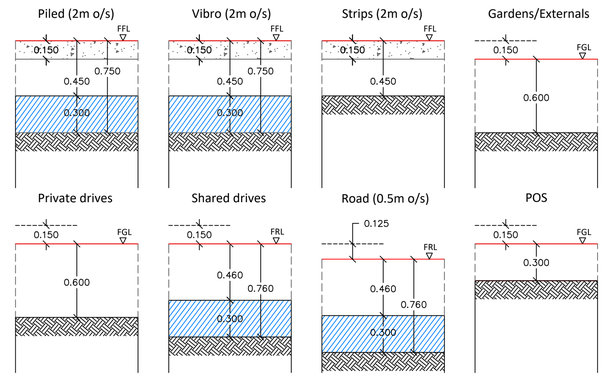
Sheet Plan



Area Plan



Trim specification



Legend

Site boundary	
Spot level (Base of excavation)	+33.48
Spot level (As built)	+33.48
As built top/bottom of bank	
As built major contour (1.0m interval)	
As built minor contour (0.2m interval)	
6F2/6F5 piling mats and road box (approximate extent only)	
Capping CBR location/reference	R3 MRN...
Untrimmed area (see Note 5)	
Low area (see Note 6)	

Stockpiles

Topsoil	5,142m³	
Topsoil (landfill area)	2,569m³	
Organic soil	2,105m³	
Subsoil	6,928m³	
Pond arisings	163m³	
6F2/6F5	703m³	

Notes

1. This plan is to be read in conjunction with the E3P completion report and all other associated reports/drawings/information including ***Handover Forms 3***, ***4/A1***, ***5/A1***, ***6/A1***, ***7/A1***, ***8/A4***, and ***9/A3***.
2. The residential layout depicted on this plan is extracted from drawing ***40-22 External works bound.dwg***, supplied digitally by Kellen Homes.
3. All fill materials have been placed using method compaction; being validated by E3P as the works were progressed.
4. Urban Regen Ltd., recommend that Kellen Homes should consult with E3P with regard to secondary settlement/creep to deeper zones of engineered fill within Areas 1, 2, 4, and 5, with potential consideration for geogrid underbuild to the development drainage and infrastructure, or other engineering solutions, as necessary.
5. As instructed, and detailed on ***Handover Form 8/A4***, the area detailed has been left untrimmed to facilitate continued works by Kellen Homes.
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Client responsibilities post handover

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- Excavated materials should be well managed, with different materials stored separately on areas not prone to ponding; the materials being sealed to minimise moisture ingress.

Survey Information:

Co-ord System:	Co-ord Type:	Primary Survey Control:	Secondary Survey Control:
OSGB36(15)	Grid	SmartNet	Site

Rev	Date	Amendment	Drawn	Checked

Urban Regen
ESTABLISHED 2001

Client:
Kellan Homes Limited

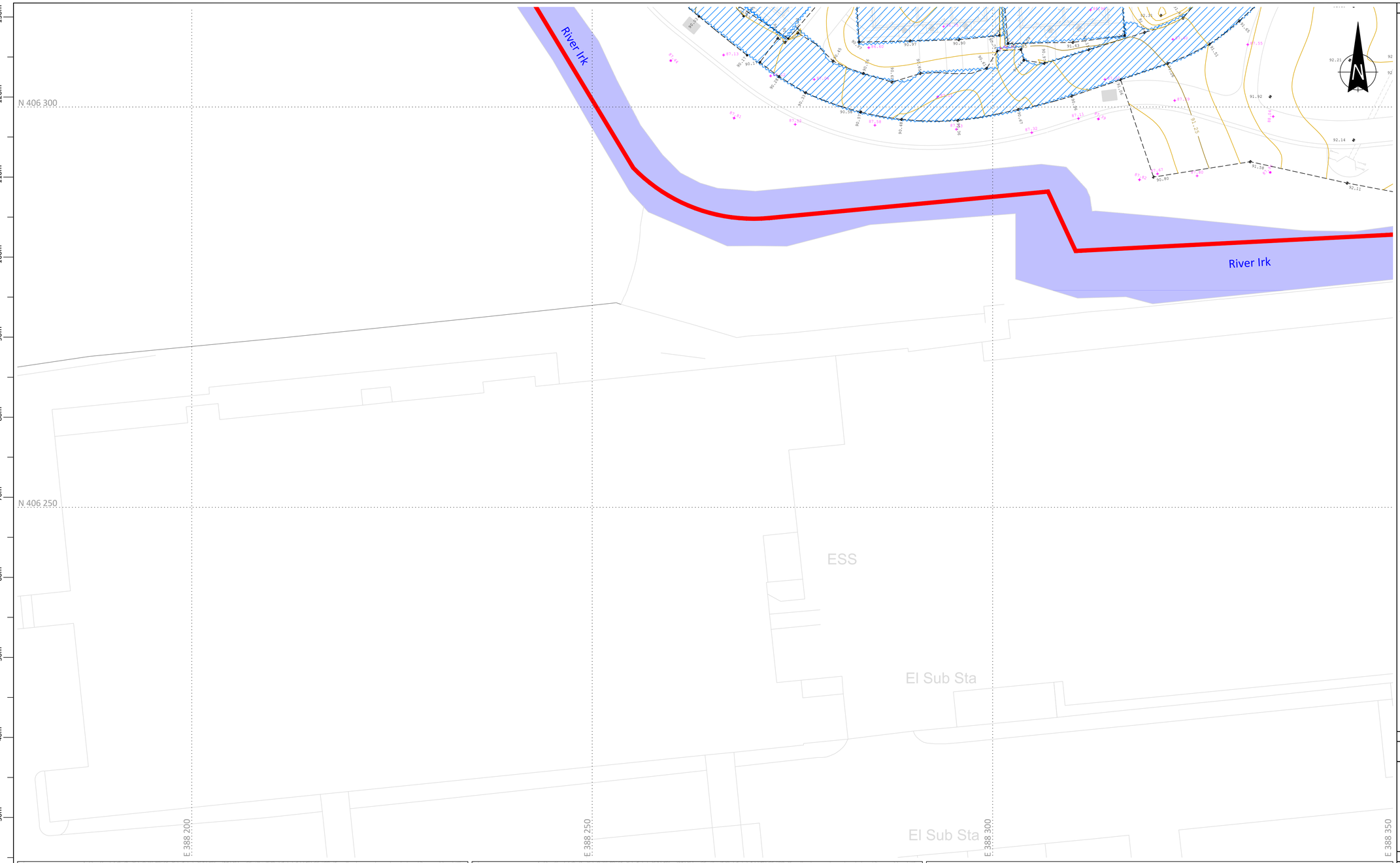
Project:
Don Street, Middleton

Title:
As built topographic survey and constraints (Sheet 5 of 10)

Scale:	First Issue:	Drawn:	Checked:
1:250 @ A1	1st March 2024	G.Bailey	D.J.Woodrow

Drawing No:
367-23-001-05

Revision:



Legend

Site boundary	
Spot level (Base of excavation)	+33.48
Spot level (As built)	+33.48
As built top/bottom of bank	
As built major contour (1.0m interval)	
As built minor contour (0.2m interval)	
6F2/6F5 piling mats and road box (approximate extent only)	
Capping CBR location/reference	R3 MRN...
Untrimmed area (see Note 5)	
Low area (see Note 6)	

Stockpiles

Topsoil	5,142m³
Topsoil (landfill area)	2,569m³
Organic soil	2,105m³
Subsoil	6,928m³
Pond arisings	163m³
6F2/6F5	703m³

Notes

1. This plan is to be read in conjunction with the E3P completion report and all other associated reports/drawings/information including ***Handover Forms 3***, ***4/A1***, ***5/A1***, ***6/A1***, ***7/A1***, ***8/A4***, and ***9/A3***.
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Client responsibilities post handover

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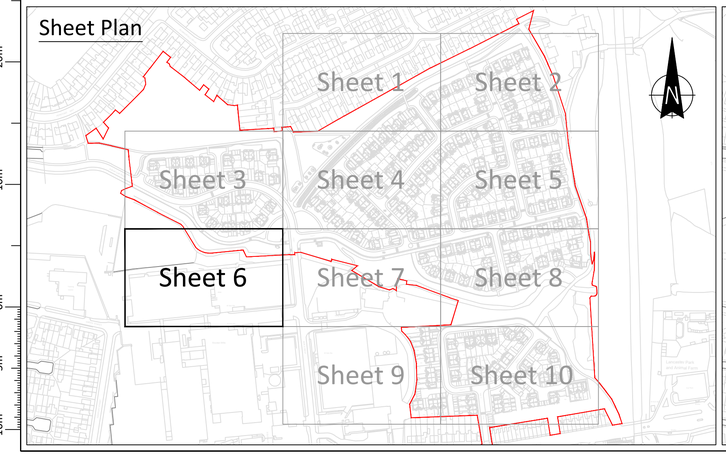
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Survey Information:

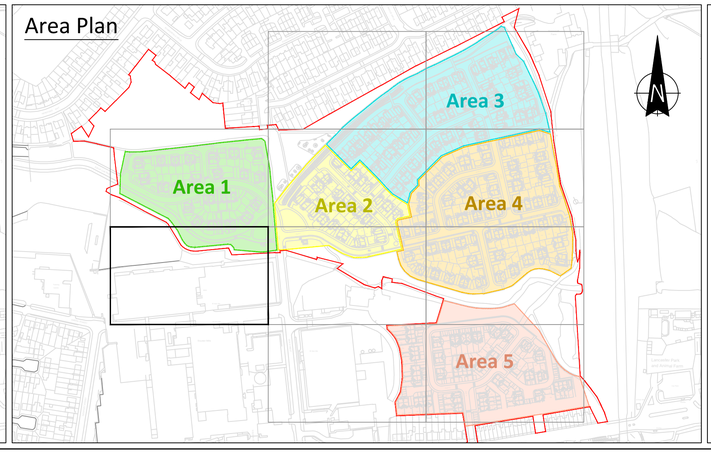
Co-ord System:	Co-ord Type:	Primary Survey Control:	Secondary Survey Control:
OSGB36(15)	Grid	SmartNet	Site

Rev	Date	Amendment	Drawn	Checked

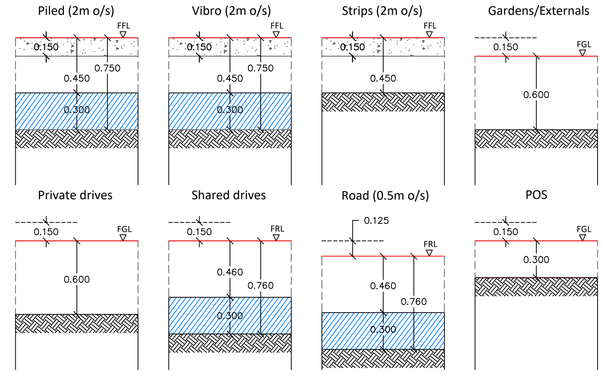
Sheet Plan



Area Plan



Trim specification



Urban Regen
ESTABLISHED 2001

Client:
Kellan Homes Limited

Project:
Don Street, Middleton

Title:
As built topographic survey and constraints (Sheet 6 of 10)

Scale:	First Issue:	Drawn:	Checked:
1:250 @ A1	1st March 2024	G.Bailey	D.J.Woodrow

Drawing No:
367-23-001-06

Revision:

P2
MRN4623/20

R3
MRN4623/20

River Irk

River Irk

N 406 300

N 406 250

E 388 400

E 388 450

E 388 500

ROAD 1

Pump House

Legend

Site boundary	
Spot level (Base of excavation)	+33.48
Spot level (As built)	+33.48
As built top/bottom of bank	
As built major contour (1.0m interval)	
As built minor contour (0.2m interval)	
6F2/6F5 piling mats and road box (approximate extent only)	
Capping CBR location/reference	R3 MRN...
Untrimmed area (see Note 5)	
Low area (see Note 6)	

Stockpiles

Topsoil	5,142m³	
Topsoil (landfill area)	2,569m³	
Organic soil	2,105m³	
Subsoil	6,928m³	
Pond arisings	163m³	
6F2/6F5	703m³	

Notes

1. This plan is to be read in conjunction with the E3P completion report and all other associated reports/drawings/information including ***Handover Forms 3***, ***4/A1***, ***5/A1***, ***6/A1***, ***7/A1***, ***8/A4***, and ***9/A3***.
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6. Due to a shortfall of fill materials, the area detailed has been left low to accommodate suitable developer arisings. These arisings are to be engineered in accordance with site requirements by Others, as agreed with Kellen Homes.

Client responsibilities post handover

To minimise any impact to the constructed landform, the site is to be suitably managed with the following recommendations considered prior to/during construction activities:

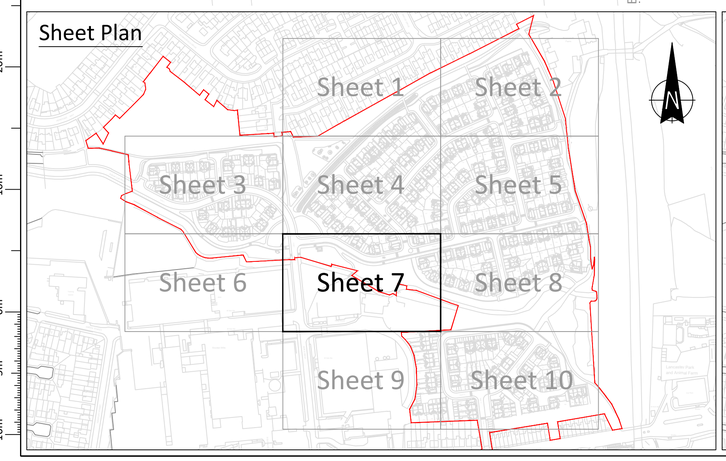
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Survey Information:

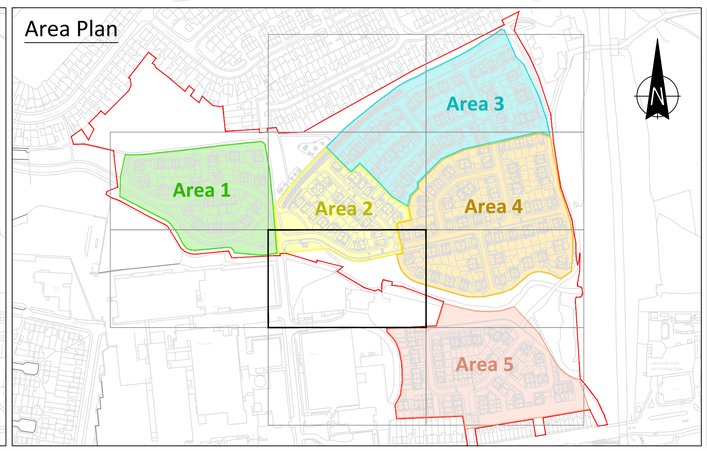
Co-ord System:	Co-ord Type:	Primary Survey Control:	Secondary Survey Control:
OSGB36(15)	Grid	SmartNet	Site

Rev	Date	Amendment	Drawn	Checked

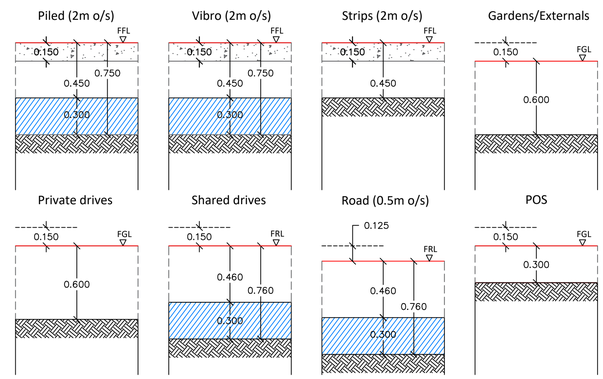
Sheet Plan



Area Plan



Trim specification



Urban Regen
ESTABLISHED 2001

Client:
Kellan Homes Limited

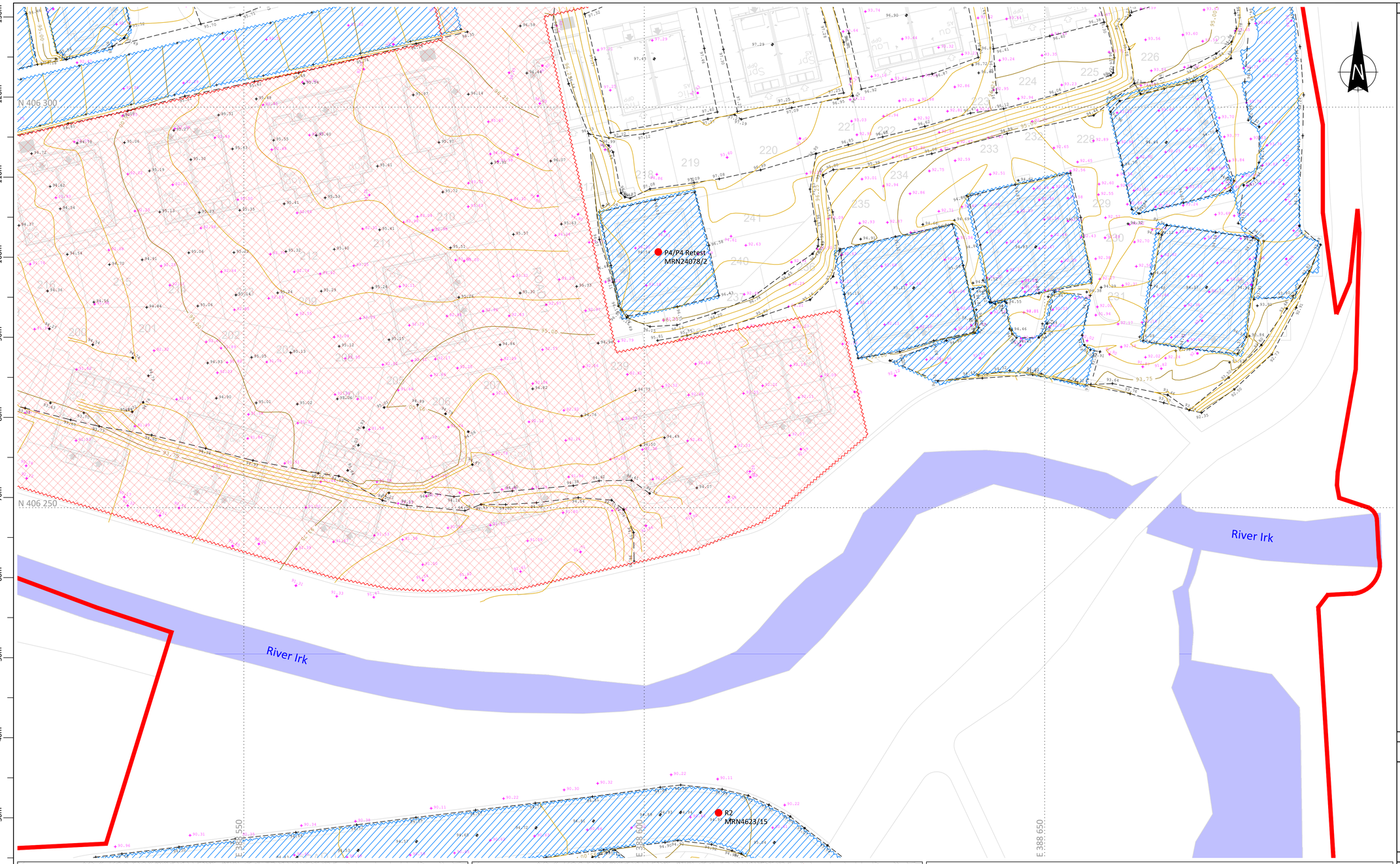
Project:
Don Street, Middleton

Title:
As built topographic survey and constraints (Sheet 7 of 10)

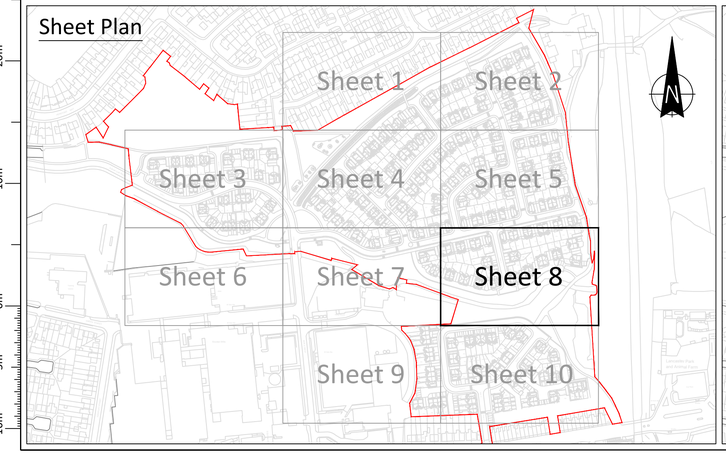
Scale:	First Issue:	Drawn:	Checked:
1:250 @ A1	1st March 2024	G.Bailey	D.J.Woodrow

Drawing No:
367-23-001-07

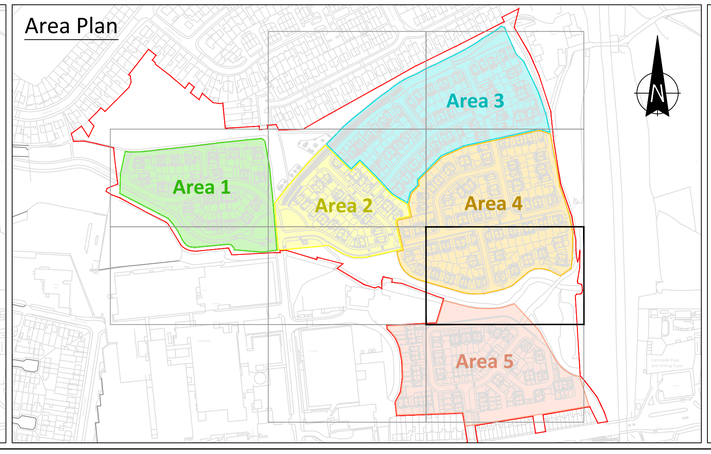
Revision:



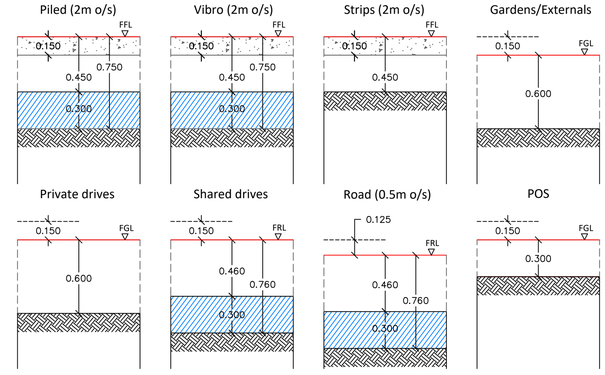
Sheet Plan



Area Plan



Trim specification



Legend

Site boundary	
Spot level (Base of excavation)	+33.48
Spot level (As built)	+33.48
As built top/bottom of bank	
As built major contour (1.0m interval)	
As built minor contour (0.2m interval)	
6F2/6F5 piling mats and road box (approximate extent only)	
Capping CBR location/reference	R3 MRN...
Untrimmed area (see Note 5)	
Low area (see Note 6)	

Stockpiles

Topsoil	5,142m³
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Subsoil	6,928m³
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6F2/6F5	703m³

Notes

1. This plan is to be read in conjunction with the E3P completion report and all other associated reports/drawings/information including ***Handover Forms 3***, ***4/A1***, ***5/A1***, ***6/A1***, ***7/A1***, ***8/A4***, and ***9/A3***.
2. The residential layout depicted on this plan is extracted from drawing ***40-22 External works bound.dwg***, supplied digitally by Kellen Homes.
3. All fill materials have been placed using method compaction; being validated by E3P as the works were progressed.
4. Urban Regen Ltd., recommend that Kellen Homes should consult with E3P with regard to secondary settlement/creep to deeper zones of engineered fill within Areas 1, 2, 4, and 5, with potential consideration for geogrid underbuild to the development drainage and infrastructure, or other engineering solutions, as necessary.
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Client responsibilities post handover

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- The up-fill/6F5 materials will degrade if trafficked when saturated, or during wet weather conditions. Any degradation of the materials is likely to require maintenance.
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- Excavated materials should be well managed, with different materials stored separately on areas not prone to ponding; the materials being sealed to minimise moisture ingress.

Survey Information:

Co-ord System:	Co-ord Type:	Primary Survey Control:	Secondary Survey Control:
OSGB36(15)	Grid	SmartNet	Site

Rev	Date	Amendment	Drawn	Checked

Urban Regen
ESTABLISHED 2001

Client: Kellan Homes Limited

Project: Don Street, Middleton

Title: As built topographic survey and constraints (Sheet 8 of 10)

Scale:	First Issue:	Drawn:	Checked:
1:250 @ A1	1st March 2024	G.Bailey	D.J.Woodrow

Drawing No: 367-23-001-08

Revision:



Legend

Site boundary	
Spot level (Base of excavation)	+33.48
Spot level (As built)	+33.48
As built top/bottom of bank	
As built major contour (1.0m interval)	
As built minor contour (0.2m interval)	
6F2/6F5 piling mats and road box (approximate extent only)	
Capping CBR location/reference	R3 MRN...
Untrimmed area (see Note 5)	
Low area (see Note 6)	

Stockpiles

Topsoil	5,142m³	
Topsoil (landfill area)	2,569m³	
Organic soil	2,105m³	
Subsoil	6,928m³	
Pond arisings	163m³	
6F2/6F5	703m³	

Notes

1. This plan is to be read in conjunction with the E3P completion report and all other associated reports/drawings/information including ***Handover Forms 3***, ***4/A1***, ***5/A1***, ***6/A1***, ***7/A1***, ***8/A4***, and ***9/A3***.
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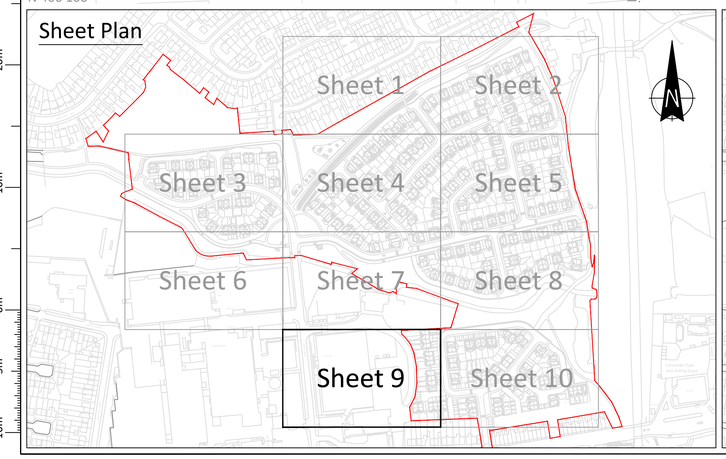
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Survey Information:

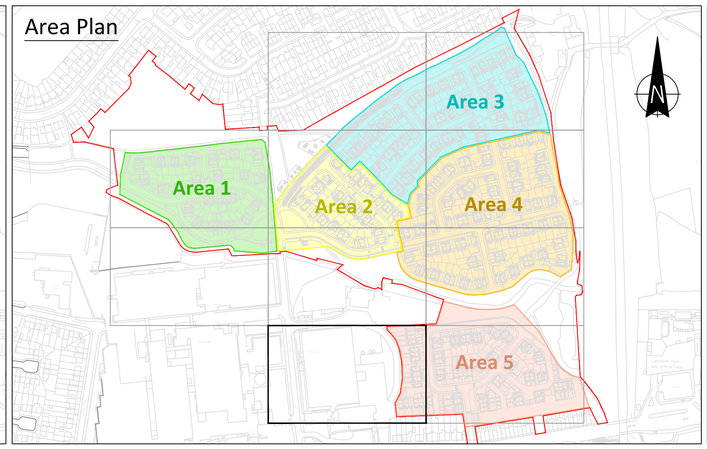
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OSGB36(15)	Grid	SmartNet	Site

Rev	Date	Amendment	Drawn	Checked

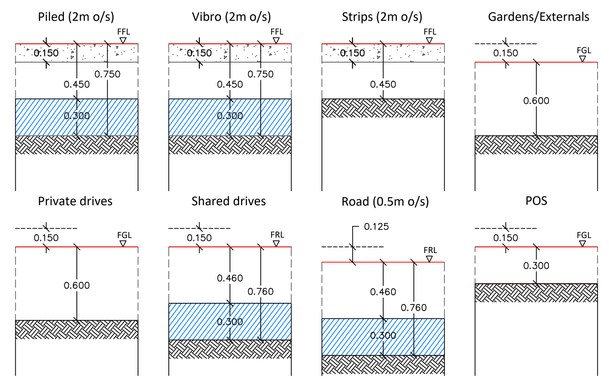
Sheet Plan



Area Plan



Trim specification



Urban Regen
ESTABLISHED 2001

Client:
Kellan Homes Limited

Project:
Don Street, Middleton

Title:
As built topographic survey and constraints (Sheet 9 of 10)

Scale:	First Issue:	Drawn:	Checked:
1:250 @ A1	1st March 2024	G.Bailey	D.J.Woodrow

Drawing No: 367-23-001-09

Revision:

R1 MRN4623/15
P5 MRN4623/15
R3 MRN4623/15
R5 MRN4623/15
P6 MRN4623/15
P4 MRN4623/15
P7 MRN4623/15
R4 MRN4623/15
P9 MRN4623/15
P1 MRN4623/15
P8 MRN4623/15
P10 MRN4623/15
N 406 200
N 406 150
E 388 550
E 388 600
E 388 650
ROAD 12
130m
120m
110m
100m
90m
80m
70m
60m
50m
40m
30m
20m
10m
0m
5m
10m

Legend

Site boundary	
Spot level (Base of excavation)	+33.48
Spot level (As built)	+33.48
As built top/bottom of bank	
As built major contour (1.0m interval)	
As built minor contour (0.2m interval)	
6F2/6F5 piling mats and road box (approximate extent only)	
Capping CBR location/reference	R3 MRN...
Untrimmed area (see Note 5)	
Low area (see Note 6)	

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Topsoil	5,142m³	
Topsoil (landfill area)	2,569m³	
Organic soil	2,105m³	
Subsoil	6,928m³	
Pond arisings	163m³	
6F2/6F5	703m³	

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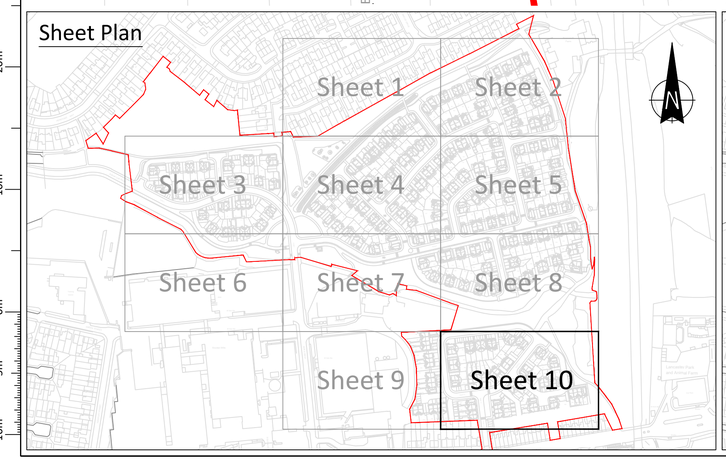
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Survey Information:

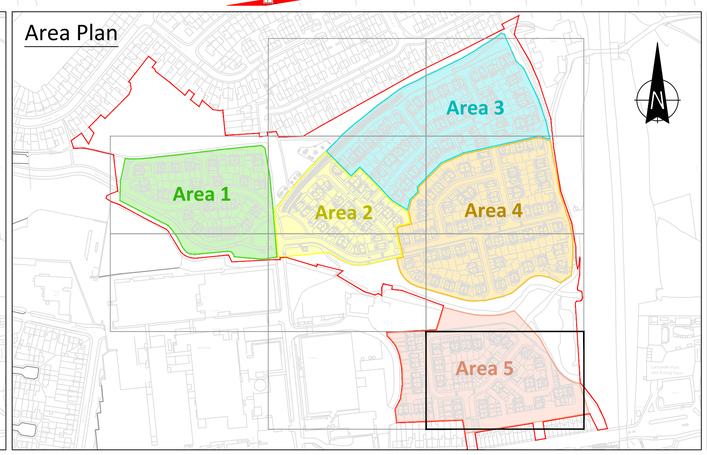
Co-ord System:	Co-ord Type:	Primary Survey Control:	Secondary Survey Control:
OSGB36(15)	Grid	SmartNet	Site

Rev	Date	Amendment	Drawn	Checked

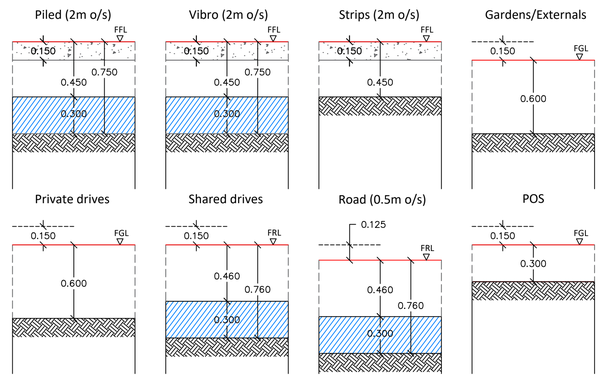
Sheet Plan



Area Plan



Trim specification



Urban Regen
ESTABLISHED 2001

Client:
Kellan Homes Limited

Project:
Don Street, Middleton

Title:
As built topographic survey and constraints (Sheet 10 of 10)

Scale:	First Issue:	Drawn:	Checked:
1:250 @ A1	1st March 2024	G.Bailey	D.J.Woodrow

Drawing No: 367-23-001-10

Revision:

APPENDIX IV
CHEMICAL TESTING RESULTS

Matt Dee
e3p
Taylor Road
Urmston
Manchester
M41 7JQ

e: mdee@e3p.co.uk

i2 Analytical Ltd.
7 Woodshots Meadow,
Croxley Green
Business Park,
Watford,
Herts,
WD18 8YS

t: 01923 225404
f: 01923 237404
e: reception@i2analytical.com

Analytical Report Number : 23-21617

Project / Site name:	Don Street	**Samples received on:**	07/03/2023
Your job number:	14 554	**Samples instructed on/ Analysis started on:**	07/03/2023
Your order number:	004285	**Analysis completed by:**	14/03/2023
Report Issue Number:	1	**Report issued on:**	14/03/2023
Samples Analysed:	6 soil samples		

Signed:

Elżbieta Suchy
Junior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-21617
Project / Site name: Don Street
Your Order No: 004285

Lab Sample Number				2609043	2609044	2609045	2609046	2609047
Sample Reference				Allotment 101	Allotment 101	Allotment 102	Allotment 102	Allotment 103
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.30	1.30	0.20	1.00	0.25
Date Sampled				06/03/2023	06/03/2023	06/03/2023	06/03/2023	06/03/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	9.5	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	14	4.9	12	5.3	14
Total mass of sample received	kg	0.001	NONE	0.3	0.3	0.3	0.3	0.3
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	-	Not-detected	-	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	SFS	N/A	SFS	N/A	SFS

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.3	6.9	6.6	6.9	8.1
Total Cyanide	mg/kg	1	MCERTS	1.2	< 1.0	< 1.0	< 1.0	1.5
Total Sulphate as SO4	mg/kg	50	MCERTS	540	< 50	350	< 50	860
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.0062	0.0016	0.0025	< 0.0013	0.025
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	12	3.2	5	< 2.5	51
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	6.2	1.6	2.5	< 1.3	25.4
Sulphide	mg/kg	1	MCERTS	1.8	2.3	2.1	< 1.0	6.1
Total Sulphur	mg/kg	50	MCERTS	450	< 50	230	< 50	580
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	3.8	0.2	1.9	0.2	4.4

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	1.7	< 1.0	< 1.0	< 1.0	< 1.0

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.5	< 0.05	< 0.05	< 0.05	1
Acenaphthylene	mg/kg	0.05	MCERTS	0.26	< 0.05	< 0.05	< 0.05	0.2
Acenaphthene	mg/kg	0.05	MCERTS	0.47	< 0.05	< 0.05	< 0.05	2.7
Fluorene	mg/kg	0.05	MCERTS	0.39	< 0.05	< 0.05	< 0.05	1.7
Phenanthrene	mg/kg	0.05	MCERTS	3.9	< 0.05	0.18	< 0.05	17
Anthracene	mg/kg	0.05	MCERTS	1.8	< 0.05	< 0.05	< 0.05	4.3
Fluoranthene	mg/kg	0.05	MCERTS	6.7	< 0.05	0.27	< 0.05	23
Pyrene	mg/kg	0.05	MCERTS	7.3	< 0.05	0.29	< 0.05	21
Benzo(a)anthracene	mg/kg	0.05	MCERTS	4.5	< 0.05	0.16	< 0.05	10
Chrysene	mg/kg	0.05	MCERTS	4.6	< 0.05	0.19	< 0.05	10
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	7.4	< 0.05	< 0.05	< 0.05	13
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	2.7	< 0.05	< 0.05	< 0.05	3.5
Benzo(a)pyrene	mg/kg	0.05	MCERTS	4.7	< 0.05	0.16	< 0.05	9
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	2.9	< 0.05	< 0.05	< 0.05	4.5
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	3.6	< 0.05	< 0.05	< 0.05	5.4

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	51.7	< 0.80	1.25	< 0.80	126

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Analytical Report Number: 23-21617
Project / Site name: Don Street
Your Order No: 004285

Lab Sample Number				2609043	2609044	2609045	2609046	2609047
Sample Reference				Allotment 101	Allotment 101	Allotment 102	Allotment 102	Allotment 103
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.30	1.30	0.20	1.00	0.25
Date Sampled				06/03/2023	06/03/2023	06/03/2023	06/03/2023	06/03/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	35	3.9	25	2.7	37
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	19	5.7	12	4	21
Copper (aqua regia extractable)	mg/kg	1	MCERTS	170	7.8	56	6.7	110
Lead (aqua regia extractable)	mg/kg	1	MCERTS	280	4	69	3.1	330
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.5	< 0.3	< 0.3	< 0.3	0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	25	6.4	17	4.6	30
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	370	20	58	14	590
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	2.5	< 2.0	< 2.0	< 2.0	3
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	11	< 4.0	< 4.0	< 4.0	11
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	41	< 1.0	< 1.0	< 1.0	51
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	160	< 1.0	< 1.0	< 1.0	160
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	22	< 10	< 10	< 10	34
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	240	< 10	< 10	< 10	260

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 23-21617
Project / Site name: Don Street
Your Order No: 004285

Lab Sample Number				2609048
Sample Reference				Allotment 103
Sample Number				None Supplied
Depth (m)				1.20
Date Sampled				06/03/2023
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	6.3
Total mass of sample received	kg	0.001	NONE	0.3

Asbestos in Soil	Type	N/A	ISO 17025	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.1
Total Cyanide	mg/kg	1	MCERTS	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	< 50
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.0033
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	6.5
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	3.3
Sulphide	mg/kg	1	MCERTS	1
Total Sulphur	mg/kg	50	MCERTS	< 50
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	0.2

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	< 0.80

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Analytical Report Number: 23-21617
Project / Site name: Don Street
Your Order No: 004285

Lab Sample Number				2609048
Sample Reference				Allotment 103
Sample Number				None Supplied
Depth (m)				1.20
Date Sampled				06/03/2023
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Heavy Metals / Metalloids				
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	2.8
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	3.5
Copper (aqua regia extractable)	mg/kg	1	MCERTS	6.6
Lead (aqua regia extractable)	mg/kg	1	MCERTS	3.3
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	4.7
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	11

Petroleum Hydrocarbons

TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	< 2.0
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	< 4.0
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	< 1.0
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	< 1.0
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	< 10
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	< 10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number : 23-21617
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2609043	Allotment 101	None Supplied	0.3	Brown loam and clay with stones and gravel
2609044	Allotment 101	None Supplied	1.3	Brown sand.
2609045	Allotment 102	None Supplied	0.2	Brown loam and clay with gravel.
2609046	Allotment 102	None Supplied	1	Brown sand.
2609047	Allotment 103	None Supplied	0.25	Brown loam and sand with gravel.
2609048	Allotment 103	None Supplied	1.2	Brown sand.

Analytical Report Number : 23-21617
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

Analytical Report Number : 23-21617
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 22-39659

Replaces Analytical Report Number: 22-39659, issue no. 2
Client sampling date amended.

Project / Site name:	Donn Street A	**Samples received on:**	10/02/2022
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	14/02/2022
Your order number:	646	**Analysis completed by:**	21/04/2022
Report Issue Number:	3	**Report issued on:**	21/04/2022
Samples Analysed:	1 leachate sample - 3 soil samples		

Signed:

Joanna Wawrzeczko
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number: 22-39659
Project / Site name: Donn Street A
Your Order No: 646

Lab Sample Number				2172864	2172865	2172866
Sample Reference				TP519	TP517	TP516
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				0.30	0.40	0.80
Date Sampled				08/02/2022	08/02/2022	08/02/2022
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	16	21	17
Total mass of sample received	kg	0.001	NONE	0.5	0.5	1
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Amosite	Amosite	Chrysotile & Amosite
Asbestos in Soil	Type	N/A	ISO 17025	Detected	Detected	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	< 0.001	< 0.001	0.001
Asbestos Quantification Total	%	0.001	ISO 17025	< 0.001	< 0.001	0.001
Asbestos Analyst ID	N/A	N/A	N/A	MLO	MLO	MLO
General Inorganics						
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Speciated PAHs						
Naphthalene	mg/kg	0.05	MCERTS	1.3	< 0.05	0.79
Acenaphthylene	mg/kg	0.05	MCERTS	0.57	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	1.5	0.17	0.9
Fluorene	mg/kg	0.05	MCERTS	1.4	0.28	0.77
Phenanthrene	mg/kg	0.05	MCERTS	12	2	6.4
Anthracene	mg/kg	0.05	MCERTS	3.8	0.57	1.9
Fluoranthene	mg/kg	0.05	MCERTS	17	3.2	11
Pyrene	mg/kg	0.05	MCERTS	17	3.3	10
Benzo(a)anthracene	mg/kg	0.05	MCERTS	8.1	1.4	6.9
Chrysene	mg/kg	0.05	MCERTS	6.9	1.3	5.2
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	8.9	1.7	7.3
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	4.2	0.75	1.7
Benzo(a)pyrene	mg/kg	0.05	MCERTS	8.6	1.7	6
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	4.5	0.78	2.7
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	1.3	0.26	0.86
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	5	0.92	3.2
Total PAH						
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	102	18.2	66
Heavy Metals / Metalloids						
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	21	10	27
Barium (aqua regia extractable)	mg/kg	1	MCERTS	680	260	390
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	1.6	0.63	1.8
Boron (water soluble)	mg/kg	0.2	MCERTS	0.3	1.3	0.8
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	1.3	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	NONE	< 4.0	< 4.0	< 4.0
Copper (aqua regia extractable)	mg/kg	1	MCERTS	430	60	420
Lead (aqua regia extractable)	mg/kg	1	MCERTS	260	75	290
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	2.9	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	40	18	29
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	43	19	40
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	990	200	210
Petroleum Hydrocarbons						
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1

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Analytical Report Number: 22-39659
Project / Site name: Donn Street A
Your Order No: 646

Lab Sample Number				2172864	2172865	2172866
Sample Reference				TP519	TP517	TP516
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				0.30	0.40	0.80
Date Sampled				08/02/2022	08/02/2022	08/02/2022
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
TPH (C8 - C10) HS_1D_TOTAL	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1
TPH (C10 - C12) EH_CU_1D_TOTAL	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0
TPH (C12 - C16) EH_CU_1D_TOTAL	mg/kg	4	MCERTS	11	< 4.0	5.3
TPH (C16 - C21) EH_CU_1D_TOTAL	mg/kg	1	MCERTS	62	18	23
TPH (C21 - C35) EH_CU_1D_TOTAL	mg/kg	1	MCERTS	200	76	67
TPH (C35 - C40) EH_CU_1D_TOTAL	mg/kg	10	MCERTS	44	< 10	< 10
TPH Total C5 - C40 EH_CU+HS_1D_TOTAL	mg/kg	10	MCERTS	320	94	96
VOCs						
Chloromethane	µg/kg	1	ISO 17025	-	-	< 1.0
Chloroethane	µg/kg	1	NONE	-	-	< 1.0
Bromomethane	µg/kg	1	ISO 17025	-	-	< 1.0
Vinyl Chloride	µg/kg	1	NONE	-	-	< 1.0
Trichlorofluoromethane	µg/kg	1	NONE	-	-	< 1.0
1,1-Dichloroethene	µg/kg	1	NONE	-	-	< 1.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	< 1.0
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	< 1.0
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	< 1.0
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	< 1.0
Trichloromethane	µg/kg	1	MCERTS	-	-	< 1.0
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	< 1.0
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	< 1.0
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	< 1.0
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	< 1.0
Benzene	µg/kg	1	MCERTS	-	-	< 1.0
Tetrachloromethane	µg/kg	1	MCERTS	-	-	< 1.0
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	< 1.0
Trichloroethene	µg/kg	1	MCERTS	-	-	< 1.0
Dibromomethane	µg/kg	1	MCERTS	-	-	< 1.0
Bromodichloromethane	µg/kg	1	MCERTS	-	-	< 1.0
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	< 1.0
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	< 1.0
Toluene	µg/kg	1	MCERTS	-	-	< 1.0
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	< 1.0
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	< 1.0
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	< 1.0
Tetrachloroethene	µg/kg	1	NONE	-	-	< 1.0
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	< 1.0
Chlorobenzene	µg/kg	1	MCERTS	-	-	< 1.0
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	-	-	< 1.0
p & m-Xylene	µg/kg	1	MCERTS	-	-	< 1.0
Styrene	µg/kg	1	MCERTS	-	-	< 1.0
Tribromomethane	µg/kg	1	NONE	-	-	< 1.0
o-Xylene	µg/kg	1	MCERTS	-	-	< 1.0
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	< 1.0
Isopropylbenzene	µg/kg	1	MCERTS	-	-	< 1.0
Bromobenzene	µg/kg	1	MCERTS	-	-	< 1.0
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	< 1.0
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	< 1.0
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	< 1.0
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	< 1.0

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Analytical Report Number: 22-39659
Project / Site name: Donn Street A
Your Order No: 646

Lab Sample Number				2172864	2172865	2172866
Sample Reference				TP519	TP517	TP516
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				0.30	0.40	0.80
Date Sampled				08/02/2022	08/02/2022	08/02/2022
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	< 1.0
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	< 1.0
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	< 1.0
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	< 1.0
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	< 1.0
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	< 1.0
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	< 1.0
Butylbenzene	µg/kg	1	MCERTS	-	-	< 1.0
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	< 1.0
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	< 1.0
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	< 1.0
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	< 1.0

SVOCs

Aniline	mg/kg	0.1	NONE	-	-	< 0.1
Phenol	mg/kg	0.2	ISO 17025	-	-	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	< 0.3
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	-	-	< 0.2
Isophorone	mg/kg	0.2	MCERTS	-	-	< 0.2
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	-	-	0.79
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	-	-	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	0.6
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	< 0.1
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	< 0.1
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	-	-	0.9
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	0.6
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	< 0.2
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	< 0.2
Fluorene	mg/kg	0.05	MCERTS	-	-	0.77
Azobenzene	mg/kg	0.3	MCERTS	-	-	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	< 0.3

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Analytical Report Number: 22-39659
Project / Site name: Donn Street A
Your Order No: 646

Lab Sample Number				2172864	2172865	2172866
Sample Reference				TP519	TP517	TP516
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				0.30	0.40	0.80
Date Sampled				08/02/2022	08/02/2022	08/02/2022
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Phenanthrene	mg/kg	0.05	MCERTS	-	-	6.4
Anthracene	mg/kg	0.05	MCERTS	-	-	1.9
Carbazole	mg/kg	0.3	MCERTS	-	-	< 0.3
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	< 0.2
Anthraquinone	mg/kg	0.3	MCERTS	-	-	< 0.3
Fluoranthene	mg/kg	0.05	MCERTS	-	-	11
Pyrene	mg/kg	0.05	MCERTS	-	-	10
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	6.9
Chrysene	mg/kg	0.05	MCERTS	-	-	5.2
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-	7.3
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-	1.7
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	6
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	2.7
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	0.86
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	3.2

U/S = Unsuitable Sample I/S = Insufficient Sample

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 22-39659
Project / Site name: Donn Street A
Your Order No: 646

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2172864	TP519	0.30	157	Loose Fibres	**Amosite**	< 0.001	**< 0.001**
2172865	TP517	0.40	136	Loose Fibres	**Amosite**	< 0.001	**< 0.001**
2172866	TP516	0.80	179	Loose Fibres	**Chrysotile & Amosite**	0.001	**0.001**

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number: 22-39659
Project / Site name: Donn Street A

Your Order No: 646

Lab Sample Number				2172867
Sample Reference				TP516
Sample Number				None Supplied
Depth (m)				0.80
Date Sampled				08/02/2022
Time Taken				None Supplied
Analytical Parameter (Leachate Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
General Inorganics				
pH (automated)	pH Units	N/A	ISO 17025	8.1
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	2.3
Total Phenols				
Total Phenols (monohydric)	µg/l	1	ISO 17025	5.3
Speciated PAHs				
Naphthalene	µg/l	0.01	ISO 17025	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	NONE	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	NONE	< 0.01
Benzo(ghi)perylene	µg/l	0.01	NONE	< 0.01
Total PAH				
Total EPA-16 PAHs	µg/l	0.2	NONE	< 0.2
Heavy Metals / Metalloids				
Arsenic (dissolved)	µg/l	1	ISO 17025	3.7
Cadmium (dissolved)	µg/l	0.08	ISO 17025	< 0.08
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0
Chromium (dissolved)	µg/l	0.4	ISO 17025	1.3
Copper (dissolved)	µg/l	0.7	ISO 17025	15
Lead (dissolved)	µg/l	1	ISO 17025	6.7
Mercury (dissolved)	µg/l	0.5	ISO 17025	< 0.5
Nickel (dissolved)	µg/l	0.3	ISO 17025	4.4
Selenium (dissolved)	µg/l	4	ISO 17025	< 4.0
Zinc (dissolved)	µg/l	0.4	ISO 17025	10
Monoaromatics & Oxygenates				
Benzene	µg/l	1	ISO 17025	< 1.0
Toluene	µg/l	1	ISO 17025	< 1.0
Ethylbenzene	µg/l	1	ISO 17025	< 1.0
p & m-xylene	µg/l	1	ISO 17025	< 1.0
o-xylene	µg/l	1	ISO 17025	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	10	NONE	< 10

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Analytical Report Number: 22-39659
Project / Site name: Donn Street A

Your Order No: 646

Lab Sample Number				2172867
Sample Reference				TP516
Sample Number				None Supplied
Depth (m)				0.80
Date Sampled				08/02/2022
Time Taken				None Supplied
Analytical Parameter (Leachate Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Petroleum Hydrocarbons				
TPH1 (C10 - C40) EH_1D_TOTAL_#1_#2_MS	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic >C5 - C6 HS_1D_AL	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aliphatic >C6 - C8 HS_1D_AL	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aliphatic >C8 - C10 HS_1D_AL	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aliphatic >C10 - C12 EH_1D_AL_#1_#2_MS	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic >C12 - C16 EH_1D_AL_#1_#2_MS	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic >C16 - C21 EH_1D_AL_#1_#2_MS	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic >C21 - C35 EH_1D_AL_#1_#2_MS	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic (C5 - C35) HS+EH_1D_AL_#1_#2_MS	µg/l	10	NONE	< 10
TPH-CWG - Aromatic >C5 - C7 HS_1D_AR	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aromatic >C7 - C8 HS_1D_AR	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aromatic >C8 - C10 HS_1D_AR	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aromatic >C10 - C12 EH_1D_AR_#1_#2_MS	µg/l	10	NONE	< 10
TPH-CWG - Aromatic >C12 - C16 EH_1D_AR_#1_#2_MS	µg/l	10	NONE	< 10
TPH-CWG - Aromatic >C16 - C21 EH_1D_AR_#1_#2_MS	µg/l	10	NONE	< 10
TPH-CWG - Aromatic >C21 - C35 EH_1D_AR_#1_#2_MS	µg/l	10	NONE	< 10
TPH-CWG - Aromatic (C5 - C35) HS+EH_1D_AR_#1_#2_MS	µg/l	10	NONE	< 10

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Analytical Report Number : 22-39659
Project / Site name: Donn Street A

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2172864	TP519	None Supplied	0.3	Brown loam and clay with gravel and vegetation.
2172865	TP517	None Supplied	0.4	Brown clay and loam with gravel and vegetation.
2172866	TP516	None Supplied	0.8	Brown clay and loam with gravel and vegetation.

Analytical Report Number : 22-39659
Project / Site name: Donn Street A

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
BS EN 12457-1 (2:1) Leachate Prep	2:1 (as recieved, moisture adjusted) end over end extraction with water for 24 hours. Eluate filtered prior to analysis.	In-house method based on BSEN12457-1.	L043-PL	W	NONE
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Metals by ICP-OES in leachate	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Hexavalent chromium in leachate	Determination of hexavalent chromium in leachate by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	ISO 17025
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	NONE
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in leachate - LOW LEVEL 1 ug/l	Determination of phenols in leachate by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Speciated EPA-16 PAHs in leachate	Determination of PAH compounds in leachate by extraction in dichloromethane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH at 20oC in leachate (automated)	Determination of pH in leachate by electrometric measurement.	In house method.	L099B	W	ISO 17025
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
TPH1 (Leachates)	Determination of dichloromethane extractable hydrocarbons in leachate by GC-MS.	In-house method	L070-PL	W	NONE
TPHCWG (Leachates)	Determination of dichloromethane extractable hydrocarbons in leachate by GC-MS.	In-house method	L070-PL	W	ISO 17025
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS

Analytical Report Number : 22-39659
Project / Site name: Donn Street A

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
BTEX and MTBE in leachates (Monoaromatics)	Determination of BTEX and MTBE in leachates by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Total cyanide in leachate - 1µg/l	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.
For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 22-57918

Project / Site name:	Donn Street	**Samples received on:**	11/05/2022
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	11/05/2022
Your order number:	1531	**Analysis completed by:**	18/05/2022
Report Issue Number:	1	**Report issued on:**	18/05/2022
Samples Analysed:	4 soil samples		

Signed:

Joanna Wawrzeczko
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number: 22-57918
Project / Site name: Donn Street
Your Order No: 1531

Lab Sample Number				2273244	2273245	2273246	2273247
Sample Reference				TP701	TP702	TP703	TP704
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.40	0.60	0.30	1.40
Date Sampled				Deviating	Deviating	Deviating	Deviating
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	18	21	20	13
Total mass of sample received	kg	0.001	NONE	0.4	0.4	0.4	0.4
Petroleum Hydrocarbons							
TPH (C5 - C6) HS_1D_TOTAL	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
TPH (C6 - C8) HS_1D_TOTAL	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C8 - C10) HS_1D_TOTAL	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C10 - C12) EH_CU_1D_TOTAL	mg/kg	2	MCERTS	2.7	< 2.0	< 2.0	< 2.0
TPH (C12 - C16) EH_CU_1D_TOTAL	mg/kg	4	MCERTS	9	< 4.0	< 4.0	6.3
TPH (C16 - C21) EH_CU_1D_TOTAL	mg/kg	1	MCERTS	46	8.3	8	120
TPH (C21 - C35) EH_CU_1D_TOTAL	mg/kg	1	MCERTS	100	20	20	440
TPH (C35 - C40) EH_CU_1D_TOTAL	mg/kg	10	MCERTS	19	< 10	< 10	52
TPH Total C5 - C40 EH_CU+HS_1D_TOTAL	mg/kg	10	MCERTS	180	28	28	620
VOCs							
Chloromethane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Bromomethane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl Chloride	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Trichlorofluoromethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
2,2-Dichloropropane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Trichloromethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloropropene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Trans-1,2-dichloroethene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloromethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Dibromomethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichloropropane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
Dibromochloromethane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
p & m-Xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Tribromomethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0

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Analytical Report Number: 22-57918
Project / Site name: Donn Street
Your Order No: 1531

Lab Sample Number				2273244	2273245	2273246	2273247
Sample Reference				TP701	TP702	TP703	TP704
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.40	0.60	0.30	1.40
Date Sampled				Deviating	Deviating	Deviating	Deviating
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Bromobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
n-Propylbenzene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
2-Chlorotoluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
4-Chlorotoluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
tert-Butylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
sec-Butylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
p-Isopropyltoluene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Butylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Hexachlorobutadiene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0

SVOCs

Aniline	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Phenol	mg/kg	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Hexachloroethane	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Isophorone	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
2-Nitrophenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	1.9	< 0.05	< 0.05	< 0.05
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	0.9	< 0.1	< 0.1	< 0.1
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	1.9	< 0.05	< 0.05	< 0.05
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	1.5	< 0.2	< 0.2	< 0.2
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	< 0.3	< 0.3	< 0.3	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
4-Nitroaniline	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
Fluorene	mg/kg	0.05	MCERTS	1.6	< 0.05	< 0.05	< 0.05
Azobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number: 22-57918
Project / Site name: Donn Street
Your Order No: 1531

Lab Sample Number				2273244	2273245	2273246	2273247
Sample Reference				TP701	TP702	TP703	TP704
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.40	0.60	0.30	1.40
Date Sampled				Deviating	Deviating	Deviating	Deviating
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	19	0.85	1.3	0.47
Anthracene	mg/kg	0.05	MCERTS	3.7	0.21	0.27	< 0.05
Carbazole	mg/kg	0.3	MCERTS	1.7	< 0.3	< 0.3	< 0.3
Dibutyl phthalate	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
Anthraquinone	mg/kg	0.3	MCERTS	0.7	< 0.3	< 0.3	< 0.3
Fluoranthene	mg/kg	0.05	MCERTS	18	1.8	1.6	0.6
Pyrene	mg/kg	0.05	MCERTS	15	1.9	1.6	0.55
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	< 0.3	< 0.3	< 0.3	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	7.6	1.1	0.99	< 0.05
Chrysene	mg/kg	0.05	MCERTS	6.8	1	0.9	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	4.9	0.97	1	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	3.7	0.74	0.48	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	5.5	1	0.92	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	2.6	0.54	0.43	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.83	0.18	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	3	0.6	0.63	< 0.05

U/S = Unsuitable Sample I/S = Insufficient Sample

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Analytical Report Number : 22-57918
Project / Site name: Donn Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2273244	TP701	None Supplied	0.4	Brown clay and sand with gravel and rubble.
2273245	TP702	None Supplied	0.6	Brown clay and loam with gravel and vegetation.
2273246	TP703	None Supplied	0.3	Brown clay and loam with gravel and vegetation.
2273247	TP704	None Supplied	1.4	Brown clay and sand with gravel and clinker.

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Analytical Report Number : 22-57918
Project / Site name: Donn Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.
For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Analytical Report Number : 22-57918
Project / Site name: Donn Street

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
TP701	None Supplied	S	2273244	a	None Supplied	None Supplied	None Supplied
TP702	None Supplied	S	2273245	a	None Supplied	None Supplied	None Supplied
TP703	None Supplied	S	2273246	a	None Supplied	None Supplied	None Supplied
TP704	None Supplied	S	2273247	a	None Supplied	None Supplied	None Supplied

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Analytical Report Number : 23-13977

Project / Site name:	Don Street	**Samples received on:**	25/01/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	25/01/2023
Your order number:	003946	**Analysis completed by:**	06/02/2023
Report Issue Number:	1	**Report issued on:**	06/02/2023
Samples Analysed:	6 soil samples		

Signed:

Adam Fenwick
Technical Reviewer
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-13977
Project / Site name: Don Street
Your Order No: 003946

Lab Sample Number				2565518	2565519	2565520	2565521	2565522
Sample Reference				BUND 101	BUND 102	BUND 103	BUND 104	BUND 105
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				20/01/2023	20/01/2023	20/01/2023	20/01/2023	20/01/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	17	14	15	28	25
Total mass of sample received	kg	0.001	NONE	0.2	0.2	0.2	0.2	0.2
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile	-	Chrysotile	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Detected	Not-detected	Detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	< 0.001	-	< 0.001	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	< 0.001	-	< 0.001	-	-
Asbestos Analyst ID	N/A	N/A	N/A	DSO	SCA	SCA	SCA	SCA
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	8	8.4	8.2	8.2	8.8
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	710	710	650	1200	1500
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.14	0.03	0.028	0.11	0.19
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	280	60	55	220	380
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	138	30.2	27.7	109	188
Sulphide	mg/kg	1	MCERTS	39	13	16	21	26
Total Sulphur	mg/kg	50	MCERTS	580	550	590	930	990
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	3.4	2.9	3.7	4.8	4.2
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	1.4	0.7	1.2	1.1	0.63
Acenaphthylene	mg/kg	0.05	MCERTS	0.3	0.13	0.3	0.07	0.1
Acenaphthene	mg/kg	0.05	MCERTS	2.7	1.8	3.1	0.62	1.3
Fluorene	mg/kg	0.05	MCERTS	2.4	1.5	2.6	0.51	1.1
Phenanthrene	mg/kg	0.05	MCERTS	19	18	27	4.1	8.7
Anthracene	mg/kg	0.05	MCERTS	5.1	4.7	6.2	1.2	2.4
Fluoranthene	mg/kg	0.05	MCERTS	29	29	34	7.1	12
Pyrene	mg/kg	0.05	MCERTS	25	25	33	7.2	12
Benzo(a)anthracene	mg/kg	0.05	MCERTS	13	12	16	4.3	6.1
Chrysene	mg/kg	0.05	MCERTS	13	8	13	3	4.1
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	15	11	14	4.6	6.6
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	6.5	4	7.2	1.1	1.6
Benzo(a)pyrene	mg/kg	0.05	MCERTS	14	9.8	14	3.9	5.5
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	6.8	4.3	6.8	1.7	2.4
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	1.6	1	1.7	0.39	0.57
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	7.6	4.6	7.9	1.9	2.7
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	164	136	187	42.7	67.4

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Analytical Report Number: 23-13977
Project / Site name: Don Street
Your Order No: 003946

Lab Sample Number				2565518	2565519	2565520	2565521	2565522
Sample Reference				BUND 101	BUND 102	BUND 103	BUND 104	BUND 105
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				20/01/2023	20/01/2023	20/01/2023	20/01/2023	20/01/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	12	47	25	15	15
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.8	< 0.2	< 0.2	1.1	1
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	18	21	24	21	20
Copper (aqua regia extractable)	mg/kg	1	MCERTS	60	72	78	140	240
Lead (aqua regia extractable)	mg/kg	1	MCERTS	150	120	190	160	140
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	0.4	0.6
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	19	30	28	23	22
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	160	160	210	370	400
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	14	11	21	< 4.0	6.2
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	75	110	180	38	51
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	270	350	540	260	260
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	75	110	100	84	100
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	430	580	840	380	420

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 23-13977
Project / Site name: Don Street
Your Order No: 003946

Lab Sample Number				2565523
Sample Reference				BUND 106
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				20/01/2023
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	31
Total mass of sample received	kg	0.001	NONE	0.2

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-
Asbestos Quantification Total	%	0.001	ISO 17025	-
Asbestos Analyst ID	N/A	N/A	N/A	SCA

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8
Total Cyanide	mg/kg	1	MCERTS	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	1300
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.1
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	200
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	101
Sulphide	mg/kg	1	MCERTS	25
Total Sulphur	mg/kg	50	MCERTS	950
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	4.9

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.43
Acenaphthylene	mg/kg	0.05	MCERTS	0.07
Acenaphthene	mg/kg	0.05	MCERTS	0.54
Fluorene	mg/kg	0.05	MCERTS	0.53
Phenanthrene	mg/kg	0.05	MCERTS	4.9
Anthracene	mg/kg	0.05	MCERTS	1.5
Fluoranthene	mg/kg	0.05	MCERTS	7.7
Pyrene	mg/kg	0.05	MCERTS	7.6
Benzo(a)anthracene	mg/kg	0.05	MCERTS	4
Chrysene	mg/kg	0.05	MCERTS	3.3
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	3.9
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	1.9
Benzo(a)pyrene	mg/kg	0.05	MCERTS	4
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	1.8
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.4
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	2

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	44.5

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-13977
Project / Site name: Don Street
Your Order No: 003946

Lab Sample Number				2565523
Sample Reference				BUND 106
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				20/01/2023
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Heavy Metals / Metalloids				
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	14
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	1.1
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	21
Copper (aqua regia extractable)	mg/kg	1	MCERTS	130
Lead (aqua regia extractable)	mg/kg	1	MCERTS	150
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.6
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	28
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	400

Petroleum Hydrocarbons

TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	< 2.0
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	6.3
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	48
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	250
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	100
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	400

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report relate only to the sample(s) submitted for testing.

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Analytical i2 Environmental Science

Analytical Report Number: 23-13977
Project / Site name: Don Street
Your Order No: 003946

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2565518	BUND 101		145	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**
2565520	BUND 103		165	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 23-13977
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2565518	BUND 101	None Supplied	None Supplied	Brown clay and sand with gravel and vegetation.
2565519	BUND 102	None Supplied	None Supplied	Brown sand with vegetation.
2565520	BUND 103	None Supplied	None Supplied	Brown clay and sand with gravel and vegetation.
2565521	BUND 104	None Supplied	None Supplied	Brown clay and sand with gravel and vegetation.
2565522	BUND 105	None Supplied	None Supplied	Brown clay and sand with gravel and vegetation.
2565523	BUND 106	None Supplied	None Supplied	Brown clay and sand with gravel and vegetation.

Analytical Report Number : 23-13977
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

Analytical Report Number : 23-13977
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-17093

Project / Site name:	Don Street	**Samples received on:**	10/02/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	10/02/2023
Your order number:	004070	**Analysis completed by:**	17/02/2023
Report Issue Number:	1	**Report issued on:**	17/02/2023
Samples Analysed:	1 leachate sample		

Signed:

Adam Fenwick
Technical Reviewer
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-17093
Project / Site name: Don Street

Your Order No: 004070

Lab Sample Number				2582197
Sample Reference				Bunds 107
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				09/02/2023
Time Taken				None Supplied
Analytical Parameter (Leachate Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
General Inorganics				
pH (automated)	pH Units	N/A	ISO 17025	7.9
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	1.3
Total Phenols				
Total Phenols (monohydric)	µg/l	1	ISO 17025	1.4
Speciated PAHs				
Naphthalene	µg/l	0.01	ISO 17025	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	NONE	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	NONE	< 0.01
Benzo(ghi)perylene	µg/l	0.01	NONE	< 0.01
Total PAH				
Total EPA-16 PAHs	µg/l	0.2	NONE	< 0.2
Heavy Metals / Metalloids				
Arsenic (dissolved)	µg/l	1	ISO 17025	3.3
Cadmium (dissolved)	µg/l	0.08	ISO 17025	< 0.08
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0
Chromium (dissolved)	µg/l	0.4	ISO 17025	0.8
Copper (dissolved)	µg/l	0.7	ISO 17025	11
Lead (dissolved)	µg/l	1	ISO 17025	10
Mercury (dissolved)	µg/l	0.5	ISO 17025	< 0.5
Nickel (dissolved)	µg/l	0.3	ISO 17025	0.8
Selenium (dissolved)	µg/l	4	ISO 17025	< 4.0
Zinc (dissolved)	µg/l	0.4	ISO 17025	5.3
Monoaromatics & Oxygenates				
Benzene	µg/l	3	ISO 17025	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	10	NONE	< 10
Petroleum Hydrocarbons				
TPH1 (C10 - C40) EH_1D_TOTAL_MS	µg/l	10	NONE	< 10

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Analytical Report Number: 23-17093
Project / Site name: Don Street

Your Order No: 004070

Lab Sample Number				2582197
Sample Reference				Bunds 107
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				09/02/2023
Time Taken				None Supplied
Analytical Parameter (Leachate Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
TPH-CWG - Aliphatic >C5 - C6 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aliphatic >C6 - C8 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aliphatic >C8 - C10 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aliphatic >C10 - C12 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic >C12 - C16 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic >C16 - C21 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic >C21 - C35 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic (C5 - C35) $_{HS+EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10
TPH-CWG - Aromatic >C5 - C7 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aromatic >C7 - C8 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aromatic >C8 - C10 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aromatic >C10 - C12 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10
TPH-CWG - Aromatic >C12 - C16 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10
TPH-CWG - Aromatic >C16 - C21 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10
TPH-CWG - Aromatic >C21 - C35 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10
TPH-CWG - Aromatic (C5 - C35) $_{HS+EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-17093
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
BS EN 12457-1 (2:1) Leachate Prep	2:1 (as recieved, moisture adjusted) end over end extraction with water for 24 hours. Eluate filtered prior to analysis.	In-house method based on BSEN12457-1.	L043-PL	W	NONE
Metals by ICP-OES in leachate	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Hexavalent chromium in leachate	Determination of hexavalent chromium in leachate by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	ISO 17025
Monohydric phenols in leachate - LOW LEVEL 1 ug/l	Determination of phenols in leachate by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Speciated EPA-16 PAHs in leachate	Determination of PAH compounds in leachate by extraction in dichloromethane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
pH at 20oC in leachate (automated)	Determination of pH in leachate by electrometric measurement.	In house method.	L099B	W	ISO 17025
TPH1 (Leachates)	Determination of dichloromethane extractable hydrocarbons in leachate by GC-MS.	In-house method	L070-PL	W	NONE
TPHCWG (Leachates)	Determination of dichloromethane extractable hydrocarbons in leachate by GC-MS.	In-house method	L070-PL	W	ISO 17025
BTEX and MTBE in leachates (Monoaromatics)	Determination of BTEX and MTBE in leachates by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Total cyanide in leachate - 1µg/l	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted

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Analytical Report Number : 23-17093
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
_	Operator - understore to separate acronyms (exception for +)				
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total				

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Analytical Report Number : 23-28809-2

Replaces Analytical Report Number: 23-28809, issue no. 1
Client references/information amended.
Sample ID amended for all samples as per client's request

Project / Site name:	Don St	**Samples received on:**	17/04/2023
Your job number:	14 554	**Samples instructed on/ Analysis started on:**	17/04/2023
Your order number:	004586	**Analysis completed by:**	24/04/2023
Report Issue Number:	2	**Report issued on:**	25/04/2023
Samples Analysed:	5 water samples		

Izabela Wójcik
Signed:

Izabela Wójcik
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Analytical i2 Environmental Science

Analytical Report Number: 23-28809
Project / Site name: Don St

Your Order No: 004586

Lab Sample Number				2650501	2650502	2650503	2650504	2650505
Sample Reference				Point 1	Point 2	Point 3	Point 4	Point 5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				14/04/2023	14/04/2023	14/04/2023	14/04/2023	14/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
General Inorganics								
pH (L005B)	pH Units	N/A	ISO 17025	8	7.5	8	7.9	7.5
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	1.7	1.5	1.7	1.7	< 1.0
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	4.67	4.6	4.79	4.32	3.72
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	13	7	5	49	150
Total Phenols								
Total Phenols (monohydric)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	1.1
Heavy Metals / Metalloids								
Calcium (dissolved)	mg/l	0.012	ISO 17025	85	61	75	80	90
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	3.53	3.57	3.6	2.42	0.82
Cadmium (dissolved)	µg/l	0.02	ISO 17025	0.03	0.03	0.04	0.03	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.5	0.4	0.5	0.4	0.3
Copper (dissolved)	µg/l	0.5	ISO 17025	5.1	5.3	3.9	3.5	2.1
Lead (dissolved)	µg/l	0.2	ISO 17025	1.6	1	0.8	0.4	2
Manganese (dissolved)	µg/l	0.05	ISO 17025	55	80	57	15	79
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	1.6	1.6	1.7	1.4	< 0.5
Selenium (dissolved)	µg/l	0.6	ISO 17025	0.7	< 0.6	0.6	< 0.6	< 0.6
Zinc (dissolved)	µg/l	0.5	ISO 17025	14	54	12	6.8	6.9
Monoaromatics & Oxygenates								
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Petroleum Hydrocarbons								
TPH1 (C10 - C40) $_{EH\_1D\_TOTAL\_MS}$	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	76
TPH-CWG - Aliphatic >C5 - C6 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) $_{HS+EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C5 - C7 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	25
TPH-CWG - Aromatic >C16 - C21 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	27
TPH-CWG - Aromatic >C21 - C35 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	24

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Analytical Report Number: 23-28809
Project / Site name: Don St

Your Order No: 004586

Lab Sample Number				2650501	2650502	2650503	2650504	2650505
Sample Reference				Point 1	Point 2	Point 3	Point 4	Point 5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				14/04/2023	14/04/2023	14/04/2023	14/04/2023	14/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
TPH-CWG - Aromatic (C5 - C35) HS+EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	76
VOCs								
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p & m-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Tribromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
o-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-28809
Project / Site name: Don St

Your Order No: 004586

Lab Sample Number				2650501	2650502	2650503	2650504	2650505
Sample Reference				Point 1	Point 2	Point 3	Point 4	Point 5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				14/04/2023	14/04/2023	14/04/2023	14/04/2023	14/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

SVOCs

Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	0.47
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	2.9

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Analytical Report Number: 23-28809
Project / Site name: Don St

Your Order No: 004586

Lab Sample Number				2650501	2650502	2650503	2650504	2650505
Sample Reference				Point 1	Point 2	Point 3	Point 4	Point 5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				14/04/2023	14/04/2023	14/04/2023	14/04/2023	14/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	2.7
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	1.5
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	1.4
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	2.2
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	0.73
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	1.7
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	1
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	0.31
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	1.3
3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-28809
Project / Site name: Don St

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

4041

Analytical Report Number : 23-28809
Project / Site name: Don St

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Sample Deviation Report

Analytical Report Number : 23-28809
Project / Site name: Don St

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
Point 1	None Supplied	W	2650501	c	pH at 20oC in water (automated)	L099-PL	c
Point 2	None Supplied	W	2650502	c	pH at 20oC in water (automated)	L099-PL	c
Point 3	None Supplied	W	2650503	c	pH at 20oC in water (automated)	L099-PL	c
Point 4	None Supplied	W	2650504	c	pH at 20oC in water (automated)	L099-PL	c
Point 5	None Supplied	W	2650505	c	pH at 20oC in water (automated)	L099-PL	c

4041

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Analytical Report Number : 23-31387

Project / Site name:	Don Street	**Samples received on:**	28/04/2023
Your job number:	14 554	**Samples instructed on/ Analysis started on:**	28/04/2023
Your order number:	004725	**Analysis completed by:**	09/05/2023
Report Issue Number:	1	**Report issued on:**	09/05/2023
Samples Analysed:	5 water samples		

Signed:

Joanna Wawrzeczko
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-31387
Project / Site name: Don Street

Your Order No: 004725

Lab Sample Number				2665593	2665594	2665595	2665596	2665597
Sample Reference				P1	P2	P3	P4	P5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				28/04/2023	28/04/2023	28/04/2023	28/04/2023	28/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
General Inorganics								
pH (L005B)	pH Units	N/A	ISO 17025	7.8	7.4	7.8	7.8	7.5
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	1.3	< 1.0	1.1	1.2	< 1.0
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	4.36	4.41	4.05	4.38	3.19
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	8	10	38	5	4
Total Phenols								
Total Phenols (monohydric)	µg/l	1	ISO 17025	1.7	< 1.0	1.1	1.1	< 1.0
Heavy Metals / Metalloids								
Calcium (dissolved)	mg/l	0.012	ISO 17025	82	65	91	89	100
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	2.75	3.03	2.64	2.67	0.66
Cadmium (dissolved)	µg/l	0.02	ISO 17025	0.09	< 0.02	< 0.02	0.02	0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.3	< 0.2	0.3	0.3	0.3
Copper (dissolved)	µg/l	0.5	ISO 17025	2.4	2.1	2.3	3.1	1.3
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	0.3	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	3.3	2.4	2.4	3.6	3.3
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	1.2	0.9	1	1.3	< 0.5
Selenium (dissolved)	µg/l	0.6	ISO 17025	0.8	< 0.6	0.7	0.6	< 0.6
Zinc (dissolved)	µg/l	0.5	ISO 17025	5.5	8.3	4.4	8.9	4
Monoaromatics & Oxygenates								
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-31387
Project / Site name: Don Street

Your Order No: 004725

Lab Sample Number				2665593	2665594	2665595	2665596	2665597
Sample Reference				P1	P2	P3	P4	P5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				28/04/2023	28/04/2023	28/04/2023	28/04/2023	28/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Petroleum Hydrocarbons								
TPH1 (C10 - C40) EH_1D_TOTAL_MS	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C5 - C6 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) HS+EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C5 - C7 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35) HS+EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
VOCs								
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-31387
Project / Site name: Don Street

Your Order No: 004725

Lab Sample Number				2665593	2665594	2665595	2665596	2665597
Sample Reference				P1	P2	P3	P4	P5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				28/04/2023	28/04/2023	28/04/2023	28/04/2023	28/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p & m-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Tribromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
o-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
SVOCs								
Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

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Analytical Report Number: 23-31387
Project / Site name: Don Street

Your Order No: 004725

Lab Sample Number				2665593	2665594	2665595	2665596	2665597
Sample Reference				P1	P2	P3	P4	P5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				28/04/2023	28/04/2023	28/04/2023	28/04/2023	28/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-31387
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025

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Analytical Report Number : 23-31387
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Sample Deviation Report

Analytical Report Number : 23-31387

Project / Site name: Don Street

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
P1	None Supplied	W	2665593	c	pH at 20oC in water (automated)	L099-PL	c
P2	None Supplied	W	2665594	c	pH at 20oC in water (automated)	L099-PL	c
P3	None Supplied	W	2665595	c	pH at 20oC in water (automated)	L099-PL	c
P4	None Supplied	W	2665596	c	pH at 20oC in water (automated)	L099-PL	c
P5	None Supplied	W	2665597	c	pH at 20oC in water (automated)	L099-PL	c

UKAS TESTING
4041

Environmental Science

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Analytical Report Number : 23-33820

Project / Site name:	Don Street	**Samples received on:**	15/05/2023
Your job number:	14 554	**Samples instructed on/ Analysis started on:**	15/05/2023
Your order number:	004842	**Analysis completed by:**	19/05/2023
Report Issue Number:	1	**Report issued on:**	19/05/2023
Samples Analysed:	5 water samples		

Signed:

Dominika Warjan
Junior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Analytical Report Number: 23-33820
Project / Site name: Don Street

Your Order No: 004842

Lab Sample Number				2679476	2679477	2679478	2679479	2679480
Sample Reference				P1	P2	P3	P4	P5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				12/05/2023	12/05/2023	12/05/2023	12/05/2023	12/05/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
General Inorganics								
pH (L005B)	pH Units	N/A	ISO 17025	7.8	7.5	7.7	7.7	7.5
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	2.9	2.7	2.6	2.4	< 1.0
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	4.62	4.65	4.28	4.47	3.4
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	13	76	14	26	69
Total Phenols								
Total Phenols (monohydric)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Heavy Metals / Metalloids								
Calcium (dissolved)	mg/l	0.012	ISO 17025	100	92	110	87	93
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	3.04	2.54	3.16	3.08	0.74
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.3	< 0.2	0.3	0.3	< 0.2
Copper (dissolved)	µg/l	0.5	ISO 17025	2.8	2.4	3.2	4.2	1.1
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	12	8.2	15	8.5	370
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	1	1.2	1.1	1	< 0.5
Selenium (dissolved)	µg/l	0.6	ISO 17025	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6
Zinc (dissolved)	µg/l	0.5	ISO 17025	3.5	7.4	4	4.3	7.2
Monoaromatics & Oxygenates								
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Petroleum Hydrocarbons								
TPH1 (C10 - C40) EH_1D_TOTAL_MS	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C5 - C6## HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8## HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10## HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) HS+EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10

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Analytical Report Number: 23-33820
Project / Site name: Don Street

Your Order No: 004842

Lab Sample Number				2679476	2679477	2679478	2679479	2679480
Sample Reference				P1	P2	P3	P4	P5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				12/05/2023	12/05/2023	12/05/2023	12/05/2023	12/05/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
TPH-CWG - Aromatic >C5 - C7 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35) $_{HS+EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
VOCs								
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloromethane##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p & m-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Tribromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
o-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-33820
Project / Site name: Don Street

Your Order No: 004842

Lab Sample Number				2679476	2679477	2679478	2679479	2679480
Sample Reference				P1	P2	P3	P4	P5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				12/05/2023	12/05/2023	12/05/2023	12/05/2023	12/05/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

SVOCs

Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

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Analytical Report Number: 23-33820
Project / Site name: Don Street

Your Order No: 004842

Lab Sample Number				2679476	2679477	2679478	2679479	2679480
Sample Reference				P1	P2	P3	P4	P5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				12/05/2023	12/05/2023	12/05/2023	12/05/2023	12/05/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-33820
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025

Analytical Report Number : 23-33820
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

##Quality control parameter has a high recovery (outside of limit); however the associated result is below the reporting limit, other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.

Sample Deviation Report

Analytical Report Number : 23-33820

Project / Site name: Don Street

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
P1	None Supplied	W	2679476	c	pH at 20oC in water (automated)	L099-PL	c
P2	None Supplied	W	2679477	c	pH at 20oC in water (automated)	L099-PL	c
P3	None Supplied	W	2679478	c	pH at 20oC in water (automated)	L099-PL	c
P4	None Supplied	W	2679479	c	pH at 20oC in water (automated)	L099-PL	c
P5	None Supplied	W	2679480	c	pH at 20oC in water (automated)	L099-PL	c

UKAS TESTING
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Analytical Report Number : 23-36456

Project / Site name:	Don Street	**Samples received on:**	26/05/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	30/05/2023
Your order number:	005001	**Analysis completed by:**	06/06/2023
Report Issue Number:	1	**Report issued on:**	06/06/2023
Samples Analysed:	4 water samples		

Izabela Wójcik

Signed:

Izabela Wójcik
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Analytical Report Number: 23-36456
Project / Site name: Don Street

Your Order No: 005001

Lab Sample Number				2695384	2695385	2695386	2695387
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				25/05/2023	25/05/2023	25/05/2023	25/05/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
General Inorganics							
pH (L005B)	pH Units	N/A	ISO 17025	9.2	9.2	9.3	9
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	1.4	1.4	< 1.0	1
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	17.8	17.1	18.6	17.6
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	66	86	46	33
Total Phenols							
Total Phenols (monohydric)	µg/l	1	ISO 17025	1.3	1.2	< 1.0	1.7
Heavy Metals / Metalloids							
Calcium (dissolved)	mg/l	0.012	ISO 17025	160	160	150	160
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	11.4	11.6	11.5	12.2
Cadmium (dissolved)	µg/l	0.02	ISO 17025	0.04	0.07	0.03	0.03
Chromium (dissolved)	µg/l	0.2	ISO 17025	2.6	2.5	2.2	2.4
Copper (dissolved)	µg/l	0.5	ISO 17025	22	25	22	19
Lead (dissolved)	µg/l	0.2	ISO 17025	0.3	0.4	< 0.2	0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	1.6	2.7	4.9	1.2
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	5.6	5.7	5.3	5.5
Selenium (dissolved)	µg/l	0.6	ISO 17025	3.6	3.8	3.5	3.7
Zinc (dissolved)	µg/l	0.5	ISO 17025	2.1	1.8	1.7	1.3
Monoaromatics & Oxygenates#							
Benzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Petroleum Hydrocarbons							
TPH1 (C10 - C40) EH_1D_TOTAL_MS	µg/l	10	ISO 17025	45	40	35	20
TPH-CWG - Aliphatic## >C5 - C6 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic## >C6 - C8 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic## >C8 - C10 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) HS+EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10

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Analytical Report Number: 23-36456
Project / Site name: Don Street

Your Order No: 005001

Lab Sample Number				2695384	2695385	2695386	2695387
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				25/05/2023	25/05/2023	25/05/2023	25/05/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
TPH-CWG - Aromatic >C5 - C7 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	20	20	< 10	10
TPH-CWG - Aromatic >C16 - C21 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	10	10	15	10
TPH-CWG - Aromatic >C21 - C35 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	15	10	20	< 10
TPH-CWG - Aromatic (C5 - C35) $_{HS+EH\_1D\_AR\_MS}$	µg/l	10	NONE	45	40	35	20
VOCs#							
Chloromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trichloromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,2-dichloroethene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
p & m-Xylene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Styrene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Tribromomethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
o-Xylene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Isopropylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-36456
Project / Site name: Don Street

Your Order No: 005001

Lab Sample Number				2695384	2695385	2695386	2695387
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				25/05/2023	25/05/2023	25/05/2023	25/05/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
1,3,5-Trimethylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0

SVOCs

Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	0.32	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05

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Analytical Report Number: 23-36456
Project / Site name: Don Street

Your Order No: 005001

Lab Sample Number				2695384	2695385	2695386	2695387
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				25/05/2023	25/05/2023	25/05/2023	25/05/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	0.2	< 0.01	0.19	0.15
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	0.93	0.7	0.85	0.84
Pyrene	µg/l	0.01	ISO 17025	0.84	0.61	0.73	0.76
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	0.24	0.16	0.18	0.23
Chrysene	µg/l	0.01	ISO 17025	0.3	0.19	0.21	0.26
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	0.36	0.23	0.28	0.36
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	0.17	0.11	0.14	0.15
Benzo(a)pyrene	µg/l	0.01	ISO 17025	0.28	0.17	0.21	0.27
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	0.19	< 0.01	< 0.01	0.2
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	0.24	< 0.01	< 0.01	0.25

3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-36456
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions

Analytical Report Number : 23-36456
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
HS	Headspace Analysis				
MS	Mass spectrometry				
FID	Flame Ionisation Detector				
GC	Gas Chromatography				
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))				
CU	Clean-up - e.g. by Florisil®, silica gel				
1D	GC - Single coil/column gas chromatography				
2D	GC-GC - Double coil/column gas chromatography				
Total	Aliphatics & Aromatics				
AL	Aliphatics				
AR	Aromatics				
#1	EH_2D_Total but with humics mathematically subtracted				
#2	EH_2D_Total but with fatty acids mathematically subtracted				
_	Operator - understore to separate acronyms (exception for +)				
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total				

- Data reported unaccredited due to quality control parameter failure associated with this result; other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.
- Quality control parameter has a high recovery (outside of limit); however the associated result is below the reporting limit, other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.

Sample Deviation Report

Analytical Report Number : 23-36456

Project / Site name: Don Street

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
P1	None Supplied	W	2695384	c	Settleable Solids in water	L004-PL	c
P1	None Supplied	W	2695384	c	Suspended solids in water	L004-PL	c
P1	None Supplied	W	2695384	c	pH at 20oC in water (automated)	L099-PL	c
P2	None Supplied	W	2695385	c	Settleable Solids in water	L004-PL	c
P2	None Supplied	W	2695385	c	Suspended solids in water	L004-PL	c
P2	None Supplied	W	2695385	c	pH at 20oC in water (automated)	L099-PL	c
P3	None Supplied	W	2695386	c	Settleable Solids in water	L004-PL	c
P3	None Supplied	W	2695386	c	Suspended solids in water	L004-PL	c
P3	None Supplied	W	2695386	c	pH at 20oC in water (automated)	L099-PL	c
P4	None Supplied	W	2695387	c	Settleable Solids in water	L004-PL	c
P4	None Supplied	W	2695387	c	Suspended solids in water	L004-PL	c
P4	None Supplied	W	2695387	c	pH at 20oC in water (automated)	L099-PL	c

UKAS TESTING
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Analytical Report Number : 23-38629

Project / Site name:	Don Street	**Samples received on:**	09/06/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	09/06/2023
Your order number:	005132	**Analysis completed by:**	20/06/2023
Report Issue Number:	1	**Report issued on:**	20/06/2023
Samples Analysed:	5 water samples		

Signed:

Joanna Wawrzeczko
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-38629
Project / Site name: Don Street

Your Order No: 005132

Lab Sample Number				2709267	2709268	2709269	2709270	2709271
Sample Reference				P1	P2	P3	P4	P5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				08/06/2023	08/06/2023	08/06/2023	08/06/2023	08/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
General Inorganics								
pH (L005B)	pH Units	N/A	ISO 17025	8.1	7.9	7.9	7.9	7.7
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	< 1.0	2.3	< 1.0	< 1.0	< 1.0
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	2.73	3.02	2.7	3.02	2.53
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	< 2.0	< 2.0	2	2	< 2.0
Total Phenols								
Total Phenols (monohydric)	µg/l	1	ISO 17025	2.6	11	2.1	2.5	2.9
Heavy Metals / Metalloids								
Calcium (dissolved)	mg/l	0.012	ISO 17025	85	82	85	80	92
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	3.73	4.2	3.93	4.27	0.75
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.3	0.3	0.3	0.2	0.3
Copper (dissolved)	µg/l	0.5	ISO 17025	2.5	2.7	2.7	3.6	1.9
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	13	20	8.2	18	78
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	0.9	1.2	0.9	1	< 0.5
Selenium (dissolved)	µg/l	0.6	ISO 17025	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6
Zinc (dissolved)	µg/l	0.5	ISO 17025	3.9	3.7	7.8	2.8	6
Monoaromatics & Oxygenates								
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-38629
Project / Site name: Don Street

Your Order No: 005132

Lab Sample Number				2709267	2709268	2709269	2709270	2709271
Sample Reference				P1	P2	P3	P4	P5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				08/06/2023	08/06/2023	08/06/2023	08/06/2023	08/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Petroleum Hydrocarbons								
TPH1 (C10 - C40) EH_1D_TOTAL_MS	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C5 - C6 HS_1D_AL	µg/l	1	ISO 17025	< 1.0##	< 1.0##	< 1.0##	< 1.0##	< 1.0##
TPH-CWG - Aliphatic >C6 - C8 HS_1D_AL	µg/l	1	ISO 17025	< 1.0##	< 1.0##	< 1.0##	< 1.0##	< 1.0##
TPH-CWG - Aliphatic >C8 - C10 HS_1D_AL	µg/l	1	ISO 17025	< 1.0##	< 1.0##	< 1.0##	< 1.0##	< 1.0##
TPH-CWG - Aliphatic >C10 - C12 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) HS+EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C5 - C7 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35) HS+EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
VOCs								
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	ISO 17025	< 3.0##	< 3.0##	< 3.0##	< 3.0##	< 3.0##
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloromethane	µg/l	3	ISO 17025	< 3.0##	< 3.0##	< 3.0##	< 3.0##	< 3.0##
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0##	< 3.0##	< 3.0##	< 3.0##	< 3.0##
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-38629
Project / Site name: Don Street

Your Order No: 005132

Lab Sample Number				2709267	2709268	2709269	2709270	2709271
Sample Reference				P1	P2	P3	P4	P5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				08/06/2023	08/06/2023	08/06/2023	08/06/2023	08/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p & m-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Tribromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
o-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0##	< 3.0##	< 3.0##	< 3.0##	< 3.0##
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
SVOCs								
Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

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Analytical Report Number: 23-38629
Project / Site name: Don Street

Your Order No: 005132

Lab Sample Number				2709267	2709268	2709269	2709270	2709271
Sample Reference				P1	P2	P3	P4	P5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				08/06/2023	08/06/2023	08/06/2023	08/06/2023	08/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025

Analytical Report Number : 23-38629
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

- Quality control parameter has a high recovery (outside of limit); however the associated result is below the reporting limit, other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.

Sample Deviation Report

Analytical Report Number : 23-38629

Project / Site name: Don Street

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
P1	None Supplied	W	2709267	c	pH at 20oC in water (automated)	L099-PL	c
P2	None Supplied	W	2709268	c	pH at 20oC in water (automated)	L099-PL	c
P3	None Supplied	W	2709269	c	pH at 20oC in water (automated)	L099-PL	c
P4	None Supplied	W	2709270	c	pH at 20oC in water (automated)	L099-PL	c
P5	None Supplied	W	2709271	c	pH at 20oC in water (automated)	L099-PL	c

UKAS TESTING
4041

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Analytical Report Number : 23-41138

Project / Site name:	Don Street	**Samples received on:**	23/06/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	23/06/2023
Your order number:	005297	**Analysis completed by:**	28/06/2023
Report Issue Number:	1	**Report issued on:**	28/06/2023
Samples Analysed:	5 water samples		

Signed:

Joanna Wawrzeczko
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-41138
Project / Site name: Don Street

Your Order No: 005297

Lab Sample Number				2725136	2725137	2725138	2725139	2725140
Sample Reference				P1	P2	P3	P4	P5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				21/06/2023	21/06/2023	21/06/2023	21/06/2023	21/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
General Inorganics								
pH (L005B)	pH Units	N/A	ISO 17025	8	7.7	7.7	7.7	7.6
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	4.11	3.8	3.66	3.65	3
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	25	21	6	12	12
Total Phenols								
Total Phenols (monohydric)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	1	< 1.0
Heavy Metals / Metalloids								
Calcium (dissolved)	mg/l	0.012	ISO 17025	100	110	91	97	110
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	3.68	3.15	3.33	3.63	1.02
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.4	5.5	0.6	0.2	1
Copper (dissolved)	µg/l	0.5	ISO 17025	3.7	5.2	3.8	3.9	6.7
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	2.6	2.2	8.4	8.2	470
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	1.3	3.4	1.5	2	1.4
Selenium (dissolved)	µg/l	0.6	ISO 17025	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6
Zinc (dissolved)	µg/l	0.5	ISO 17025	5	12	8.2	7.2	7.2
Monoaromatics & Oxygenates								
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-41138
Project / Site name: Don Street

Your Order No: 005297

Lab Sample Number				2725136	2725137	2725138	2725139	2725140
Sample Reference				P1	P2	P3	P4	P5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				21/06/2023	21/06/2023	21/06/2023	21/06/2023	21/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Petroleum Hydrocarbons								
TPH1 (C10 - C40) EH_1D_TOTAL_MS	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C5 - C6## HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8## HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10^ HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) HS+EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C5 - C7 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35) HS+EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
VOCs								
Chloromethane^	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloromethane##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-41138
Project / Site name: Don Street

Your Order No: 005297

Lab Sample Number				2725136	2725137	2725138	2725139	2725140
Sample Reference				P1	P2	P3	P4	P5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				21/06/2023	21/06/2023	21/06/2023	21/06/2023	21/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
1,1,1,2-Tetrachloroethane##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p & m-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Tribromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
o-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
SVOCs								
Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

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Analytical Report Number: 23-41138
Project / Site name: Don Street

Your Order No: 005297

Lab Sample Number				2725136	2725137	2725138	2725139	2725140
Sample Reference				P1	P2	P3	P4	P5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				21/06/2023	21/06/2023	21/06/2023	21/06/2023	21/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-41138
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025

Analytical Report Number : 23-41138
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

^ Data reported unaccredited due to quality control parameter failure associated with this result; The result should be considered as being deviating and may be compromised.
- Quality control parameter has a high recovery (outside of limit); however the associated result is below the reporting limit, other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.

Sample Deviation Report

Analytical Report Number : 23-41138

Project / Site name: Don Street

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
P1	None Supplied	W	2725136	c	pH at 20oC in water (automated)	L099-PL	c
P2	None Supplied	W	2725137	c	pH at 20oC in water (automated)	L099-PL	c
P3	None Supplied	W	2725138	c	pH at 20oC in water (automated)	L099-PL	c
P4	None Supplied	W	2725139	c	pH at 20oC in water (automated)	L099-PL	c
P5	None Supplied	W	2725140	c	pH at 20oC in water (automated)	L099-PL	c

UKAS TESTING
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Analytical Report Number : 23-44133

Project / Site name:	Don Street	**Samples received on:**	10/07/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	10/07/2023
Your order number:	005457	**Analysis completed by:**	14/07/2023
Report Issue Number:	1	**Report issued on:**	17/07/2023
Samples Analysed:	4 water samples		

Signed:

Anna Goc
PL Head of Reporting Team
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Analytical Report Number: 23-44133
Project / Site name: Don Street

Your Order No: 005457

Lab Sample Number				2742876	2742877	2742878	2742879
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				07/07/2023	07/07/2023	07/07/2023	07/07/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
General Inorganics							
pH (L099)	pH Units	N/A	ISO 17025	8	8	8	7.9
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	2.58	2.71	2.7	2.63
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	3	3	13	90
Total Phenols							
Total Phenols (monohydric)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
Heavy Metals / Metalloids							
Calcium (dissolved)	mg/l	0.012	ISO 17025	89	100	89	90
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	4.31	4.2	4.11	3.59
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	< 0.02	< 0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	19	0.5	0.4	0.3
Copper (dissolved)	µg/l	0.5	ISO 17025	7	7.1	3.2	5.2
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	13	4	1.6	3.7
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	1	1.1	1.1	0.9
Selenium (dissolved)	µg/l	0.6	ISO 17025	< 0.6	< 0.6	< 0.6	< 0.6
Zinc (dissolved)	µg/l	0.5	ISO 17025	3.7	4	4.4	6.1
Monoaromatics & Oxygenates							
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene ##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-44133
Project / Site name: Don Street

Your Order No: 005457

Lab Sample Number				2742876	2742877	2742878	2742879
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				07/07/2023	07/07/2023	07/07/2023	07/07/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Petroleum Hydrocarbons							
TPH1 (C10 - C40) EH_1D_TOTAL_MS	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C5 - C6 ## HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8 ## HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10 ## HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) HS+EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C5 - C7 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35) HS+EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
VOCs							
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane ##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene ##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane ##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane #	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Chloroform ##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane ##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Carbontetrachloride ##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane ##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane ##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene ##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloroethane ##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-44133
Project / Site name: Don Street

Your Order No: 005457

Lab Sample Number				2742876	2742877	2742878	2742879
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				07/07/2023	07/07/2023	07/07/2023	07/07/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene #	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

SVOCs

Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05

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Analytical Report Number: 23-44133
Project / Site name: Don Street

Your Order No: 005457

Lab Sample Number				2742876	2742877	2742878	2742879
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				07/07/2023	07/07/2023	07/07/2023	07/07/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01

3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-44133
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025

Analytical Report Number : 23-44133
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

- Data reported unaccredited due to quality control parameter failure associated with this result; other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.
- Quality control parameter has a high recovery (outside of limit); however the associated result is below the reporting limit, other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.

Sample Deviation Report

Analytical Report Number : 23-44133

Project / Site name: Don Street

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
P1	None Supplied	W	2742876	c	pH at 20oC in water (automated)	L099-PL	c
P2	None Supplied	W	2742877	c	pH at 20oC in water (automated)	L099-PL	c
P3	None Supplied	W	2742878	c	pH at 20oC in water (automated)	L099-PL	c
P4	None Supplied	W	2742879	c	pH at 20oC in water (automated)	L099-PL	c

UKAS TESTING
4041

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Analytical Report Number : 23-47847

Project / Site name:	Don Street	**Samples received on:**	27/07/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	31/07/2023
Your order number:	005643	**Analysis completed by:**	04/08/2023
Report Issue Number:	1	**Report issued on:**	04/08/2023
Samples Analysed:	4 water samples		

Signed:

Dominika Warjan
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Analytical Report Number: 23-47847
Project / Site name: Don Street

Your Order No: 005643

Lab Sample Number				2764533	2764534	2764535	2764536
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				26/07/2023	26/07/2023	26/07/2023	26/07/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
General Inorganics							
pH (L099)	pH Units	N/A	ISO 17025	8.2	8.2	8.2	8.2
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	4.7	6.1	5.8	5.1
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	5.63	5.5	5.48	5.99
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	6	5	7	4
Total Phenols							
Total Phenols (monohydric)	µg/l	1	ISO 17025	1	1.4	1.2	1.3
Heavy Metals / Metalloids							
Calcium (dissolved)	mg/l	0.012	ISO 17025	93	90	84	89
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	3.87	3.9	4.03	1.4
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	< 0.02	< 0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.3	0.4	0.5	< 0.2
Copper (dissolved)	µg/l	0.5	ISO 17025	8.1	8.1	5.6	3
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	0.5	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	5.6	4.8	4.7	0.89
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	1.9	1.6	1.6	0.6
Selenium (dissolved)	µg/l	0.6	ISO 17025	0.7	0.7	0.8	0.6
Zinc (dissolved)	µg/l	0.5	ISO 17025	8.4	6.6	7.1	2.2
Monoaromatics & Oxygenates							
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Petroleum Hydrocarbons							
TPH1 (C10 - C40) EH_1D_TOTAL_MS	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C5 - C6 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10## HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) HS+EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10

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Analytical Report Number: 23-47847
Project / Site name: Don Street

Your Order No: 005643

Lab Sample Number				2764533	2764534	2764535	2764536
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				26/07/2023	26/07/2023	26/07/2023	26/07/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
TPH-CWG - Aromatic >C5 - C7 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35) HS+EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
VOCs							
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chloroform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Carbontetrachloride	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-47847
Project / Site name: Don Street

Your Order No: 005643

Lab Sample Number				2764533	2764534	2764535	2764536
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				26/07/2023	26/07/2023	26/07/2023	26/07/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

SVOCs

Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01

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Analytical Report Number: 23-47847
Project / Site name: Don Street

Your Order No: 005643

Lab Sample Number				2764533	2764534	2764535	2764536
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				26/07/2023	26/07/2023	26/07/2023	26/07/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01

3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-47847
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025

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Analytical Report Number : 23-47847
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

- Quality control parameter has a high recovery (outside of limit); however the associated result is below the reporting limit, other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.

Sample Deviation Report

Analytical Report Number : 23-47847
Project / Site name: Don Street

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
P1	None Supplied	W	2764533	c	pH at 20oC in water (automated)	L099-PL	c
P2	None Supplied	W	2764534	c	pH at 20oC in water (automated)	L099-PL	c
P3	None Supplied	W	2764535	c	pH at 20oC in water (automated)	L099-PL	c
P4	None Supplied	W	2764536	c	pH at 20oC in water (automated)	L099-PL	c

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Analytical Report Number : 23-50844

Project / Site name:	Don Street	**Samples received on:**	14/08/2023
Your job number:	14 554	**Samples instructed on/ Analysis started on:**	14/08/2023
Your order number:	005797	**Analysis completed by:**	18/08/2023
Report Issue Number:	1	**Report issued on:**	18/08/2023
Samples Analysed:	4 water samples		

Signed:

Dominika Warjan
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-50844
Project / Site name: Don Street

Your Order No: 005797

Lab Sample Number				2780646	2780647	2780648	2780649
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				11/08/2023	11/08/2023	11/08/2023	11/08/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
General Inorganics							
pH (L099)	pH Units	N/A	ISO 17025	8.2	8.1	8.1	8.1
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	3.2	< 1.0	2.3	1.6
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	4.3	4.66	4.27	4.61
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	3	4	6	3
Total Phenols							
Total Phenols (monohydric)	µg/l	1	ISO 17025	< 1.0	< 1.0	1.4	< 1.0
Heavy Metals / Metalloids							
Calcium (dissolved)	mg/l	0.012	ISO 17025	78	78	84	85
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	U/S*	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	3.56	3.58	3.72	4
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	< 0.02	< 0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.4	0.5	0.5	0.5
Copper (dissolved)	µg/l	0.5	ISO 17025	3.2	3.2	4.2	3.2
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	1.1	1.5	1.2	1.5
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	1	1	1	1.1
Selenium (dissolved)	µg/l	0.6	ISO 17025	< 0.6	< 0.6	< 0.6	0.7
Zinc (dissolved)	µg/l	0.5	ISO 17025	2.5	3	3.8	3.2
Monoaromatics & Oxygenates							
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Petroleum Hydrocarbons							
TPH1 (C10 - C40) $_{EH\_1D\_TOTAL\_MS}$	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C5 - C6 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8## $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10## $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) $_{HS+EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10

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Analytical Report Number: 23-50844
Project / Site name: Don Street

Your Order No: 005797

Lab Sample Number				2780646	2780647	2780648	2780649
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				11/08/2023	11/08/2023	11/08/2023	11/08/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
TPH-CWG - Aromatic >C5 - C7 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35) $_{HS+EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10

VOCs

Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chloroform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Carbontetrachloride##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-50844
Project / Site name: Don Street

Your Order No: 005797

Lab Sample Number				2780646	2780647	2780648	2780649
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				11/08/2023	11/08/2023	11/08/2023	11/08/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

SVOCs

Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01

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4041

Analytical Report Number: 23-50844
Project / Site name: Don Street

Your Order No: 005797

Lab Sample Number				2780646	2780647	2780648	2780649
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				11/08/2023	11/08/2023	11/08/2023	11/08/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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4041

Analytical Report Number : 23-50844
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025

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Analytical Report Number : 23-50844
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

*U/S - Unsuitable for analysis due to high colour intensity.
- Quality control parameter has a high recovery (outside of limit); however the associated result is below the reporting limit, other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.

Sample Deviation Report

Analytical Report Number : 23-50844
Project / Site name: Don Street

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
P1	None Supplied	W	2780646	c	pH at 20oC in water (automated)	L099-PL	c
P2	None Supplied	W	2780647	c	pH at 20oC in water (automated)	L099-PL	c
P3	None Supplied	W	2780648	c	pH at 20oC in water (automated)	L099-PL	c
P4	None Supplied	W	2780649	c	pH at 20oC in water (automated)	L099-PL	c

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Analytical Report Number : 23-53489

Project / Site name:	Don Street	**Samples received on:**	29/08/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	29/08/2023
Your order number:	005941	**Analysis completed by:**	04/09/2023
Report Issue Number:	1	**Report issued on:**	04/09/2023
Samples Analysed:	4 water samples		

Signed:

Anna Goc
PL Head of Reporting Team
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-53489
Project / Site name: Don Street

Your Order No: 005941

Lab Sample Number				2794537	2794538	2794539	2794540
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				25/08/2023	25/08/2023	25/08/2023	25/08/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
General Inorganics							
pH (L099)	pH Units	N/A	ISO 17025	8	7.9	7.9	7.9
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	2.5	2.5	2	2.8
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	3.28	4	3.45	3.49
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	18	9	5	9
Total Phenols							
Total Phenols (monohydric)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	1
Heavy Metals / Metalloids							
Calcium (dissolved)	mg/l	0.012	ISO 17025	89	91	100	97
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	3.21	3.12	3.16	3.21
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	< 0.02	< 0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.3	0.2	0.3	0.3
Copper (dissolved)	µg/l	0.5	ISO 17025	3.8	3.3	4.1	3.2
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	1.5	2.2	1.5	1.7
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	0.9	1.1	1.2	1
Selenium (dissolved)	µg/l	0.6	ISO 17025	0.9	0.9	0.6	0.6
Zinc (dissolved)	µg/l	0.5	ISO 17025	4	4.3	4.7	7.4
Monoaromatics & Oxygenates							
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-53489
Project / Site name: Don Street

Your Order No: 005941

Lab Sample Number				2794537	2794538	2794539	2794540
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				25/08/2023	25/08/2023	25/08/2023	25/08/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Petroleum Hydrocarbons							
TPH1 (C10 - C40) EH_1D_TOTAL_MS	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C5 - C6 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) HS+EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C5 - C7 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35) HS+EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10

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Project / Site name: Don Street

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Lab Sample Number				2794537	2794538	2794539	2794540
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				25/08/2023	25/08/2023	25/08/2023	25/08/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
VOCs							
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene ##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane ##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chloroform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Carbontetrachloride ##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-53489
Project / Site name: Don Street

Your Order No: 005941

Lab Sample Number				2794537	2794538	2794539	2794540
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				25/08/2023	25/08/2023	25/08/2023	25/08/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

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Lab Sample Number				2794537	2794538	2794539	2794540
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				25/08/2023	25/08/2023	25/08/2023	25/08/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
SVOCs							
Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01

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Project / Site name: Don Street

Your Order No: 005941

Lab Sample Number				2794537	2794538	2794539	2794540
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				25/08/2023	25/08/2023	25/08/2023	25/08/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Analytical Report Number : 23-53489
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

- Quality control parameter has a high recovery (outside of limit); however the associated result is below the reporting limit, other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.

Sample Deviation Report

Analytical Report Number : 23-53489

Project / Site name: Don Street

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
P1	None Supplied	W	2794537	c	pH at 20oC in water (automated)	L099-PL	c
P2	None Supplied	W	2794538	c	pH at 20oC in water (automated)	L099-PL	c
P3	None Supplied	W	2794539	c	pH at 20oC in water (automated)	L099-PL	c
P4	None Supplied	W	2794540	c	pH at 20oC in water (automated)	L099-PL	c

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Analytical Report Number : 23-55330

Project / Site name:	Don Street	**Samples received on:**	07/09/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	07/09/2023
Your order number:	006051	**Analysis completed by:**	13/09/2023
Report Issue Number:	1	**Report issued on:**	13/09/2023
Samples Analysed:	4 water samples		

Signed:

Adam Fenwick
Technical Reviewer
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Analytical Report Number: 23-55330
Project / Site name: Don Street

Your Order No: 006051

Lab Sample Number				2804821	2804822	2804823	2804824
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				06/09/2023	06/09/2023	06/09/2023	06/09/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
General Inorganics							
pH (L099)	pH Units	N/A	ISO 17025	8.1	8	8	8.1
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	3.1	3.1	2.9	2.8
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	3.41	3.07	3.38	3
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	2	< 2.0	< 2.0	< 2.0
Total Phenols							
Total Phenols (monohydric)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
Heavy Metals / Metalloids							
Calcium (dissolved)	mg/l	0.012	ISO 17025	85	99	87	82
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	2.44	3.62	3.73	3.92
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	< 0.02	< 0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	1	1	1.2	0.7
Copper (dissolved)	µg/l	0.5	ISO 17025	2.1	3.6	3.5	3
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	0.66	2	1.2	1.3
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	0.8	1	1.1	1.1
Selenium (dissolved)	µg/l	0.6	ISO 17025	< 0.6	< 0.6	< 0.6	< 0.6
Zinc (dissolved)	µg/l	0.5	ISO 17025	1.5	2.2	2	3.5
Monoaromatics & Oxygenates							
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Petroleum Hydrocarbons							
TPH1 (C10 - C40) $_{EH\_1D\_TOTAL\_MS}$	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C5 - C6 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0##	< 1.0##	< 1.0##	< 1.0##
TPH-CWG - Aliphatic >C6 - C8 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0##	< 1.0##	< 1.0##	< 1.0##
TPH-CWG - Aliphatic >C8 - C10 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0##	< 1.0##	< 1.0##	< 1.0##
TPH-CWG - Aliphatic >C10 - C12 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) $_{HS+EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C5 - C7 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10

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Analytical Report Number: 23-55330
Project / Site name: Don Street

Your Order No: 006051

Lab Sample Number				2804821	2804822	2804823	2804824
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				06/09/2023	06/09/2023	06/09/2023	06/09/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
TPH-CWG - Aromatic (C5 - C35) HS+EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
VOCs							
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chloroform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Carbontetrachloride	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-55330
Project / Site name: Don Street

Your Order No: 006051

Lab Sample Number				2804821	2804822	2804823	2804824
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				06/09/2023	06/09/2023	06/09/2023	06/09/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

SVOCs

Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05

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Analytical Report Number: 23-55330
Project / Site name: Don Street

Your Order No: 006051

Lab Sample Number				2804821	2804822	2804823	2804824
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				06/09/2023	06/09/2023	06/09/2023	06/09/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-55330
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

4041

Analytical Report Number : 23-55330
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-58057

Project / Site name:	Don Street	**Samples received on:**	22/09/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	22/09/2023
Your order number:	006264	**Analysis completed by:**	27/09/2023
Report Issue Number:	1	**Report issued on:**	27/09/2023
Samples Analysed:	4 water samples		

Signed:

Dominika Warjan
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-58057
Project / Site name: Don Street

Your Order No: 006264

Lab Sample Number				2820747	2820748	2820749	2820750
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				20/09/2023	20/09/2023	20/09/2023	20/09/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
General Inorganics							
pH (L099)	pH Units	N/A	ISO 17025	7.8	7.8	7.7	7.7
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	4.1	4.1	4.8	4.6
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	9.02	9.08	8.54	8.61
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	20	13	28	37
Total Phenols							
Total Phenols (monohydric)	µg/l	1	ISO 17025	1	1.1	< 1.0	1
Heavy Metals / Metalloids							
Calcium (dissolved)	mg/l	0.012	ISO 17025	43	48	65	50
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	2.4	2.44	2.4	8.18
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	0.02	< 0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.9	0.9	0.9	0.6
Copper (dissolved)	µg/l	0.5	ISO 17025	9.9	7.3	16	14
Lead (dissolved)	µg/l	0.2	ISO 17025	0.4	0.5	0.4	3.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	2	3	2.9	35
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	1.8	2.1	1.7	2
Selenium (dissolved)	µg/l	0.6	ISO 17025	< 0.6	< 0.6	< 0.6	< 0.6
Zinc (dissolved)	µg/l	0.5	ISO 17025	12	5.2	9.8	8.2
Monoaromatics & Oxygenates							
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Petroleum Hydrocarbons							
TPH1 (C10 - C40) $_{EH\_1D\_TOTAL\_MS}$	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C5 - C6 $_{HS\_1D\_AL}$	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8 $_{HS\_1D\_AL}$	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10 $_{HS\_1D\_AL}$	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) $_{HS+EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10

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Analytical Report Number: 23-58057
Project / Site name: Don Street

Your Order No: 006264

Lab Sample Number				2820747	2820748	2820749	2820750
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				20/09/2023	20/09/2023	20/09/2023	20/09/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
TPH-CWG - Aromatic >C5 - C7 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35) $_{HS+EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
VOCs							
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chloroform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Carbontetrachloride	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene#	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-58057
Project / Site name: Don Street

Your Order No: 006264

Lab Sample Number				2820747	2820748	2820749	2820750
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				20/09/2023	20/09/2023	20/09/2023	20/09/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

SVOCs

Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01

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Analytical Report Number: 23-58057
Project / Site name: Don Street

Your Order No: 006264

Lab Sample Number				2820747	2820748	2820749	2820750
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				20/09/2023	20/09/2023	20/09/2023	20/09/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01

3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-58057
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260. Refer to CoA for analyte specific accreditation	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025

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Analytical Report Number : 23-58057
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

- Data reported unaccredited due to quality control parameter failure associated with this result; other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.

UKAS TESTING
4041

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Analytical Report Number : 23-60519

Project / Site name:	Don Street	**Samples received on:**	04/10/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	04/10/2023
Your order number:	006370	**Analysis completed by:**	11/10/2023
Report Issue Number:	1	**Report issued on:**	11/10/2023
Samples Analysed:	4 water samples		

Signed:

Anna Goc
PL Head of Reporting Team
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-60519
Project / Site name: Don Street

Your Order No: 006370

Lab Sample Number				2834472	2834473	2834474	2834475
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				03/10/2023	03/10/2023	03/10/2023	03/10/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
General Inorganics							
pH (L099)	pH Units	N/A	ISO 17025	7.9	7.9	7.7	7.6
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	5.1	2.5	3.4	2.2
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	7.36	7.99	8.17	7.07
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	34	44	51	44
Total Phenols							
Total Phenols (monohydric)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
Heavy Metals / Metalloids							
Calcium (dissolved)	mg/l	0.012	ISO 17025	59	57	53	45
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	2.68	1.84	1.88	1.52
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	< 0.02	< 0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.4	0.7	0.7	0.7
Copper (dissolved)	µg/l	0.5	ISO 17025	5.2	5.2	7.3	6.1
Lead (dissolved)	µg/l	0.2	ISO 17025	0.3	< 0.2	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	5.1	1.3	1.5	1.4
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	1.4	1.4	2.1	1.2
Selenium (dissolved)	µg/l	0.6	ISO 17025	< 0.6	< 0.6	< 0.6	< 0.6
Zinc (dissolved)	µg/l	0.5	ISO 17025	6.3	11	8.7	11
Monoaromatics & Oxygenates							
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-60519
Project / Site name: Don Street

Your Order No: 006370

Lab Sample Number				2834472	2834473	2834474	2834475
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				03/10/2023	03/10/2023	03/10/2023	03/10/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Petroleum Hydrocarbons							
TPH1 (C10 - C40) EH_1D_TOTAL_MS	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C5 - C6 HS_1D_AL	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8 HS_1D_AL	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10 HS_1D_AL	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) HS+EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C5 - C7 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35) HS+EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
VOCs							
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane ##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chloroform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Carbontetrachloride	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-60519
Project / Site name: Don Street

Your Order No: 006370

Lab Sample Number				2834472	2834473	2834474	2834475
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				03/10/2023	03/10/2023	03/10/2023	03/10/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

SVOCs

Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05

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Analytical Report Number: 23-60519
Project / Site name: Don Street

Your Order No: 006370

Lab Sample Number				2834472	2834473	2834474	2834475
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				03/10/2023	03/10/2023	03/10/2023	03/10/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01

3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-60519
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260. Refer to CoA for analyte specific accreditation	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025

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Analytical Report Number : 23-60519
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

- Quality control parameter has a high recovery (outside of limit); however the associated result is below the reporting limit, other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.

4041

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Analytical Report Number : 23-65120

Project / Site name:	Don Street	**Samples received on:**	26/10/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	26/10/2023
Your order number:	006588	**Analysis completed by:**	01/11/2023
Report Issue Number:	1	**Report issued on:**	01/11/2023
Samples Analysed:	4 water samples		

Signed:

Joanna Wawrzeczko
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Analytical Report Number: 23-65120
Project / Site name: Don Street

Your Order No: 006588

Lab Sample Number				2859056	2859057	2859058	2859059
Sample Reference				P1 (Upstream)	P2 (Mid 1)	P3 (Mid 2)	P4 (Downstream)
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				25/10/2023	25/10/2023	25/10/2023	25/10/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
General Inorganics							
pH (L099)	pH Units	N/A	ISO 17025	8	8	8	8.1
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	3.3	3.4	3.5	3.3
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	6.3	9.92	6.06	10.2
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	4	< 2.0	< 2.0	< 2.0
Total Phenols							
Total Phenols (monohydric)	µg/l	1	ISO 17025	1	1.2	1.1	1
Heavy Metals / Metalloids							
Calcium (dissolved)	mg/l	0.012	ISO 17025	92	84	83	70
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	3.29	3.29	3.3	3.24
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	< 0.02	< 0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.4	0.4	0.4	0.4
Copper (dissolved)	µg/l	0.5	ISO 17025	4.6	3.9	5	5.8
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	1.9	8.6	5.8	13
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	1.7	1.7	1.7	1.7
Selenium (dissolved)	µg/l	0.6	ISO 17025	< 0.6	0.7	< 0.6	< 0.6
Zinc (dissolved)	µg/l	0.5	ISO 17025	5.4	5.1	6.1	6.2
Monoaromatics & Oxygenates							
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

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4041

Analytical Report Number: 23-65120
Project / Site name: Don Street

Your Order No: 006588

Lab Sample Number				2859056	2859057	2859058	2859059
Sample Reference				P1 (Upstream)	P2 (Mid 1)	P3 (Mid 2)	P4 (Downstream)
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				25/10/2023	25/10/2023	25/10/2023	25/10/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Petroleum Hydrocarbons							
TPH1 (C10 - C40) EH_1D_TOTAL_MS	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C5 - C6 HS_1D_AL	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8 HS_1D_AL	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10 HS_1D_AL	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) HS+EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C5 - C7 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35) HS+EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
VOCs							
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chloroform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Carbontetrachloride	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-65120
Project / Site name: Don Street

Your Order No: 006588

Lab Sample Number				2859056	2859057	2859058	2859059
Sample Reference				P1 (Upstream)	P2 (Mid 1)	P3 (Mid 2)	P4 (Downstream)
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				25/10/2023	25/10/2023	25/10/2023	25/10/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

SVOCs

Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05

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Analytical Report Number: 23-65120
Project / Site name: Don Street

Your Order No: 006588

Lab Sample Number				2859056	2859057	2859058	2859059
Sample Reference				P1 (Upstream)	P2 (Mid 1)	P3 (Mid 2)	P4 (Downstream)
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				25/10/2023	25/10/2023	25/10/2023	25/10/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-65120
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260. Refer to CoA for analyte specific accreditation	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025

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Analytical Report Number : 23-65120
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-67947

Project / Site name:	Don Street	**Samples received on:**	09/11/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	09/11/2023
Your order number:	006719	**Analysis completed by:**	15/11/2023
Report Issue Number:	1	**Report issued on:**	15/11/2023
Samples Analysed:	4 water samples		

Signed:

Joanna Szwagrzak
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-67947
Project / Site name: Don Street

Your Order No: 006719

Lab Sample Number				2873524	2873525	2873526	2873527
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				07/11/2023	07/11/2023	07/11/2023	07/11/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
General Inorganics							
pH (L099)	pH Units	N/A	ISO 17025	8	8	7.9	7.9
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	5.4	4.7	5.3	4.3
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	9.16	12.9	9.31	12.6
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	8	8	6	7
Total Phenols							
Total Phenols (monohydric)	µg/l	1	ISO 17025	< 1.0	1	< 1.0	< 1.0
Heavy Metals / Metalloids							
Calcium (dissolved)	mg/l	0.012	ISO 17025	71	59	64	61
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	2.4	2.5	2.37	2.35
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	0.03	0.04	0.05
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.5	0.6	0.6	0.5
Copper (dissolved)	µg/l	0.5	ISO 17025	6.8	6.7	6.1	5.7
Lead (dissolved)	µg/l	0.2	ISO 17025	0.3	0.4	0.3	0.4
Manganese (dissolved)	µg/l	0.05	ISO 17025	2.1	2	1.2	1.5
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	1.9	2	1.9	1.9
Selenium (dissolved)	µg/l	0.6	ISO 17025	< 0.6	0.6	< 0.6	< 0.6
Zinc (dissolved)	µg/l	0.5	ISO 17025	8.7	18	17	21
Monoaromatics & Oxygenates							
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-67947
Project / Site name: Don Street

Your Order No: 006719

Lab Sample Number				2873524	2873525	2873526	2873527
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				07/11/2023	07/11/2023	07/11/2023	07/11/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Petroleum Hydrocarbons							
TPH1 (C10 - C40) EH_1D_TOTAL_MS	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C5 - C6 HS_1D_AL	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8 HS_1D_AL	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10 HS_1D_AL	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) HS+EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C5 - C7 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35) HS+EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
VOCs							
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane#	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Chloroform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Carbontetrachloride	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-67947
Project / Site name: Don Street

Your Order No: 006719

Lab Sample Number				2873524	2873525	2873526	2873527
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				07/11/2023	07/11/2023	07/11/2023	07/11/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

SVOCs

Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05

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Analytical Report Number: 23-67947
Project / Site name: Don Street

Your Order No: 006719

Lab Sample Number				2873524	2873525	2873526	2873527
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				07/11/2023	07/11/2023	07/11/2023	07/11/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01

3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-67947
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260. Refer to CoA for analyte specific accreditation	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025

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Analytical Report Number : 23-67947
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

- Data reported unaccredited due to quality control parameter failure associated with this result; other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.

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Analytical Report Number : 23-71240

Project / Site name:	Don Street	**Samples received on:**	24/11/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	24/11/2023
Your order number:	006837	**Analysis completed by:**	01/12/2023
Report Issue Number:	1	**Report issued on:**	01/12/2023
Samples Analysed:	4 water samples		

Signed:

Joanna Wawrzeczko
Senior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-71240
Project / Site name: Don Street

Your Order No: 006837

Lab Sample Number				2890695	2890696	2890697	2890698
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				23/11/2023	23/11/2023	23/11/2023	23/11/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
General Inorganics							
pH (L099)	pH Units	N/A	ISO 17025	7.8	7.9	7.9	7.9
Total Cyanide (Low Level 1 µg/l)	µg/l	1	NONE	4.7	4.7	5.4	4.5
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	5.82	9.52	5.65	9.08
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	15	11	12	12
Total Phenols							
Total Phenols (monohydric)	µg/l	1	ISO 17025	1.2	< 1.0	< 1.0	< 1.0
Heavy Metals / Metalloids							
Calcium (dissolved)	mg/l	0.012	ISO 17025	62	67	71	64
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	3.34	3.52	3.32	3.67
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	< 0.02	< 0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.9	0.5	0.5	0.9
Copper (dissolved)	µg/l	0.5	ISO 17025	4.4	4.4	5.1	4.7
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	21	31	22	9.8
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	1.8	1.7	2	1.9
Selenium (dissolved)	µg/l	0.6	ISO 17025	0.7	< 0.6	< 0.6	< 0.6
Zinc (dissolved)	µg/l	0.5	ISO 17025	11	8	10	9.7
Monoaromatics & Oxygenates							
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-71240
Project / Site name: Don Street

Your Order No: 006837

Lab Sample Number				2890695	2890696	2890697	2890698
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				23/11/2023	23/11/2023	23/11/2023	23/11/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Petroleum Hydrocarbons							
TPH1 (C10 - C40) EH_1D_TOTAL_MS	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C5 - C6 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) HS+EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C5 - C7 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35) HS+EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
VOCs							
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chloroform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Carbontetrachloride	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-71240
Project / Site name: Don Street

Your Order No: 006837

Lab Sample Number				2890695	2890696	2890697	2890698
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				23/11/2023	23/11/2023	23/11/2023	23/11/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

SVOCs

Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05

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Analytical Report Number: 23-71240
Project / Site name: Don Street

Your Order No: 006837

Lab Sample Number				2890695	2890696	2890697	2890698
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				23/11/2023	23/11/2023	23/11/2023	23/11/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01

3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-71240
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260. Refer to CoA for analyte specific accreditation	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	NONE
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

4041

Analytical Report Number : 23-71240
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Acronym	**Descriptions**				
HS	Headspace Analysis				
MS	Mass spectrometry				
FID	Flame Ionisation Detector				
GC	Gas Chromatography				
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))				
CU	Clean-up - e.g. by Florisil®, silica gel				
1D	GC - Single coil/column gas chromatography				
2D	GC-GC - Double coil/column gas chromatography				
Total	Aliphatics & Aromatics				
AL	Aliphatics				
AR	Aromatics				
#1	EH_2D_Total but with humics mathematically subtracted				
#2	EH_2D_Total but with fatty acids mathematically subtracted				
_	Operator - understore to separate acronyms (exception for +)				
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total				

Sample Deviation Report

Analytical Report Number : 23-71240
Project / Site name: Don Street

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
P1	None Supplied	W	2890695	c	pH at 20oC in water (automated)	L099-PL	c
P2	None Supplied	W	2890696	c	pH at 20oC in water (automated)	L099-PL	c
P3	None Supplied	W	2890697	c	pH at 20oC in water (automated)	L099-PL	c
P4	None Supplied	W	2890698	c	pH at 20oC in water (automated)	L099-PL	c

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Analytical Report Number : 23-73916

Project / Site name:	Don Street	**Samples received on:**	07/12/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	11/12/2023
Your order number:	006953	**Analysis completed by:**	21/12/2023
Report Issue Number:	1	**Report issued on:**	21/12/2023
Samples Analysed:	4 water samples		

Izabela Wójcik

Signed:

Izabela Wójcik
Senior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Analytical Report Number: 23-73916
Project / Site name: Don Street

Your Order No: 006953

Lab Sample Number				2905228	2905229	2905230	2905231
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				07/12/2023	07/12/2023	07/12/2023	07/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
General Inorganics							
pH (L099)	pH Units	N/A	ISO 17025	7.8	7.8	7.8	7.7
Total Cyanide (Low Level 1 µg/l)	µg/l	1	NONE	3.5	4	4.2	3.6
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	9.46	5.48	8.36	5.24
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	640	260	390	360
Total Phenols							
Total Phenols (monohydric)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
Heavy Metals / Metalloids							
Calcium (dissolved)	mg/l	0.012	ISO 17025	62	66	49	83
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	2.36	2.83	2.83	2.4
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	0.02	0.03	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	1.1	0.8	1	0.8
Copper (dissolved)	µg/l	0.5	ISO 17025	4.8	4.8	3.9	5.3
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	40	59	100	41
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	1.8	1.7	2.1	33
Selenium (dissolved)	µg/l	0.6	ISO 17025	0.7	0.9	0.9	0.7
Zinc (dissolved)	µg/l	0.5	ISO 17025	18	13	29	45
Monoaromatics & Oxygenates							
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Petroleum Hydrocarbons							
TPH1 (C10 - C40) $_{EH\_1D\_TOTAL\_MS}$	µg/l	10	ISO 17025	30	35	45	30
TPH-CWG - Aliphatic >C5 - C6 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) $_{HS+EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10

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Analytical Report Number: 23-73916
Project / Site name: Don Street

Your Order No: 006953

Lab Sample Number				2905228	2905229	2905230	2905231
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				07/12/2023	07/12/2023	07/12/2023	07/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
TPH-CWG - Aromatic >C5 - C7 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	10	10	15	10
TPH-CWG - Aromatic >C21 - C35 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	20	25	30	20
TPH-CWG - Aromatic (C5 - C35) $_{HS+EH\_1D\_AR\_MS}$	µg/l	10	NONE	30	35	45	30
VOCs							
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0##
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chloroform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Carbontetrachloride	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-73916
Project / Site name: Don Street

Your Order No: 006953

Lab Sample Number				2905228	2905229	2905230	2905231
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				07/12/2023	07/12/2023	07/12/2023	07/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
SVOCs							
Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	0.14	0.21	0.25	0.12
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	0.15	< 0.01

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Analytical Report Number: 23-73916
Project / Site name: Don Street

Your Order No: 006953

Lab Sample Number				2905228	2905229	2905230	2905231
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				07/12/2023	07/12/2023	07/12/2023	07/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	0.51	0.92	1.4	0.5
Anthracene	µg/l	0.01	ISO 17025	0.13	0.22	0.48	0.14
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	1.1	2.2	3.9	1.2
Pyrene	µg/l	0.01	ISO 17025	1.1	2	3.5	1.1
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	0.5	0.89	1.7	0.61
Chrysene	µg/l	0.01	ISO 17025	0.53	1	1.8	0.63
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	0.6	1.2	2	0.78
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	0.25	0.34	0.81	0.33
Benzo(a)pyrene	µg/l	0.01	ISO 17025	0.48	0.95	1.7	0.64
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	0.22	0.39	0.76	0.3
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	0.27	0.49	0.86	0.35
3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-73916
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260. Refer to CoA for analyte specific accreditation	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	NONE
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Analytical Report Number : 23-73916
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

- Quality control parameter has a high recovery (outside of limit); however the associated result is below the reporting limit, other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised

Sample Deviation Report

Analytical Report Number : 23-73916
Project / Site name: Don Street

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
P1	None Supplied	W	2905228	c	pH at 20oC in water (automated)	L099-PL	c
P2	None Supplied	W	2905229	c	pH at 20oC in water (automated)	L099-PL	c
P3	None Supplied	W	2905230	c	pH at 20oC in water (automated)	L099-PL	c
P4	None Supplied	W	2905231	c	pH at 20oC in water (automated)	L099-PL	c

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Analytical Report Number : 23-76378

Project / Site name:	Don Street	**Samples received on:**	21/12/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	21/12/2023
Your order number:	007036	**Analysis completed by:**	03/01/2024
Report Issue Number:	1	**Report issued on:**	03/01/2024
Samples Analysed:	4 water samples		

Signed: A. Czerwińska

Agnieszka Czerwińska
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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UKAS TESTING
4041

Analytical i2 Environmental Science

Analytical Report Number: 23-76378
Project / Site name: Don Street

Your Order No: 007036

Lab Sample Number				2919159	2919160	2919161	2919162
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				18/12/2023	18/12/2023	18/12/2023	18/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
General Inorganics							
pH (L099)	pH Units	N/A	ISO 17025	7.8	7.7	7.7	7.7
Total Cyanide (Low Level 1 µg/l)	µg/l	1	NONE	3.8	4.5	4.6	4.2
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	8.68	4.88	5.03	4.83
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	14	16	2	11
Total Phenols							
Total Phenols (monohydric)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
Heavy Metals / Metalloids							
Calcium (dissolved)	mg/l	0.012	ISO 17025	61	65	66	64
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	2.44	2.59	2.53	2.55
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	< 0.02	< 0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.7	0.6	0.7	1
Copper (dissolved)	µg/l	0.5	ISO 17025	3.8	2.4	2.3	2.2
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	1.4	0.67	0.67	0.67
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	1.6	1.4	1.6	1.4
Selenium (dissolved)	µg/l	0.6	ISO 17025	< 0.6	0.7	< 0.6	< 0.6
Zinc (dissolved)	µg/l	0.5	ISO 17025	9.8	10	8.1	7.5
Monoaromatics & Oxygenates							
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-76378
Project / Site name: Don Street

Your Order No: 007036

Lab Sample Number				2919159	2919160	2919161	2919162
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				18/12/2023	18/12/2023	18/12/2023	18/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Petroleum Hydrocarbons							
TPH1 (C10 - C40) EH_1D_TOTAL_MS	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C5 - C6 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) HS+EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C5 - C7 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35) HS+EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10

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Analytical Report Number: 23-76378
Project / Site name: Don Street

Your Order No: 007036

Lab Sample Number				2919159	2919160	2919161	2919162
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				18/12/2023	18/12/2023	18/12/2023	18/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
VOCs							
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0##	< 3.0##	< 3.0##	< 3.0##
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chloroform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Carbontetrachloride	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0##	< 3.0##	< 3.0##	< 3.0##
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-76378
Project / Site name: Don Street

Your Order No: 007036

Lab Sample Number				2919159	2919160	2919161	2919162
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				18/12/2023	18/12/2023	18/12/2023	18/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

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Lab Sample Number				2919159	2919160	2919161	2919162
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				18/12/2023	18/12/2023	18/12/2023	18/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
SVOCs							
Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01

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Analytical Report Number: 23-76378
Project / Site name: Don Street

Your Order No: 007036

Lab Sample Number				2919159	2919160	2919161	2919162
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				18/12/2023	18/12/2023	18/12/2023	18/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-76378
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260. Refer to CoA for analyte specific accreditation	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	NONE
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Analytical Report Number : 23-76378
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

- Quality control parameter has a high recovery (outside of limit); however the associated result is below the reporting limit, other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised

Sample Deviation Report

Analytical Report Number : 23-76378

Project / Site name: Don Street

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
P1	None Supplied	W	2919159	c	pH at 20oC in water (automated)	L099-PL	c
P2	None Supplied	W	2919160	c	pH at 20oC in water (automated)	L099-PL	c
P3	None Supplied	W	2919161	c	pH at 20oC in water (automated)	L099-PL	c
P4	None Supplied	W	2919162	c	pH at 20oC in water (automated)	L099-PL	c

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Analytical Report Number : 24-77486

Project / Site name:	Don Street	**Samples received on:**	09/01/2024
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	09/01/2024
Your order number:	007121	**Analysis completed by:**	15/01/2024
Report Issue Number:	1	**Report issued on:**	15/01/2024
Samples Analysed:	4 water samples		

Izabela Wójcik
Signed:

Izabela Wójcik
Senior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Analytical Report Number: 24-77486
Project / Site name: Don Street

Your Order No: 007121

Lab Sample Number				2924482	2924483	2924484	2924485
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				08/01/2024	08/01/2024	08/01/2024	08/01/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
General Inorganics							
pH (L099)	pH Units	N/A	ISO 17025	7.8	7.8	7.9	7.9
Total Cyanide (Low Level 1 µg/l)	µg/l	1	NONE	4.1	3	3.1	1.7
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	4.47	4.04	3.99	4.2
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	39	19	30	6
Total Phenols							
Total Phenols (monohydric)	µg/l	1	ISO 17025	1.5	1.5	1.5	1.4
Heavy Metals / Metalloids							
Calcium (dissolved)	mg/l	0.012	ISO 17025	38	63	61	83
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	2.61	2.92	2.82	3.19
Cadmium (dissolved)	µg/l	0.02	ISO 17025	0.02	0.02	< 0.02	0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	1.4	0.3	0.7	1
Copper (dissolved)	µg/l	0.5	ISO 17025	5.8	12	13	5.3
Lead (dissolved)	µg/l	0.2	ISO 17025	0.4	< 0.2	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	93	120	120	100
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	2.3	1.9	1.8	1.6
Selenium (dissolved)	µg/l	0.6	ISO 17025	< 0.6	0.8	< 0.6	< 0.6
Zinc (dissolved)	µg/l	0.5	ISO 17025	25	16	21	11
Monoaromatics & Oxygenates							
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Petroleum Hydrocarbons							
TPH1 (C10 - C40) EH_1D_TOTAL_MS	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C5 - C6 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) HS+EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10

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Analytical Report Number: 24-77486
Project / Site name: Don Street

Your Order No: 007121

Lab Sample Number				2924482	2924483	2924484	2924485
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				08/01/2024	08/01/2024	08/01/2024	08/01/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
TPH-CWG - Aromatic >C5 - C7 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35) $_{HS+EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
VOCs							
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Chloroform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Carbontetrachloride	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 24-77486
Project / Site name: Don Street

Your Order No: 007121

Lab Sample Number				2924482	2924483	2924484	2924485
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				08/01/2024	08/01/2024	08/01/2024	08/01/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

SVOCs

Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 24-77486
Project / Site name: Don Street

Your Order No: 007121

Lab Sample Number				2924482	2924483	2924484	2924485
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				08/01/2024	08/01/2024	08/01/2024	08/01/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	0.12	0.13	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	0.32	0.27	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	0.29	0.24	< 0.01	< 0.01
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01

3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 24-77486
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.Accredited Matrices PW, SW, GW, FSE, PrW, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260. Refer to CoA for analyte specific accreditation	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	NONE
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Analytical Report Number : 24-77486
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Acronym	**Descriptions**				
HS	Headspace Analysis				
MS	Mass spectrometry				
FID	Flame Ionisation Detector				
GC	Gas Chromatography				
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))				
CU	Clean-up - e.g. by Florisil®, silica gel				
1D	GC - Single coil/column gas chromatography				
2D	GC-GC - Double coil/column gas chromatography				
Total	Aliphatics & Aromatics				
AL	Aliphatics				
AR	Aromatics				
#1	EH_2D_Total but with humics mathematically subtracted				
#2	EH_2D_Total but with fatty acids mathematically subtracted				
_	Operator - understore to separate acronyms (exception for +)				
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total				

UKAS TESTING
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Analytical Report Number : 22-13819

Project / Site name:	Don St	**Samples received on:**	19/12/2022
Your job number:	14554	**Samples instructed on/ Analysis started on:**	19/12/2022
Your order number:	14554.003716	**Analysis completed by:**	28/12/2022
Report Issue Number:	1	**Report issued on:**	28/12/2022
Samples Analysed:	5 water samples		

Signed:

Dominika Warjan
Junior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 22-13819
Project / Site name: Don St

Your Order No: 14554.003716

Lab Sample Number				2536989	2536990	2536991	2536992	2536993
Sample Reference				P5	P4	P3	P2	P1
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				15/12/2022	15/12/2022	15/12/2022	15/12/2022	15/12/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
General Inorganics								
pH	pH Units	N/A	ISO 17025	7.4	7.7	7.8	7.8	7.9
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	2.08	3.12	2.83	3.26	2.89
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	10	4	5	4	7
Total Phenols								
Total Phenols (monohydric)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Heavy Metals / Metalloids								
Calcium (dissolved)	mg/l	0.012	ISO 17025	92	97	100	97	95
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	0.54	3.24	2.97	3.19	2.89
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Copper (dissolved)	µg/l	0.5	ISO 17025	1.3	1.9	2.8	2.7	2.7
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	770	150	190	160	200
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	< 0.5	1.1	1.1	1.1	1.3
Selenium (dissolved)	µg/l	0.6	ISO 17025	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6
Zinc (dissolved)	µg/l	0.5	ISO 17025	2	5.4	7.1	5.9	6.2
Monoaromatics & Oxygenates								
Benzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Petroleum Hydrocarbons								
TPH1 (C10 - C40) $_{EH\_1D\_TOTAL\_MS}$	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C5 - C6 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) $_{HS+EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10

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Analytical Report Number: 22-13819
Project / Site name: Don St

Your Order No: 14554.003716

Lab Sample Number				2536989	2536990	2536991	2536992	2536993
Sample Reference				P5	P4	P3	P2	P1
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				15/12/2022	15/12/2022	15/12/2022	15/12/2022	15/12/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
TPH-CWG - Aromatic >C5 - C7 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35) $_{HS+EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
VOCs								
Chloromethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromomethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl Chloride	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichlorofluoromethane	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cis-1,2-dichloroethene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2,2-Dichloropropane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloromethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloropropene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trans-1,2-dichloroethene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Benzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloromethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dibromomethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cis-1,3-dichloropropene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trans-1,3-dichloropropene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichloropropane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dibromochloromethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1,2-Tetrachloroethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-Xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tribromomethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromobenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
n-Propylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2-Chlorotoluene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
4-Chlorotoluene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

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Analytical Report Number: 22-13819
Project / Site name: Don St

Your Order No: 14554.003716

Lab Sample Number				2536989	2536990	2536991	2536992	2536993
Sample Reference				P5	P4	P3	P2	P1
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				15/12/2022	15/12/2022	15/12/2022	15/12/2022	15/12/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
1,3,5-Trimethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
tert-Butylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
sec-Butylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p-Isopropyltoluene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Butylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Hexachlorobutadiene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
SVOCs								
Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 22-13819
Project / Site name: Don St

Your Order No: 14554.003716

Lab Sample Number				2536989	2536990	2536991	2536992	2536993
Sample Reference				P5	P4	P3	P2	P1
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				15/12/2022	15/12/2022	15/12/2022	15/12/2022	15/12/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 22-13819
Project / Site name: Don St

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025

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Analytical Report Number : 22-13819
Project / Site name: Don St

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 22-13819

Project / Site name: Don St

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
P1	None Supplied	W	2536993	c	pH at 20oC in water (automated)	L099-PL	c
P2	None Supplied	W	2536992	c	pH at 20oC in water (automated)	L099-PL	c
P3	None Supplied	W	2536991	c	pH at 20oC in water (automated)	L099-PL	c
P4	None Supplied	W	2536990	c	pH at 20oC in water (automated)	L099-PL	c
P5	None Supplied	W	2536989	c	pH at 20oC in water (automated)	L099-PL	c

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Analytical Report Number : 22-94224

Project / Site name:	Don Street	**Samples received on:**	02/11/2022
Your job number:		**Samples instructed on/ Analysis started on:**	02/11/2022
Your order number:	003364	**Analysis completed by:**	09/11/2022
Report Issue Number:	1	**Report issued on:**	09/11/2022
Samples Analysed:	8 water samples		

Signed:

Adam Fenwick
Technical Reviewer
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing

Analytical Report Number: 22-94224
Project / Site name: Don Street

Your Order No: 003364

Lab Sample Number				2485648	2485649	2485650	2485651	2485652
Sample Reference				Point 101	Point 102	Point 103	Point 104	Point 105
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				01/11/2022	01/11/2022	01/11/2022	01/11/2022	01/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
General Inorganics								
pH	pH Units	N/A	ISO 17025	7.8	7.7	7.7	7.8	7.5
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	3.4	3.2	3.2	3.7	< 1.0
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	10.1	10.4	9.81	10.6	2.79
Total Suspended Solids	mg/l	2	ISO 17025	28	43	98	82	21
Total Phenols								
Total Phenols (monohydric)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Heavy Metals / Metalloids								
Calcium (dissolved)	mg/l	0.012	ISO 17025	52	50	50	56	92
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	1.86	1.75	1.8	1.82	0.43
Cadmium (dissolved)	µg/l	0.02	ISO 17025	0.03	0.03	0.03	0.03	0.05
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.7	0.5	0.5	0.5	< 0.2
Copper (dissolved)	µg/l	0.5	ISO 17025	6.5	6.4	6.2	6.8	2.8
Lead (dissolved)	µg/l	0.2	ISO 17025	0.6	0.5	0.5	0.4	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	13	6.2	6.7	7.6	340
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	2	2.1	1.9	2.1	< 0.5
Selenium (dissolved)	µg/l	0.6	ISO 17025	0.7	< 0.6	< 0.6	0.7	< 0.6
Zinc (dissolved)	µg/l	0.5	ISO 17025	11	12	14	16	4.9
Monoaromatics & Oxygenates								
Benzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Petroleum Hydrocarbons								
TPH1 (C10 - C40) $_{EH\_1D\_TOTAL\_MS}$	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C5 - C6 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) $_{HS+EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C5 - C7 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10

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Analytical Report Number: 22-94224
Project / Site name: Don Street

Your Order No: 003364

Lab Sample Number				2485648	2485649	2485650	2485651	2485652
Sample Reference				Point 101	Point 102	Point 103	Point 104	Point 105
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				01/11/2022	01/11/2022	01/11/2022	01/11/2022	01/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
TPH-CWG - Aromatic (C5 - C35) HS+EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10

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Analytical Report Number: 22-94224
Project / Site name: Don Street

Your Order No: 003364

Lab Sample Number				2485648	2485649	2485650	2485651	2485652
Sample Reference				Point 101	Point 102	Point 103	Point 104	Point 105
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				01/11/2022	01/11/2022	01/11/2022	01/11/2022	01/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
VOCs								
Chloromethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromomethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl Chloride	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichlorofluoromethane	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cis-1,2-dichloroethene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2,2-Dichloropropane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloromethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloropropene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trans-1,2-dichloroethene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Benzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloromethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dibromomethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cis-1,3-dichloropropene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trans-1,3-dichloropropene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichloropropane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dibromochloromethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1,2-Tetrachloroethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-Xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tribromomethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromobenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
n-Propylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2-Chlorotoluene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
4-Chlorotoluene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
tert-Butylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
sec-Butylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p-Isopropyltoluene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

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Analytical Report Number: 22-94224
Project / Site name: Don Street

Your Order No: 003364

Lab Sample Number				2485648	2485649	2485650	2485651	2485652
Sample Reference				Point 101	Point 102	Point 103	Point 104	Point 105
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				01/11/2022	01/11/2022	01/11/2022	01/11/2022	01/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Butylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Hexachlorobutadiene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

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Analytical Report Number: 22-94224
Project / Site name: Don Street

Your Order No: 003364

Lab Sample Number				2485648	2485649	2485650	2485651	2485652
Sample Reference				Point 101	Point 102	Point 103	Point 104	Point 105
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				01/11/2022	01/11/2022	01/11/2022	01/11/2022	01/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
SVOCs								
Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

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Analytical Report Number: 22-94224
Project / Site name: Don Street

Your Order No: 003364

Lab Sample Number				2485648	2485649	2485650	2485651	2485652
Sample Reference				Point 101	Point 102	Point 103	Point 104	Point 105
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				01/11/2022	01/11/2022	01/11/2022	01/11/2022	01/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

U/S = Unsuitable Sample I/S = Insufficient Sample

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Analytical Report Number: 22-94224
Project / Site name: Don Street

Your Order No: 003364

Lab Sample Number				2485653	2485654	2485655
Sample Reference				Area A 101	Area A 102	Area A 103
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				01/11/2022	01/11/2022	01/11/2022
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
General Inorganics						
pH	pH Units	N/A	ISO 17025	8.1	8.1	8.2
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	3.82	2.92	2.91
Total Suspended Solids	mg/l	2	ISO 17025	36	130	28
Total Phenols						
Total Phenols (monohydric)	µg/l	1	ISO 17025	1.1	< 1.0	< 1.0
Heavy Metals / Metalloids						
Calcium (dissolved)	mg/l	0.012	ISO 17025	110	110	140
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	1.56	1.49	3.81
Cadmium (dissolved)	µg/l	0.02	ISO 17025	0.04	0.05	0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.4	0.3	1
Copper (dissolved)	µg/l	0.5	ISO 17025	5.6	5.2	13
Lead (dissolved)	µg/l	0.2	ISO 17025	0.2	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	450	390	100
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	2.4	2.3	3.7
Selenium (dissolved)	µg/l	0.6	ISO 17025	< 0.6	< 0.6	0.6
Zinc (dissolved)	µg/l	0.5	ISO 17025	12	12	13
Monoaromatics & Oxygenates						
Benzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Toluene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
o-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Petroleum Hydrocarbons						
TPH1 (C10 - C40) $_{EH\_1D\_TOTAL\_MS}$	µg/l	10	ISO 17025	< 10	< 10	< 10
TPH-CWG - Aliphatic >C5 - C6 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) $_{HS+EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10
TPH-CWG - Aromatic >C5 - C7 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10

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Analytical Report Number: 22-94224
Project / Site name: Don Street

Your Order No: 003364

Lab Sample Number				2485653	2485654	2485655
Sample Reference				Area A 101	Area A 102	Area A 103
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				01/11/2022	01/11/2022	01/11/2022
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
TPH-CWG - Aromatic (C5 - C35) HS+EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 22-94224
Project / Site name: Don Street

Your Order No: 003364

Lab Sample Number				2485653	2485654	2485655
Sample Reference				Area A 101	Area A 102	Area A 103
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				01/11/2022	01/11/2022	01/11/2022
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
VOCs						
Chloromethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Chloroethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Bromomethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Vinyl Chloride	µg/l	1	NONE	< 1.0	< 1.0	< 1.0
Trichlorofluoromethane	µg/l	1	NONE	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Cis-1,2-dichloroethene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
2,2-Dichloropropane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Trichloromethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,1-Dichloropropene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Trans-1,2-dichloroethene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Benzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Tetrachloromethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Trichloroethene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Dibromomethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Bromodichloromethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Cis-1,3-dichloropropene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Trans-1,3-dichloropropene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Toluene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,3-Dichloropropane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Dibromochloromethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Tetrachloroethene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Chlorobenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,1,1,2-Tetrachloroethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
p & m-Xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Styrene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Tribromomethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
o-Xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Isopropylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Bromobenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
n-Propylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
2-Chlorotoluene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
4-Chlorotoluene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
tert-Butylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
sec-Butylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
p-Isopropyltoluene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0

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Analytical Report Number: 22-94224
Project / Site name: Don Street

Your Order No: 003364

Lab Sample Number				2485653	2485654	2485655
Sample Reference				Area A 101	Area A 102	Area A 103
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				01/11/2022	01/11/2022	01/11/2022
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Butylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Hexachlorobutadiene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0

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Analytical Report Number: 22-94224
Project / Site name: Don Street

Your Order No: 003364

Lab Sample Number				2485653	2485654	2485655
Sample Reference				Area A 101	Area A 102	Area A 103
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				01/11/2022	01/11/2022	01/11/2022
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
SVOCs						
Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01

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Analytical Report Number: 22-94224
Project / Site name: Don Street

Your Order No: 003364

Lab Sample Number				2485653	2485654	2485655
Sample Reference				Area A 101	Area A 102	Area A 103
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				01/11/2022	01/11/2022	01/11/2022
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01

3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10

U/S = Unsuitable Sample I/S = Insufficient Sample

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Analytical Report Number : 22-94224
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions

Analytical Report Number : 22-94224
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
HS	Headspace Analysis				
MS	Mass spectrometry				
FID	Flame Ionisation Detector				
GC	Gas Chromatography				
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))				
CU	Clean-up - e.g. by Florisil®, silica gel				
1D	GC - Single coil/column gas chromatography				
2D	GC-GC - Double coil/column gas chromatography				
Total	Aliphatics & Aromatics				
AL	Aliphatics				
AR	Aromatics				
#1	EH_2D_Total but with humics mathematically subtracted				
#2	EH_2D_Total but with fatty acids mathematically subtracted				
_	Operator - understore to separate acronyms (exception for +)				
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total				

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Analytical Report Number : 22-96550

Project / Site name:	Don Street	**Samples received on:**	14/11/2022
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	14/11/2022
Your order number:	003486	**Analysis completed by:**	21/11/2022
Report Issue Number:	1	**Report issued on:**	21/11/2022
Samples Analysed:	1 water sample		

Signed:

Dominika Warjan
Junior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Analytical Report Number: 22-96550
Project / Site name: Don Street

Your Order No: 003486

Lab Sample Number				2498979
Sample Reference				Area A 104+B12:K18
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				14/11/2022
Time Taken				None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
General Inorganics				
pH	pH Units	N/A	ISO 17025	8.3
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	< 1.0
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	4.5
Total Suspended Solids	mg/l	2	ISO 17025	14
Total Phenols				
Total Phenols (monohydric)	µg/l	1	ISO 17025	< 1.0
Heavy Metals / Metalloids				
Calcium (dissolved)	mg/l	0.012	ISO 17025	120
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	2.05
Cadmium (dissolved)	µg/l	0.02	ISO 17025	0.04
Chromium (dissolved)	µg/l	0.2	ISO 17025	< 0.2
Copper (dissolved)	µg/l	0.5	ISO 17025	6.4
Lead (dissolved)	µg/l	0.2	ISO 17025	0.3
Manganese (dissolved)	µg/l	0.05	ISO 17025	250
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	2.5
Selenium (dissolved)	µg/l	0.6	ISO 17025	< 0.6
Zinc (dissolved)	µg/l	0.5	ISO 17025	3.2
Monoaromatics & Oxygenates				
Benzene	µg/l	1	ISO 17025	< 1.0
Toluene	µg/l	1	ISO 17025	< 1.0
Ethylbenzene	µg/l	1	ISO 17025	< 1.0
p & m-xylene	µg/l	1	ISO 17025	< 1.0
o-xylene	µg/l	1	ISO 17025	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	1	ISO 17025	< 1.0
Petroleum Hydrocarbons				
TPH1 (C10 - C40) $_{EH\_1D\_TOTAL\_MS}$	µg/l	10	ISO 17025	< 10
TPH-CWG - Aliphatic >C5 - C6* $_{HS\_1D\_AL}$	µg/l	1	NONE	< 1.0
TPH-CWG - Aliphatic >C6 - C8* $_{HS\_1D\_AL}$	µg/l	1	NONE	< 1.0
TPH-CWG - Aliphatic >C8 - C10* $_{HS\_1D\_AL}$	µg/l	1	NONE	< 1.0
TPH-CWG - Aliphatic >C10 - C12 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic >C12 - C16 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic >C16 - C21 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic >C21 - C35 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic (C5 - C35) $_{HS+EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10

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Analytical Report Number: 22-96550
Project / Site name: Don Street

Your Order No: 003486

Lab Sample Number				2498979
Sample Reference				Area A 104+B12:K18
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				14/11/2022
Time Taken				None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
TPH-CWG - Aromatic >C5 - C7* HS_1D_AR	µg/l	1	NONE	< 1.0
TPH-CWG - Aromatic >C7 - C8* HS_1D_AR	µg/l	1	NONE	< 1.0
TPH-CWG - Aromatic >C8 - C10* HS_1D_AR	µg/l	1	NONE	< 1.0
TPH-CWG - Aromatic >C10 - C12 EH_1D_AR_MS	µg/l	10	NONE	< 10
TPH-CWG - Aromatic >C12 - C16 EH_1D_AR_MS	µg/l	10	NONE	< 10
TPH-CWG - Aromatic >C16 - C21 EH_1D_AR_MS	µg/l	10	NONE	< 10
TPH-CWG - Aromatic >C21 - C35 EH_1D_AR_MS	µg/l	10	NONE	< 10
TPH-CWG - Aromatic (C5 - C35) HS+EH_1D_AR_MS	µg/l	10	NONE	< 10
VOCs				
Chloromethane	µg/l	1	ISO 17025	< 1.0
Chloroethane	µg/l	1	ISO 17025	< 1.0
Bromomethane	µg/l	1	ISO 17025	< 1.0
Vinyl Chloride	µg/l	1	NONE	< 1.0
Trichlorofluoromethane	µg/l	1	NONE	< 1.0
1,1-Dichloroethene	µg/l	1	ISO 17025	< 1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	1	ISO 17025	< 1.0
Cis-1,2-dichloroethene	µg/l	1	ISO 17025	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	1	ISO 17025	< 1.0
1,1-Dichloroethane	µg/l	1	ISO 17025	< 1.0
2,2-Dichloropropane	µg/l	1	ISO 17025	< 1.0
Trichloromethane	µg/l	1	ISO 17025	< 1.0
1,1,1-Trichloroethane	µg/l	1	ISO 17025	< 1.0
1,2-Dichloroethane	µg/l	1	ISO 17025	< 1.0
1,1-Dichloropropene	µg/l	1	ISO 17025	< 1.0
Trans-1,2-dichloroethene	µg/l	1	ISO 17025	< 1.0
Benzene	µg/l	1	ISO 17025	< 1.0
Tetrachloromethane	µg/l	1	ISO 17025	< 1.0
1,2-Dichloropropane	µg/l	1	ISO 17025	< 1.0
Trichloroethene	µg/l	1	ISO 17025	< 1.0
Dibromomethane	µg/l	1	ISO 17025	< 1.0
Bromodichloromethane	µg/l	1	ISO 17025	< 1.0
Cis-1,3-dichloropropene	µg/l	1	ISO 17025	< 1.0
Trans-1,3-dichloropropene	µg/l	1	ISO 17025	< 1.0
Toluene	µg/l	1	ISO 17025	< 1.0
1,1,2-Trichloroethane	µg/l	1	ISO 17025	< 1.0
1,3-Dichloropropane	µg/l	1	ISO 17025	< 1.0
Dibromochloromethane	µg/l	1	ISO 17025	< 1.0
Tetrachloroethene	µg/l	1	ISO 17025	< 1.0
1,2-Dibromoethane	µg/l	1	ISO 17025	< 1.0
Chlorobenzene	µg/l	1	ISO 17025	< 1.0
1,1,1,2-Tetrachloroethane	µg/l	1	ISO 17025	< 1.0
Ethylbenzene	µg/l	1	ISO 17025	< 1.0
p & m-Xylene	µg/l	1	ISO 17025	< 1.0
Styrene	µg/l	1	ISO 17025	< 1.0
Tribromomethane	µg/l	1	ISO 17025	< 1.0
o-Xylene	µg/l	1	ISO 17025	< 1.0
1,1,2,2-Tetrachloroethane	µg/l	1	ISO 17025	< 1.0
Isopropylbenzene	µg/l	1	ISO 17025	< 1.0
Bromobenzene	µg/l	1	ISO 17025	< 1.0
n-Propylbenzene	µg/l	1	ISO 17025	< 1.0
2-Chlorotoluene	µg/l	1	ISO 17025	< 1.0
4-Chlorotoluene	µg/l	1	ISO 17025	< 1.0

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Analytical Report Number: 22-96550
Project / Site name: Don Street

Your Order No: 003486

Lab Sample Number				2498979
Sample Reference				Area A 104+B12:K18
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				14/11/2022
Time Taken				None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
1,3,5-Trimethylbenzene	µg/l	1	ISO 17025	< 1.0
tert-Butylbenzene	µg/l	1	ISO 17025	< 1.0
1,2,4-Trimethylbenzene	µg/l	1	ISO 17025	< 1.0
sec-Butylbenzene	µg/l	1	ISO 17025	< 1.0
1,3-Dichlorobenzene	µg/l	1	ISO 17025	< 1.0
p-Isopropyltoluene	µg/l	1	ISO 17025	< 1.0
1,2-Dichlorobenzene	µg/l	1	ISO 17025	< 1.0
1,4-Dichlorobenzene	µg/l	1	ISO 17025	< 1.0
Butylbenzene	µg/l	1	ISO 17025	< 1.0
1,2-Dibromo-3-chloropropane	µg/l	1	ISO 17025	< 1.0
1,2,4-Trichlorobenzene	µg/l	1	ISO 17025	< 1.0
Hexachlorobutadiene	µg/l	1	ISO 17025	< 1.0
1,2,3-Trichlorobenzene	µg/l	1	ISO 17025	< 1.0

SVOCs

Aniline	µg/l	0.05	NONE	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01
Azobenzene	µg/l	0.05	NONE	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05

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Analytical Report Number: 22-96550
Project / Site name: Don Street

Your Order No: 003486

Lab Sample Number				2498979
Sample Reference				Area A 104+B12:K18
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				14/11/2022
Time Taken				None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01

3&4-Methylphenol	µg/l	0.1	NONE	< 0.10

U/S = Unsuitable Sample I/S = Insufficient Sample
*The compound reported unaccredited due to failure of the drift standard in this batch

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Analytical Report Number : 22-96550
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions

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Analytical Report Number : 22-96550
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
HS	Headspace Analysis				
MS	Mass spectrometry				
FID	Flame Ionisation Detector				
GC	Gas Chromatography				
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))				
CU	Clean-up - e.g. by Florisil®, silica gel				
1D	GC - Single coil/column gas chromatography				
2D	GC-GC - Double coil/column gas chromatography				
Total	Aliphatics & Aromatics				
AL	Aliphatics				
AR	Aromatics				
#1	EH_2D_Total but with humics mathematically subtracted				
#2	EH_2D_Total but with fatty acids mathematically subtracted				
_	Operator - understore to separate acronyms (exception for +)				
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total				

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Analytical Report Number : 22-97417

Project / Site name:	Don Street	**Samples received on:**	17/11/2022
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	17/11/2022
Your order number:	003512	**Analysis completed by:**	30/11/2022
Report Issue Number:	1	**Report issued on:**	30/11/2022
Samples Analysed:	5 water samples		

Signed:

Elżbieta Suchy
Junior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Analytical Report Number: 22-97417
Project / Site name: Don Street

Your Order No: 003512

Lab Sample Number				2503432	2503433	2503434	2503435	2503436
Sample Reference				P1	P2	P3	P4	P5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				16/11/2022	16/11/2022	16/11/2022	16/11/2022	16/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
General Inorganics								
pH	pH Units	N/A	ISO 17025	8	7.9	7.9	7.9	7.6
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	4.5	3.3	3.6	3.8	< 1.0
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	7.41	7.49	7.56	7.71	3.17
Total Suspended Solids	mg/l	2	ISO 17025	5	5	8	6	27
Total Phenols								
Total Phenols (monohydric)	µg/l	1	ISO 17025	< 1.0	1.5	1.7	1.2	< 1.0
Heavy Metals / Metalloids								
Calcium (dissolved)	mg/l	0.012	ISO 17025	81	81	82	82	100
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	2.17	2.18	2.36	2.35	0.32
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	< 0.02	0.03	0.03	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	< 0.2	2.5	2.6	0.3	0.7
Copper (dissolved)	µg/l	0.5	ISO 17025	3.6	4.8	4.4	4.3	1.2
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	4.2	4.1	5.7	7	2.2
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	1.4	2	2.1	1.6	< 0.5
Selenium (dissolved)	µg/l	0.6	ISO 17025	< 0.6	0.7	1	1.3	< 0.6
Zinc (dissolved)	µg/l	0.5	ISO 17025	6.4	8.1	6.7	10	3.4
Monoaromatics & Oxygenates*								
Benzene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

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Analytical Report Number: 22-97417
Project / Site name: Don Street

Your Order No: 003512

Lab Sample Number				2503432	2503433	2503434	2503435	2503436
Sample Reference				P1	P2	P3	P4	P5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				16/11/2022	16/11/2022	16/11/2022	16/11/2022	16/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Petroleum Hydrocarbons								
TPH1 (C10 - C40) EH_1D_TOTAL_MS	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C5 - C6 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) HS+EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C5 - C7 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35) HS+EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
VOCs*								
Chloromethane	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromomethane	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl Chloride	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichlorofluoromethane	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cis-1,2-dichloroethene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2,2-Dichloropropane	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloromethane	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloropropene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trans-1,2-dichloroethene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Benzene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloromethane	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dibromomethane	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cis-1,3-dichloropropene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trans-1,3-dichloropropene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichloropropane	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dibromochloromethane	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

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Analytical Report Number: 22-97417
Project / Site name: Don Street

Your Order No: 003512

Lab Sample Number				2503432	2503433	2503434	2503435	2503436
Sample Reference				P1	P2	P3	P4	P5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				16/11/2022	16/11/2022	16/11/2022	16/11/2022	16/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
1,1,1,2-Tetrachloroethane	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-Xylene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tribromomethane	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromobenzene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
n-Propylbenzene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2-Chlorotoluene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
4-Chlorotoluene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
tert-Butylbenzene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
sec-Butylbenzene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p-Isopropyltoluene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Butylbenzene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Hexachlorobutadiene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

SVOCs

Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

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Analytical Report Number: 22-97417
Project / Site name: Don Street

Your Order No: 003512

Lab Sample Number				2503432	2503433	2503434	2503435	2503436
Sample Reference				P1	P2	P3	P4	P5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				16/11/2022	16/11/2022	16/11/2022	16/11/2022	16/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

U/S = Unsuitable Sample I/S = Insufficient Sample

*The compound has a -ve fail on drift standard, but was not detected in any sample in the batch so is reported "none-accredited". All other checks (calibration, SST,AQC) pass.

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Analytical Report Number : 22-97417
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions

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Analytical Report Number : 22-97417
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
HS	Headspace Analysis				
MS	Mass spectrometry				
FID	Flame Ionisation Detector				
GC	Gas Chromatography				
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))				
CU	Clean-up - e.g. by Florisil®, silica gel				
1D	GC - Single coil/column gas chromatography				
2D	GC-GC - Double coil/column gas chromatography				
Total	Aliphatics & Aromatics				
AL	Aliphatics				
AR	Aromatics				
#1	EH_2D_Total but with humics mathematically subtracted				
#2	EH_2D_Total but with fatty acids mathematically subtracted				
_	Operator - understore to separate acronyms (exception for +)				
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total				

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UKAS TESTING
4041

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Analytical Report Number : 23-10325-2

Replaces Analytical Report Number: 23-10325, issue no. 1
Client sampling date amended.

Project / Site name:	Don St	**Samples received on:**	04/01/2023
Your job number:	14554	**Samples instructed on/ Analysis started on:**	04/01/2023
Your order number:	003786	**Analysis completed by:**	11/01/2023
Report Issue Number:	2	**Report issued on:**	11/01/2023
Samples Analysed:	5 water samples		

Signed:

Adam Fenwick
Technical Reviewer
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Analytical Report Number: 23-10325
Project / Site name: Don St

Your Order No: 003786

Lab Sample Number				2545976	2545977	2545978	2545979	2545980
Sample Reference				P1	P2	P3	P4	P5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				03/01/2023	03/01/2023	03/01/2023	03/01/2023	03/01/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
General Inorganics								
pH	pH Units	N/A	ISO 17025	7.5	7.5	7.5	7.5	7.7
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	3.8	4.2	3.6	< 1.0	17
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	7.22	6.39	7.07	7.08	2.92
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	27	30	24	44	1400
Total Phenols								
Total Phenols (monohydric)	µg/l	1	ISO 17025	1.8	1.5	2	1.7	3.3
Heavy Metals / Metalloids								
Calcium (dissolved)	mg/l	0.012	ISO 17025	58	58	61	56	83
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	2.22	2.15	2.35	2.11	0.52
Cadmium (dissolved)	µg/l	0.02	ISO 17025	0.02	0.03	0.02	< 0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.6	0.5	0.7	0.7	0.2
Copper (dissolved)	µg/l	0.5	ISO 17025	3.7	3.7	4.2	4.2	< 0.5
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	7.4	11	8.6	4.6	370
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	1.6	1.8	2	1.5	< 0.5
Selenium (dissolved)	µg/l	0.6	ISO 17025	< 0.6	< 0.6	0.7	< 0.6	< 0.6
Zinc (dissolved)	µg/l	0.5	ISO 17025	16	15	19	16	3.9
Monoaromatics & Oxygenates								
Benzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Petroleum Hydrocarbons								
TPH1 (C10 - C40) $_{EH\_1D\_TOTAL\_MS}$	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C5 - C6 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) $_{HS+EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C5 - C7 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10

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Analytical Report Number: 23-10325
Project / Site name: Don St

Your Order No: 003786

Lab Sample Number				2545976	2545977	2545978	2545979	2545980
Sample Reference				P1	P2	P3	P4	P5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				03/01/2023	03/01/2023	03/01/2023	03/01/2023	03/01/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
TPH-CWG - Aromatic (C5 - C35) HS+EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
VOCs								
Chloromethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromomethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl Chloride	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichlorofluoromethane	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cis-1,2-dichloroethene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2,2-Dichloropropane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloromethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloropropene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trans-1,2-dichloroethene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Benzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloromethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dibromomethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cis-1,3-dichloropropene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trans-1,3-dichloropropene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichloropropane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dibromochloromethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1,2-Tetrachloroethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-Xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tribromomethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromobenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
n-Propylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2-Chlorotoluene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
4-Chlorotoluene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
tert-Butylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
sec-Butylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p-Isopropyltoluene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

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Analytical Report Number: 23-10325
Project / Site name: Don St

Your Order No: 003786

Lab Sample Number				2545976	2545977	2545978	2545979	2545980
Sample Reference				P1	P2	P3	P4	P5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				03/01/2023	03/01/2023	03/01/2023	03/01/2023	03/01/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
1,4-Dichlorobenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Butylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Hexachlorobutadiene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
SVOCs								
Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

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Analytical Report Number: 23-10325
Project / Site name: Don St

Your Order No: 003786

Lab Sample Number				2545976	2545977	2545978	2545979	2545980
Sample Reference				P1	P2	P3	P4	P5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				03/01/2023	03/01/2023	03/01/2023	03/01/2023	03/01/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-10325
Project / Site name: Don St

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions

4041

Analytical Report Number : 23-10325
Project / Site name: Don St

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
HS	Headspace Analysis				
MS	Mass spectrometry				
FID	Flame Ionisation Detector				
GC	Gas Chromatography				
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))				
CU	Clean-up - e.g. by Florisil®, silica gel				
1D	GC - Single coil/column gas chromatography				
2D	GC-GC - Double coil/column gas chromatography				
Total	Aliphatics & Aromatics				
AL	Aliphatics				
AR	Aromatics				
#1	EH_2D_Total but with humics mathematically subtracted				
#2	EH_2D_Total but with fatty acids mathematically subtracted				
_	Operator - understore to separate acronyms (exception for +)				
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total				

UKAS TESTING
4041

Environmental Science

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Analytical Report Number : 23-17113

Replaces Analytical Report Number: 23-17113, issue no. 1
Client sampling date amended.

Project / Site name:	Don Street	**Samples received on:**	10/02/2023
Your job number:	14 554	**Samples instructed on/ Analysis started on:**	10/02/2023
Your order number:	004069	**Analysis completed by:**	16/02/2023
Report Issue Number:	2	**Report issued on:**	23/05/2023
Samples Analysed:	4 water samples		

Signed:

Adam Fenwick
Technical Reviewer
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-17113
Project / Site name: Don Street

Your Order No: 004069

Lab Sample Number				2582296	2582297	2582298	2582299
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				09/02/2023	09/02/2023	09/02/2023	09/02/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
General Inorganics							
pH (L005B)	pH Units	N/A	ISO 17025	8	7.9	7.9	7.8
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	4.23	3.64	4.01	3.61
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	7	2	4	< 2.0
Total Phenols							
Total Phenols (monohydric)	µg/l	1	ISO 17025	< 1.0	1	< 1.0	< 1.0
Heavy Metals / Metalloids							
Calcium (dissolved)	mg/l	0.012	ISO 17025	85	86	89	87
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	3.06	2.86	3	2.97
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	< 0.02	0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.2	< 0.2	0.2	< 0.2
Copper (dissolved)	µg/l	0.5	ISO 17025	2.7	2.5	2.3	1.7
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	94	78	100	110
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	1.1	1.2	1.5	1.2
Selenium (dissolved)	µg/l	0.6	ISO 17025	0.8	< 0.6	< 0.6	< 0.6
Zinc (dissolved)	µg/l	0.5	ISO 17025	5	5	5.6	6.1
Monoaromatics & Oxygenates							
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Petroleum Hydrocarbons							
TPH1 (C10 - C40) $_{EH\_1D\_TOTAL\_MS}$	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C5 - C6 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) $_{HS+EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C5 - C7 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35) $_{HS+EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10

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Analytical Report Number: 23-17113
Project / Site name: Don Street

Your Order No: 004069

Lab Sample Number				2582296	2582297	2582298	2582299
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				09/02/2023	09/02/2023	09/02/2023	09/02/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
VOCs							
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene ##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Tribromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-17113
Project / Site name: Don Street

Your Order No: 004069

Lab Sample Number				2582296	2582297	2582298	2582299
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				09/02/2023	09/02/2023	09/02/2023	09/02/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
SVOCs							
Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01

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Analytical Report Number: 23-17113
Project / Site name: Don Street

Your Order No: 004069

Lab Sample Number				2582296	2582297	2582298	2582299
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				09/02/2023	09/02/2023	09/02/2023	09/02/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-17113
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

- Quality control parameter has a high recovery (outside of limit); however the associated result is below the reporting limit, other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.

Information in Support of Analytical Results

4041

Analytical Report Number : 23-17113
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

UKAS TESTING
4041

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Analytical Report Number : 23-23922-2

Replaces Analytical Report Number: 23-23922, issue no. 1
Client sampling date amended.
Sampling date amended for all samples as per client's request

Project / Site name:	Don St	**Samples received on:**	20/03/2023
Your job number:	14 554	**Samples instructed on/ Analysis started on:**	20/03/2023
Your order number:	004371	**Analysis completed by:**	27/03/2023
Report Issue Number:	2	**Report issued on:**	27/03/2023
Samples Analysed:	5 water samples		

Izabela Wójcik
Signed:

Izabela Wójcik
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Analytical Report Number: 23-23922
Project / Site name: Don St

Your Order No: 004371

Lab Sample Number				2622869	2622870	2622871	2622872	2622873
Sample Reference				Point1	Point2	Point3	Point4	Point5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				17/03/2023	17/03/2023	17/03/2023	17/03/2023	17/03/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
General Inorganics								
pH (L005B)	pH Units	N/A	ISO 17025	7.7	7.7	7.7	7.8	7.6
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	4.6	5.2	5.2	4.8	< 1.0
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	5.92	5.64	5.84	5.49	2.87
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	30	9	20	190	50
Total Phenols								
Total Phenols (monohydric)	µg/l	1	ISO 17025	< 1.0	< 1.0	2.3	< 1.0	1.8
Heavy Metals / Metalloids								
Calcium (dissolved)	mg/l	0.012	ISO 17025	71	68	72	68	78
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	2.07	2.02	2.43	2.21	0.48
Cadmium (dissolved)	µg/l	0.02	ISO 17025	0.02	0.04	< 0.02	0.03	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.5	0.4	0.3	0.4	< 0.2
Copper (dissolved)	µg/l	0.5	ISO 17025	4.2	6.3	4	5.1	1.6
Lead (dissolved)	µg/l	0.2	ISO 17025	0.3	0.3	0.3	0.6	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	9.7	15	14	23	12
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	1.6	2	1.4	1.5	< 0.5
Selenium (dissolved)	µg/l	0.6	ISO 17025	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6
Zinc (dissolved)	µg/l	0.5	ISO 17025	9.6	10	9.9	13	3.1
Monoaromatics & Oxygenates								
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Petroleum Hydrocarbons								
TPH1 (C10 - C40) $_{EH\_1D\_TOTAL\_MS}$	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C5 - C6 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) $_{HS+EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10

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Analytical Report Number: 23-23922
Project / Site name: Don St

Your Order No: 004371

Lab Sample Number				2622869	2622870	2622871	2622872	2622873
Sample Reference				Point1	Point2	Point3	Point4	Point5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				17/03/2023	17/03/2023	17/03/2023	17/03/2023	17/03/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
TPH-CWG - Aromatic >C5 - C7 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35) $_{HS+EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
VOCs								
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p & m-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Tribromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
o-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-23922
Project / Site name: Don St

Your Order No: 004371

Lab Sample Number				2622869	2622870	2622871	2622872	2622873
Sample Reference				Point1	Point2	Point3	Point4	Point5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				17/03/2023	17/03/2023	17/03/2023	17/03/2023	17/03/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
SVOCs								
Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

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Analytical Report Number: 23-23922
Project / Site name: Don St

Your Order No: 004371

Lab Sample Number				2622869	2622870	2622871	2622872	2622873
Sample Reference				Point1	Point2	Point3	Point4	Point5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				17/03/2023	17/03/2023	17/03/2023	17/03/2023	17/03/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-23922
Project / Site name: Don St

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions

4041

Analytical Report Number : 23-23922
Project / Site name: Don St

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
HS	Headspace Analysis				
MS	Mass spectrometry				
FID	Flame Ionisation Detector				
GC	Gas Chromatography				
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))				
CU	Clean-up - e.g. by Florisil®, silica gel				
1D	GC - Single coil/column gas chromatography				
2D	GC-GC - Double coil/column gas chromatography				
Total	Aliphatics & Aromatics				
AL	Aliphatics				
AR	Aromatics				
#1	EH_2D_Total but with humics mathematically subtracted				
#2	EH_2D_Total but with fatty acids mathematically subtracted				
_	Operator - understore to separate acronyms (exception for +)				
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total				

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Analytical Report Number : 23-28847

Project / Site name:	Don Street	**Samples received on:**	17/04/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	17/04/2023
Your order number:	004601	**Analysis completed by:**	24/04/2023
Report Issue Number:	1	**Report issued on:**	24/04/2023
Samples Analysed:	2 soil samples		

Signed:

Joanna Wawrzeczko
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Analytical Report Number: 23-28847
Project / Site name: Don Street
Your Order No: 004601

Lab Sample Number				2650711	2650712
Sample Reference				Knotweed 101	Oil Tank 1 Base
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				14/04/2023	14/04/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	19	3.3
Total mass of sample received	kg	0.001	NONE	0.8	0.3
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	MJN	MJN

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.6	6.7
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	380	55
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.0075	0.0028
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	15	5.6
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	7.5	2.8
Sulphide	mg/kg	1	MCERTS	1.3	< 1.0
Total Sulphur	mg/kg	50	MCERTS	320	< 50
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	2.4	0.2

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.16	-
Acenaphthylene	mg/kg	0.05	MCERTS	0.07	-
Acenaphthene	mg/kg	0.05	MCERTS	0.39	-
Fluorene	mg/kg	0.05	MCERTS	0.27	-
Phenanthrene	mg/kg	0.05	MCERTS	3.5	-
Anthracene	mg/kg	0.05	MCERTS	0.83	-
Fluoranthene	mg/kg	0.05	MCERTS	6.3	-
Pyrene	mg/kg	0.05	MCERTS	5.8	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	3	-
Chrysene	mg/kg	0.05	MCERTS	2.9	-
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	3.3	-
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	1.5	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	2.8	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	1.5	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.25	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	1.6	-

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	34	-

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Analytical Report Number: 23-28847
Project / Site name: Don Street
Your Order No: 004601

Lab Sample Number				2650711	2650712
Sample Reference				Knotweed 101	Oil Tank 1 Base
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				14/04/2023	14/04/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Heavy Metals / Metalloids					
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	17	3.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.7	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	27	7.8
Copper (aqua regia extractable)	mg/kg	1	MCERTS	80	7.7
Lead (aqua regia extractable)	mg/kg	1	MCERTS	110	6.8
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	24	10
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	130	28
Petroleum Hydrocarbons					
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	< 2.0	< 2.0
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	< 4.0	< 4.0
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	16	< 1.0
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	56	< 1.0
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	< 10	< 10
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	78	< 10
VOCs					
Chloromethane	µg/kg	5	ISO 17025	-	< 5.0
Chloroethane	µg/kg	5	NONE	-	< 5.0
Bromomethane	µg/kg	5	ISO 17025	-	< 5.0
Vinyl Chloride	µg/kg	5	NONE	-	< 5.0
Trichlorofluoromethane	µg/kg	5	NONE	-	< 5.0
1,1-Dichloroethene	µg/kg	5	NONE	-	< 5.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	5	NONE	-	< 5.0
Cis-1,2-dichloroethene	µg/kg	5	ISO 17025	-	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	-	< 5.0
1,1-Dichloroethane	µg/kg	5	ISO 17025	-	< 5.0
2,2-Dichloropropane	µg/kg	5	ISO 17025	-	< 5.0
Trichloromethane	µg/kg	5	ISO 17025	-	< 5.0
1,1,1-Trichloroethane	µg/kg	5	ISO 17025	-	< 5.0
1,2-Dichloroethane	µg/kg	5	ISO 17025	-	< 5.0
1,1-Dichloropropene	µg/kg	5	ISO 17025	-	< 5.0
Trans-1,2-dichloroethene	µg/kg	5	NONE	-	< 5.0
Benzene	µg/kg	5	MCERTS	-	< 5.0
Tetrachloromethane	µg/kg	5	NONE	-	< 5.0
1,2-Dichloropropane	µg/kg	5	ISO 17025	-	< 5.0
Trichloroethene	µg/kg	5	ISO 17025	-	< 5.0
Dibromomethane	µg/kg	5	ISO 17025	-	< 5.0
Bromodichloromethane	µg/kg	5	ISO 17025	-	< 5.0
Cis-1,3-dichloropropene	µg/kg	5	ISO 17025	-	< 5.0
Trans-1,3-dichloropropene	µg/kg	5	ISO 17025	-	< 5.0
Toluene	µg/kg	5	MCERTS	-	< 5.0
1,1,2-Trichloroethane	µg/kg	5	ISO 17025	-	< 5.0
1,3-Dichloropropane	µg/kg	5	ISO 17025	-	< 5.0
Dibromochloromethane	µg/kg	5	ISO 17025	-	< 5.0
Tetrachloroethene	µg/kg	5	NONE	-	< 5.0

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Analytical Report Number: 23-28847
Project / Site name: Don Street
Your Order No: 004601

Lab Sample Number				2650711	2650712
Sample Reference				Knotweed 101	Oil Tank 1 Base
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				14/04/2023	14/04/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
1,2-Dibromoethane	µg/kg	5	ISO 17025	-	< 5.0
Chlorobenzene	µg/kg	5	ISO 17025	-	< 5.0
1,1,1,2-Tetrachloroethane	µg/kg	5	ISO 17025	-	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	-	< 5.0
p & m-Xylene	µg/kg	5	MCERTS	-	< 5.0
Styrene	µg/kg	5	ISO 17025	-	< 5.0
Tribromomethane	µg/kg	5	NONE	-	< 5.0
o-Xylene	µg/kg	5	MCERTS	-	< 5.0
1,1,2,2-Tetrachloroethane	µg/kg	5	ISO 17025	-	< 5.0
Isopropylbenzene	µg/kg	5	ISO 17025	-	< 5.0
Bromobenzene	µg/kg	5	ISO 17025	-	< 5.0
n-Propylbenzene	µg/kg	5	ISO 17025	-	< 5.0
2-Chlorotoluene	µg/kg	5	ISO 17025	-	< 5.0
4-Chlorotoluene	µg/kg	5	ISO 17025	-	< 5.0
1,3,5-Trimethylbenzene	µg/kg	5	ISO 17025	-	< 5.0
tert-Butylbenzene	µg/kg	5	ISO 17025	-	< 5.0
1,2,4-Trimethylbenzene	µg/kg	5	ISO 17025	-	< 5.0
sec-Butylbenzene	µg/kg	5	ISO 17025	-	< 5.0
1,3-Dichlorobenzene	µg/kg	5	ISO 17025	-	< 5.0
p-Isopropyltoluene	µg/kg	5	ISO 17025	-	< 5.0
1,2-Dichlorobenzene	µg/kg	5	ISO 17025	-	< 5.0
1,4-Dichlorobenzene	µg/kg	5	ISO 17025	-	< 5.0
Butylbenzene	µg/kg	5	NONE	-	< 5.0
1,2-Dibromo-3-chloropropane	µg/kg	5	ISO 17025	-	< 5.0
1,2,4-Trichlorobenzene	µg/kg	5	ISO 17025	-	< 5.0
Hexachlorobutadiene	µg/kg	5	NONE	-	< 5.0
1,2,3-Trichlorobenzene	µg/kg	5	ISO 17025	-	< 5.0

SVOCs

Aniline	mg/kg	0.1	NONE	-	0.5
Phenol	mg/kg	0.2	ISO 17025	-	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	-	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	-	< 0.3
Hexachloroethane	mg/kg	0.05	ISO 17025	-	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	-	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	-	< 0.2
Isophorone	mg/kg	0.2	MCERTS	-	< 0.2
2-Nitrophenol	mg/kg	0.3	NONE	-	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	-	< 0.05
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	-	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	NONE	-	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	NONE	-	< 0.2

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Analytical Report Number: 23-28847
Project / Site name: Don Street
Your Order No: 004601

Lab Sample Number				2650711	2650712
Sample Reference				Knotweed 101	Oil Tank 1 Base
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				14/04/2023	14/04/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
2-Methylnaphthalene	mg/kg	0.1	NONE	-	< 0.1
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	< 0.1
Dimethylphthalate	mg/kg	0.1	MCERTS	-	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	NONE	-	< 0.1
Acenaphthylene	mg/kg	0.05	MCERTS	-	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	-	< 0.05
2,4-Dinitrotoluene	mg/kg	0.2	NONE	-	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	-	< 0.2
4-Chlorophenyl phenyl ether	mg/kg	0.3	MCERTS	-	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	-	< 0.2
4-Nitroaniline	mg/kg	0.2	NONE	-	< 0.2
Fluorene	mg/kg	0.05	MCERTS	-	< 0.05
Azobenzene	mg/kg	0.3	NONE	-	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	-	< 0.05
Anthracene	mg/kg	0.05	MCERTS	-	< 0.05
Carbazole	mg/kg	0.3	MCERTS	-	< 0.3
Dibutyl phthalate	mg/kg	0.2	NONE	-	< 0.2
Anthraquinone	mg/kg	0.3	NONE	-	< 0.3
Fluoranthene	mg/kg	0.05	MCERTS	-	< 0.05
Pyrene	mg/kg	0.05	MCERTS	-	< 0.05
Butyl benzyl phthalate	mg/kg	0.3	NONE	-	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	< 0.05
Chrysene	mg/kg	0.05	MCERTS	-	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	-	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	-	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	< 0.05

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-28847
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2650711	Knotweed 101	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2650712	Oil Tank 1 Base	None Supplied	None Supplied	Brown sand.

Analytical Report Number : 23-28847
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS

Analytical Report Number : 23-28847
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

UKAS TESTING
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Analytical Report Number : 23-38629

Project / Site name:	Don Street	**Samples received on:**	09/06/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	09/06/2023
Your order number:	005132	**Analysis completed by:**	20/06/2023
Report Issue Number:	1	**Report issued on:**	20/06/2023
Samples Analysed:	5 water samples		

Signed:

Joanna Wawrzeczko
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Analytical Report Number: 23-38629
Project / Site name: Don Street

Your Order No: 005132

Lab Sample Number				2709267	2709268	2709269	2709270	2709271
Sample Reference				P1	P2	P3	P4	P5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				08/06/2023	08/06/2023	08/06/2023	08/06/2023	08/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
General Inorganics								
pH (L005B)	pH Units	N/A	ISO 17025	8.1	7.9	7.9	7.9	7.7
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	< 1.0	2.3	< 1.0	< 1.0	< 1.0
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	2.73	3.02	2.7	3.02	2.53
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	< 2.0	< 2.0	2	2	< 2.0
Total Phenols								
Total Phenols (monohydric)	µg/l	1	ISO 17025	2.6	11	2.1	2.5	2.9
Heavy Metals / Metalloids								
Calcium (dissolved)	mg/l	0.012	ISO 17025	85	82	85	80	92
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	3.73	4.2	3.93	4.27	0.75
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.3	0.3	0.3	0.2	0.3
Copper (dissolved)	µg/l	0.5	ISO 17025	2.5	2.7	2.7	3.6	1.9
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	13	20	8.2	18	78
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	0.9	1.2	0.9	1	< 0.5
Selenium (dissolved)	µg/l	0.6	ISO 17025	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6
Zinc (dissolved)	µg/l	0.5	ISO 17025	3.9	3.7	7.8	2.8	6
Monoaromatics & Oxygenates								
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-38629
Project / Site name: Don Street

Your Order No: 005132

Lab Sample Number				2709267	2709268	2709269	2709270	2709271
Sample Reference				P1	P2	P3	P4	P5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				08/06/2023	08/06/2023	08/06/2023	08/06/2023	08/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Petroleum Hydrocarbons								
TPH1 (C10 - C40) EH_1D_TOTAL_MS	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C5 - C6 HS_1D_AL	µg/l	1	ISO 17025	< 1.0##	< 1.0##	< 1.0##	< 1.0##	< 1.0##
TPH-CWG - Aliphatic >C6 - C8 HS_1D_AL	µg/l	1	ISO 17025	< 1.0##	< 1.0##	< 1.0##	< 1.0##	< 1.0##
TPH-CWG - Aliphatic >C8 - C10 HS_1D_AL	µg/l	1	ISO 17025	< 1.0##	< 1.0##	< 1.0##	< 1.0##	< 1.0##
TPH-CWG - Aliphatic >C10 - C12 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) HS+EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C5 - C7 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35) HS+EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
VOCs								
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	ISO 17025	< 3.0##	< 3.0##	< 3.0##	< 3.0##	< 3.0##
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloromethane	µg/l	3	ISO 17025	< 3.0##	< 3.0##	< 3.0##	< 3.0##	< 3.0##
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0##	< 3.0##	< 3.0##	< 3.0##	< 3.0##
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-38629
Project / Site name: Don Street

Your Order No: 005132

Lab Sample Number				2709267	2709268	2709269	2709270	2709271
Sample Reference				P1	P2	P3	P4	P5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				08/06/2023	08/06/2023	08/06/2023	08/06/2023	08/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p & m-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Tribromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
o-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0##	< 3.0##	< 3.0##	< 3.0##	< 3.0##
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
SVOCs								
Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-38629
Project / Site name: Don Street

Your Order No: 005132

Lab Sample Number				2709267	2709268	2709269	2709270	2709271
Sample Reference				P1	P2	P3	P4	P5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				08/06/2023	08/06/2023	08/06/2023	08/06/2023	08/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-38629
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025

Analytical Report Number : 23-38629
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

- Quality control parameter has a high recovery (outside of limit); however the associated result is below the reporting limit, other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.

Sample Deviation Report

Analytical Report Number : 23-38629

Project / Site name: Don Street

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
P1	None Supplied	W	2709267	c	pH at 20oC in water (automated)	L099-PL	c
P2	None Supplied	W	2709268	c	pH at 20oC in water (automated)	L099-PL	c
P3	None Supplied	W	2709269	c	pH at 20oC in water (automated)	L099-PL	c
P4	None Supplied	W	2709270	c	pH at 20oC in water (automated)	L099-PL	c
P5	None Supplied	W	2709271	c	pH at 20oC in water (automated)	L099-PL	c

4041

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Analytical Report Number : 23-28809-2

Replaces Analytical Report Number: 23-28809, issue no. 1
Client references/information amended.
Sample ID amended for all samples as per client's request

Project / Site name:	Don St	**Samples received on:**	17/04/2023
Your job number:	14 554	**Samples instructed on/ Analysis started on:**	17/04/2023
Your order number:	004586	**Analysis completed by:**	24/04/2023
Report Issue Number:	2	**Report issued on:**	25/04/2023
Samples Analysed:	5 water samples		

Izabela Wójcik
Signed:

Izabela Wójcik
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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UKAS TESTING
4041

Analytical i2 Environmental Science

Analytical Report Number: 23-28809
Project / Site name: Don St

Your Order No: 004586

Lab Sample Number				2650501	2650502	2650503	2650504	2650505
Sample Reference				Point 1	Point 2	Point 3	Point 4	Point 5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				14/04/2023	14/04/2023	14/04/2023	14/04/2023	14/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
General Inorganics								
pH (L005B)	pH Units	N/A	ISO 17025	8	7.5	8	7.9	7.5
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	1.7	1.5	1.7	1.7	< 1.0
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	4.67	4.6	4.79	4.32	3.72
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	13	7	5	49	150
Total Phenols								
Total Phenols (monohydric)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	1.1
Heavy Metals / Metalloids								
Calcium (dissolved)	mg/l	0.012	ISO 17025	85	61	75	80	90
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	3.53	3.57	3.6	2.42	0.82
Cadmium (dissolved)	µg/l	0.02	ISO 17025	0.03	0.03	0.04	0.03	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.5	0.4	0.5	0.4	0.3
Copper (dissolved)	µg/l	0.5	ISO 17025	5.1	5.3	3.9	3.5	2.1
Lead (dissolved)	µg/l	0.2	ISO 17025	1.6	1	0.8	0.4	2
Manganese (dissolved)	µg/l	0.05	ISO 17025	55	80	57	15	79
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	1.6	1.6	1.7	1.4	< 0.5
Selenium (dissolved)	µg/l	0.6	ISO 17025	0.7	< 0.6	0.6	< 0.6	< 0.6
Zinc (dissolved)	µg/l	0.5	ISO 17025	14	54	12	6.8	6.9
Monoaromatics & Oxygenates								
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Petroleum Hydrocarbons								
TPH1 (C10 - C40) $_{EH\_1D\_TOTAL\_MS}$	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	76
TPH-CWG - Aliphatic >C5 - C6 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) $_{HS+EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C5 - C7 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	25
TPH-CWG - Aromatic >C16 - C21 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	27
TPH-CWG - Aromatic >C21 - C35 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	24

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Analytical Report Number: 23-28809
Project / Site name: Don St

Your Order No: 004586

Lab Sample Number				2650501	2650502	2650503	2650504	2650505
Sample Reference				Point 1	Point 2	Point 3	Point 4	Point 5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				14/04/2023	14/04/2023	14/04/2023	14/04/2023	14/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
TPH-CWG - Aromatic (C5 - C35) HS+EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	76
VOCs								
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p & m-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Tribromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
o-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-28809
Project / Site name: Don St

Your Order No: 004586

Lab Sample Number				2650501	2650502	2650503	2650504	2650505
Sample Reference				Point 1	Point 2	Point 3	Point 4	Point 5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				14/04/2023	14/04/2023	14/04/2023	14/04/2023	14/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

SVOCs

Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	0.47
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	2.9

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Analytical Report Number: 23-28809
Project / Site name: Don St

Your Order No: 004586

Lab Sample Number				2650501	2650502	2650503	2650504	2650505
Sample Reference				Point 1	Point 2	Point 3	Point 4	Point 5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				14/04/2023	14/04/2023	14/04/2023	14/04/2023	14/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	2.7
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	1.5
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	1.4
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	2.2
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	0.73
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	1.7
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	1
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	0.31
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	1.3
3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-28809
Project / Site name: Don St

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

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Analytical Report Number : 23-28809
Project / Site name: Don St

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Sample Deviation Report

Analytical Report Number : 23-28809
Project / Site name: Don St

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
Point 1	None Supplied	W	2650501	c	pH at 20oC in water (automated)	L099-PL	c
Point 2	None Supplied	W	2650502	c	pH at 20oC in water (automated)	L099-PL	c
Point 3	None Supplied	W	2650503	c	pH at 20oC in water (automated)	L099-PL	c
Point 4	None Supplied	W	2650504	c	pH at 20oC in water (automated)	L099-PL	c
Point 5	None Supplied	W	2650505	c	pH at 20oC in water (automated)	L099-PL	c

4041

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Analytical Report Number : 23-31387

Project / Site name:	Don Street	**Samples received on:**	28/04/2023
Your job number:	14 554	**Samples instructed on/ Analysis started on:**	28/04/2023
Your order number:	004725	**Analysis completed by:**	09/05/2023
Report Issue Number:	1	**Report issued on:**	09/05/2023
Samples Analysed:	5 water samples		

Signed:

Joanna Wawrzeczko
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Analytical Report Number: 23-31387
Project / Site name: Don Street

Your Order No: 004725

Lab Sample Number				2665593	2665594	2665595	2665596	2665597
Sample Reference				P1	P2	P3	P4	P5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				28/04/2023	28/04/2023	28/04/2023	28/04/2023	28/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
General Inorganics								
pH (L005B)	pH Units	N/A	ISO 17025	7.8	7.4	7.8	7.8	7.5
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	1.3	< 1.0	1.1	1.2	< 1.0
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	4.36	4.41	4.05	4.38	3.19
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	8	10	38	5	4
Total Phenols								
Total Phenols (monohydric)	µg/l	1	ISO 17025	1.7	< 1.0	1.1	1.1	< 1.0
Heavy Metals / Metalloids								
Calcium (dissolved)	mg/l	0.012	ISO 17025	82	65	91	89	100
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	2.75	3.03	2.64	2.67	0.66
Cadmium (dissolved)	µg/l	0.02	ISO 17025	0.09	< 0.02	< 0.02	0.02	0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.3	< 0.2	0.3	0.3	0.3
Copper (dissolved)	µg/l	0.5	ISO 17025	2.4	2.1	2.3	3.1	1.3
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	0.3	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	3.3	2.4	2.4	3.6	3.3
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	1.2	0.9	1	1.3	< 0.5
Selenium (dissolved)	µg/l	0.6	ISO 17025	0.8	< 0.6	0.7	0.6	< 0.6
Zinc (dissolved)	µg/l	0.5	ISO 17025	5.5	8.3	4.4	8.9	4
Monoaromatics & Oxygenates								
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-31387
Project / Site name: Don Street

Your Order No: 004725

Lab Sample Number				2665593	2665594	2665595	2665596	2665597
Sample Reference				P1	P2	P3	P4	P5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				28/04/2023	28/04/2023	28/04/2023	28/04/2023	28/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Petroleum Hydrocarbons								
TPH1 (C10 - C40) EH_1D_TOTAL_MS	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C5 - C6 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) HS+EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C5 - C7 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35) HS+EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
VOCs								
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-31387
Project / Site name: Don Street

Your Order No: 004725

Lab Sample Number				2665593	2665594	2665595	2665596	2665597
Sample Reference				P1	P2	P3	P4	P5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				28/04/2023	28/04/2023	28/04/2023	28/04/2023	28/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p & m-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Tribromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
o-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
SVOCs								
Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

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Analytical Report Number: 23-31387
Project / Site name: Don Street

Your Order No: 004725

Lab Sample Number				2665593	2665594	2665595	2665596	2665597
Sample Reference				P1	P2	P3	P4	P5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				28/04/2023	28/04/2023	28/04/2023	28/04/2023	28/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-31387
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025

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Analytical Report Number : 23-31387
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Sample Deviation Report

Analytical Report Number : 23-31387

Project / Site name: Don Street

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
P1	None Supplied	W	2665593	c	pH at 20oC in water (automated)	L099-PL	c
P2	None Supplied	W	2665594	c	pH at 20oC in water (automated)	L099-PL	c
P3	None Supplied	W	2665595	c	pH at 20oC in water (automated)	L099-PL	c
P4	None Supplied	W	2665596	c	pH at 20oC in water (automated)	L099-PL	c
P5	None Supplied	W	2665597	c	pH at 20oC in water (automated)	L099-PL	c

UKAS TESTING
4041

Environmental Science

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Analytical Report Number : 23-33820

Project / Site name:	Don Street	**Samples received on:**	15/05/2023
Your job number:	14 554	**Samples instructed on/ Analysis started on:**	15/05/2023
Your order number:	004842	**Analysis completed by:**	19/05/2023
Report Issue Number:	1	**Report issued on:**	19/05/2023
Samples Analysed:	5 water samples		

Signed:

Dominika Warjan
Junior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-33820
Project / Site name: Don Street

Your Order No: 004842

Lab Sample Number				2679476	2679477	2679478	2679479	2679480
Sample Reference				P1	P2	P3	P4	P5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				12/05/2023	12/05/2023	12/05/2023	12/05/2023	12/05/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
General Inorganics								
pH (L005B)	pH Units	N/A	ISO 17025	7.8	7.5	7.7	7.7	7.5
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	2.9	2.7	2.6	2.4	< 1.0
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	4.62	4.65	4.28	4.47	3.4
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	13	76	14	26	69
Total Phenols								
Total Phenols (monohydric)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Heavy Metals / Metalloids								
Calcium (dissolved)	mg/l	0.012	ISO 17025	100	92	110	87	93
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	3.04	2.54	3.16	3.08	0.74
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.3	< 0.2	0.3	0.3	< 0.2
Copper (dissolved)	µg/l	0.5	ISO 17025	2.8	2.4	3.2	4.2	1.1
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	12	8.2	15	8.5	370
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	1	1.2	1.1	1	< 0.5
Selenium (dissolved)	µg/l	0.6	ISO 17025	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6
Zinc (dissolved)	µg/l	0.5	ISO 17025	3.5	7.4	4	4.3	7.2
Monoaromatics & Oxygenates								
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Petroleum Hydrocarbons								
TPH1 (C10 - C40) EH_1D_TOTAL_MS	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C5 - C6## HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8## HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10## HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) HS+EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10

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Analytical Report Number: 23-33820
Project / Site name: Don Street

Your Order No: 004842

Lab Sample Number				2679476	2679477	2679478	2679479	2679480
Sample Reference				P1	P2	P3	P4	P5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				12/05/2023	12/05/2023	12/05/2023	12/05/2023	12/05/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
TPH-CWG - Aromatic >C5 - C7 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35) $_{HS+EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
VOCs								
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloromethane##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p & m-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Tribromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
o-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-33820
Project / Site name: Don Street

Your Order No: 004842

Lab Sample Number				2679476	2679477	2679478	2679479	2679480
Sample Reference				P1	P2	P3	P4	P5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				12/05/2023	12/05/2023	12/05/2023	12/05/2023	12/05/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

SVOCs

Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

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Analytical Report Number: 23-33820
Project / Site name: Don Street

Your Order No: 004842

Lab Sample Number				2679476	2679477	2679478	2679479	2679480
Sample Reference				P1	P2	P3	P4	P5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				12/05/2023	12/05/2023	12/05/2023	12/05/2023	12/05/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-33820
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025

Analytical Report Number : 23-33820
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

##Quality control parameter has a high recovery (outside of limit); however the associated result is below the reporting limit, other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.

Sample Deviation Report

Analytical Report Number : 23-33820

Project / Site name: Don Street

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
P1	None Supplied	W	2679476	c	pH at 20oC in water (automated)	L099-PL	c
P2	None Supplied	W	2679477	c	pH at 20oC in water (automated)	L099-PL	c
P3	None Supplied	W	2679478	c	pH at 20oC in water (automated)	L099-PL	c
P4	None Supplied	W	2679479	c	pH at 20oC in water (automated)	L099-PL	c
P5	None Supplied	W	2679480	c	pH at 20oC in water (automated)	L099-PL	c

UKAS TESTING
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Analytical Report Number : 23-36456

Project / Site name:	Don Street	**Samples received on:**	26/05/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	30/05/2023
Your order number:	005001	**Analysis completed by:**	06/06/2023
Report Issue Number:	1	**Report issued on:**	06/06/2023
Samples Analysed:	4 water samples		

Izabela Wójcik

Signed:

Izabela Wójcik
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Analytical Report Number: 23-36456
Project / Site name: Don Street

Your Order No: 005001

Lab Sample Number				2695384	2695385	2695386	2695387
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				25/05/2023	25/05/2023	25/05/2023	25/05/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
General Inorganics							
pH (L005B)	pH Units	N/A	ISO 17025	9.2	9.2	9.3	9
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	1.4	1.4	< 1.0	1
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	17.8	17.1	18.6	17.6
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	66	86	46	33
Total Phenols							
Total Phenols (monohydric)	µg/l	1	ISO 17025	1.3	1.2	< 1.0	1.7
Heavy Metals / Metalloids							
Calcium (dissolved)	mg/l	0.012	ISO 17025	160	160	150	160
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	11.4	11.6	11.5	12.2
Cadmium (dissolved)	µg/l	0.02	ISO 17025	0.04	0.07	0.03	0.03
Chromium (dissolved)	µg/l	0.2	ISO 17025	2.6	2.5	2.2	2.4
Copper (dissolved)	µg/l	0.5	ISO 17025	22	25	22	19
Lead (dissolved)	µg/l	0.2	ISO 17025	0.3	0.4	< 0.2	0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	1.6	2.7	4.9	1.2
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	5.6	5.7	5.3	5.5
Selenium (dissolved)	µg/l	0.6	ISO 17025	3.6	3.8	3.5	3.7
Zinc (dissolved)	µg/l	0.5	ISO 17025	2.1	1.8	1.7	1.3
Monoaromatics & Oxygenates#							
Benzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Petroleum Hydrocarbons							
TPH1 (C10 - C40) EH_1D_TOTAL_MS	µg/l	10	ISO 17025	45	40	35	20
TPH-CWG - Aliphatic## >C5 - C6 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic## >C6 - C8 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic## >C8 - C10 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) HS+EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10

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Analytical Report Number: 23-36456
Project / Site name: Don Street

Your Order No: 005001

Lab Sample Number				2695384	2695385	2695386	2695387
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				25/05/2023	25/05/2023	25/05/2023	25/05/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
TPH-CWG - Aromatic >C5 - C7 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	20	20	< 10	10
TPH-CWG - Aromatic >C16 - C21 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	10	10	15	10
TPH-CWG - Aromatic >C21 - C35 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	15	10	20	< 10
TPH-CWG - Aromatic (C5 - C35) $_{HS+EH\_1D\_AR\_MS}$	µg/l	10	NONE	45	40	35	20
VOCs#							
Chloromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trichloromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,2-dichloroethene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
p & m-Xylene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Styrene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Tribromomethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
o-Xylene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Isopropylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-36456
Project / Site name: Don Street

Your Order No: 005001

Lab Sample Number				2695384	2695385	2695386	2695387
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				25/05/2023	25/05/2023	25/05/2023	25/05/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
1,3,5-Trimethylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0

SVOCs

Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	0.32	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05

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Analytical Report Number: 23-36456
Project / Site name: Don Street

Your Order No: 005001

Lab Sample Number				2695384	2695385	2695386	2695387
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				25/05/2023	25/05/2023	25/05/2023	25/05/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	0.2	< 0.01	0.19	0.15
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	0.93	0.7	0.85	0.84
Pyrene	µg/l	0.01	ISO 17025	0.84	0.61	0.73	0.76
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	0.24	0.16	0.18	0.23
Chrysene	µg/l	0.01	ISO 17025	0.3	0.19	0.21	0.26
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	0.36	0.23	0.28	0.36
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	0.17	0.11	0.14	0.15
Benzo(a)pyrene	µg/l	0.01	ISO 17025	0.28	0.17	0.21	0.27
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	0.19	< 0.01	< 0.01	0.2
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	0.24	< 0.01	< 0.01	0.25

3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-36456
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions

Analytical Report Number : 23-36456
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
HS	Headspace Analysis				
MS	Mass spectrometry				
FID	Flame Ionisation Detector				
GC	Gas Chromatography				
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))				
CU	Clean-up - e.g. by Florisil®, silica gel				
1D	GC - Single coil/column gas chromatography				
2D	GC-GC - Double coil/column gas chromatography				
Total	Aliphatics & Aromatics				
AL	Aliphatics				
AR	Aromatics				
#1	EH_2D_Total but with humics mathematically subtracted				
#2	EH_2D_Total but with fatty acids mathematically subtracted				
_	Operator - understore to separate acronyms (exception for +)				
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total				

- Data reported unaccredited due to quality control parameter failure associated with this result; other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.
- Quality control parameter has a high recovery (outside of limit); however the associated result is below the reporting limit, other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.

Sample Deviation Report

Analytical Report Number : 23-36456

Project / Site name: Don Street

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
P1	None Supplied	W	2695384	c	Settleable Solids in water	L004-PL	c
P1	None Supplied	W	2695384	c	Suspended solids in water	L004-PL	c
P1	None Supplied	W	2695384	c	pH at 20oC in water (automated)	L099-PL	c
P2	None Supplied	W	2695385	c	Settleable Solids in water	L004-PL	c
P2	None Supplied	W	2695385	c	Suspended solids in water	L004-PL	c
P2	None Supplied	W	2695385	c	pH at 20oC in water (automated)	L099-PL	c
P3	None Supplied	W	2695386	c	Settleable Solids in water	L004-PL	c
P3	None Supplied	W	2695386	c	Suspended solids in water	L004-PL	c
P3	None Supplied	W	2695386	c	pH at 20oC in water (automated)	L099-PL	c
P4	None Supplied	W	2695387	c	Settleable Solids in water	L004-PL	c
P4	None Supplied	W	2695387	c	Suspended solids in water	L004-PL	c
P4	None Supplied	W	2695387	c	pH at 20oC in water (automated)	L099-PL	c

UKAS TESTING
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Analytical Report Number : 23-38629

Project / Site name:	Don Street	**Samples received on:**	09/06/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	09/06/2023
Your order number:	005132	**Analysis completed by:**	20/06/2023
Report Issue Number:	1	**Report issued on:**	20/06/2023
Samples Analysed:	5 water samples		

Signed:

Joanna Wawrzeczko
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Analytical Report Number: 23-38629
Project / Site name: Don Street

Your Order No: 005132

Lab Sample Number				2709267	2709268	2709269	2709270	2709271
Sample Reference				P1	P2	P3	P4	P5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				08/06/2023	08/06/2023	08/06/2023	08/06/2023	08/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
General Inorganics								
pH (L005B)	pH Units	N/A	ISO 17025	8.1	7.9	7.9	7.9	7.7
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	< 1.0	2.3	< 1.0	< 1.0	< 1.0
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	2.73	3.02	2.7	3.02	2.53
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	< 2.0	< 2.0	2	2	< 2.0
Total Phenols								
Total Phenols (monohydric)	µg/l	1	ISO 17025	2.6	11	2.1	2.5	2.9
Heavy Metals / Metalloids								
Calcium (dissolved)	mg/l	0.012	ISO 17025	85	82	85	80	92
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	3.73	4.2	3.93	4.27	0.75
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.3	0.3	0.3	0.2	0.3
Copper (dissolved)	µg/l	0.5	ISO 17025	2.5	2.7	2.7	3.6	1.9
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	13	20	8.2	18	78
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	0.9	1.2	0.9	1	< 0.5
Selenium (dissolved)	µg/l	0.6	ISO 17025	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6
Zinc (dissolved)	µg/l	0.5	ISO 17025	3.9	3.7	7.8	2.8	6
Monoaromatics & Oxygenates								
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-38629
Project / Site name: Don Street

Your Order No: 005132

Lab Sample Number				2709267	2709268	2709269	2709270	2709271
Sample Reference				P1	P2	P3	P4	P5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				08/06/2023	08/06/2023	08/06/2023	08/06/2023	08/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Petroleum Hydrocarbons								
TPH1 (C10 - C40) EH_1D_TOTAL_MS	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C5 - C6 HS_1D_AL	µg/l	1	ISO 17025	< 1.0##	< 1.0##	< 1.0##	< 1.0##	< 1.0##
TPH-CWG - Aliphatic >C6 - C8 HS_1D_AL	µg/l	1	ISO 17025	< 1.0##	< 1.0##	< 1.0##	< 1.0##	< 1.0##
TPH-CWG - Aliphatic >C8 - C10 HS_1D_AL	µg/l	1	ISO 17025	< 1.0##	< 1.0##	< 1.0##	< 1.0##	< 1.0##
TPH-CWG - Aliphatic >C10 - C12 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) HS+EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C5 - C7 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35) HS+EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
VOCs								
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	ISO 17025	< 3.0##	< 3.0##	< 3.0##	< 3.0##	< 3.0##
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloromethane	µg/l	3	ISO 17025	< 3.0##	< 3.0##	< 3.0##	< 3.0##	< 3.0##
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0##	< 3.0##	< 3.0##	< 3.0##	< 3.0##
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-38629
Project / Site name: Don Street

Your Order No: 005132

Lab Sample Number				2709267	2709268	2709269	2709270	2709271
Sample Reference				P1	P2	P3	P4	P5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				08/06/2023	08/06/2023	08/06/2023	08/06/2023	08/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p & m-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Tribromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
o-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0##	< 3.0##	< 3.0##	< 3.0##	< 3.0##
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
SVOCs								
Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

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Analytical Report Number: 23-38629
Project / Site name: Don Street

Your Order No: 005132

Lab Sample Number				2709267	2709268	2709269	2709270	2709271
Sample Reference				P1	P2	P3	P4	P5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				08/06/2023	08/06/2023	08/06/2023	08/06/2023	08/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-38629
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025

Analytical Report Number : 23-38629
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

- Quality control parameter has a high recovery (outside of limit); however the associated result is below the reporting limit, other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.

Sample Deviation Report

Analytical Report Number : 23-38629

Project / Site name: Don Street

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
P1	None Supplied	W	2709267	c	pH at 20oC in water (automated)	L099-PL	c
P2	None Supplied	W	2709268	c	pH at 20oC in water (automated)	L099-PL	c
P3	None Supplied	W	2709269	c	pH at 20oC in water (automated)	L099-PL	c
P4	None Supplied	W	2709270	c	pH at 20oC in water (automated)	L099-PL	c
P5	None Supplied	W	2709271	c	pH at 20oC in water (automated)	L099-PL	c

UKAS TESTING
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Analytical Report Number : 23-41138

Project / Site name:	Don Street	**Samples received on:**	23/06/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	23/06/2023
Your order number:	005297	**Analysis completed by:**	28/06/2023
Report Issue Number:	1	**Report issued on:**	28/06/2023
Samples Analysed:	5 water samples		

Signed:

Joanna Wawrzeczko
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Analytical Report Number: 23-41138
Project / Site name: Don Street

Your Order No: 005297

Lab Sample Number				2725136	2725137	2725138	2725139	2725140
Sample Reference				P1	P2	P3	P4	P5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				21/06/2023	21/06/2023	21/06/2023	21/06/2023	21/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
General Inorganics								
pH (L005B)	pH Units	N/A	ISO 17025	8	7.7	7.7	7.7	7.6
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	4.11	3.8	3.66	3.65	3
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	25	21	6	12	12
Total Phenols								
Total Phenols (monohydric)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	1	< 1.0
Heavy Metals / Metalloids								
Calcium (dissolved)	mg/l	0.012	ISO 17025	100	110	91	97	110
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	3.68	3.15	3.33	3.63	1.02
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.4	5.5	0.6	0.2	1
Copper (dissolved)	µg/l	0.5	ISO 17025	3.7	5.2	3.8	3.9	6.7
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	2.6	2.2	8.4	8.2	470
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	1.3	3.4	1.5	2	1.4
Selenium (dissolved)	µg/l	0.6	ISO 17025	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6
Zinc (dissolved)	µg/l	0.5	ISO 17025	5	12	8.2	7.2	7.2
Monoaromatics & Oxygenates								
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-41138
Project / Site name: Don Street

Your Order No: 005297

Lab Sample Number				2725136	2725137	2725138	2725139	2725140
Sample Reference				P1	P2	P3	P4	P5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				21/06/2023	21/06/2023	21/06/2023	21/06/2023	21/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Petroleum Hydrocarbons								
TPH1 (C10 - C40) EH_1D_TOTAL_MS	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C5 - C6## HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8## HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10^ HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) HS+EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C5 - C7 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35) HS+EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
VOCs								
Chloromethane^	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloromethane##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-41138
Project / Site name: Don Street

Your Order No: 005297

Lab Sample Number				2725136	2725137	2725138	2725139	2725140
Sample Reference				P1	P2	P3	P4	P5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				21/06/2023	21/06/2023	21/06/2023	21/06/2023	21/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
1,1,1,2-Tetrachloroethane##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p & m-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Tribromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
o-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
SVOCs								
Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

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Analytical Report Number: 23-41138
Project / Site name: Don Street

Your Order No: 005297

Lab Sample Number				2725136	2725137	2725138	2725139	2725140
Sample Reference				P1	P2	P3	P4	P5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				21/06/2023	21/06/2023	21/06/2023	21/06/2023	21/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-41138
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025

Analytical Report Number : 23-41138
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

^ Data reported unaccredited due to quality control parameter failure associated with this result; The result should be considered as being deviating and may be compromised.
- Quality control parameter has a high recovery (outside of limit); however the associated result is below the reporting limit, other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.

Sample Deviation Report

Analytical Report Number : 23-41138

Project / Site name: Don Street

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
P1	None Supplied	W	2725136	c	pH at 20oC in water (automated)	L099-PL	c
P2	None Supplied	W	2725137	c	pH at 20oC in water (automated)	L099-PL	c
P3	None Supplied	W	2725138	c	pH at 20oC in water (automated)	L099-PL	c
P4	None Supplied	W	2725139	c	pH at 20oC in water (automated)	L099-PL	c
P5	None Supplied	W	2725140	c	pH at 20oC in water (automated)	L099-PL	c

UKAS TESTING
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Analytical Report Number : 23-44133

Project / Site name:	Don Street	**Samples received on:**	10/07/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	10/07/2023
Your order number:	005457	**Analysis completed by:**	14/07/2023
Report Issue Number:	1	**Report issued on:**	17/07/2023
Samples Analysed:	4 water samples		

Signed:

Anna Goc
PL Head of Reporting Team
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-44133
Project / Site name: Don Street

Your Order No: 005457

Lab Sample Number				2742876	2742877	2742878	2742879
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				07/07/2023	07/07/2023	07/07/2023	07/07/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
General Inorganics							
pH (L099)	pH Units	N/A	ISO 17025	8	8	8	7.9
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	2.58	2.71	2.7	2.63
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	3	3	13	90
Total Phenols							
Total Phenols (monohydric)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
Heavy Metals / Metalloids							
Calcium (dissolved)	mg/l	0.012	ISO 17025	89	100	89	90
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	4.31	4.2	4.11	3.59
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	< 0.02	< 0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	19	0.5	0.4	0.3
Copper (dissolved)	µg/l	0.5	ISO 17025	7	7.1	3.2	5.2
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	13	4	1.6	3.7
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	1	1.1	1.1	0.9
Selenium (dissolved)	µg/l	0.6	ISO 17025	< 0.6	< 0.6	< 0.6	< 0.6
Zinc (dissolved)	µg/l	0.5	ISO 17025	3.7	4	4.4	6.1
Monoaromatics & Oxygenates							
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene ##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-44133
Project / Site name: Don Street

Your Order No: 005457

Lab Sample Number				2742876	2742877	2742878	2742879
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				07/07/2023	07/07/2023	07/07/2023	07/07/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Petroleum Hydrocarbons							
TPH1 (C10 - C40) EH_1D_TOTAL_MS	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C5 - C6 ## HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8 ## HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10 ## HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) HS+EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C5 - C7 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35) HS+EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
VOCs							
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane ##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene ##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane ##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane #	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Chloroform ##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane ##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Carbontetrachloride ##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane ##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane ##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene ##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloroethane ##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-44133
Project / Site name: Don Street

Your Order No: 005457

Lab Sample Number				2742876	2742877	2742878	2742879
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				07/07/2023	07/07/2023	07/07/2023	07/07/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene #	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

SVOCs

Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05

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Analytical Report Number: 23-44133
Project / Site name: Don Street

Your Order No: 005457

Lab Sample Number				2742876	2742877	2742878	2742879
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				07/07/2023	07/07/2023	07/07/2023	07/07/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01

3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-44133
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025

Analytical Report Number : 23-44133
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

- Data reported unaccredited due to quality control parameter failure associated with this result; other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.
- Quality control parameter has a high recovery (outside of limit); however the associated result is below the reporting limit, other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.

Sample Deviation Report

Analytical Report Number : 23-44133

Project / Site name: Don Street

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
P1	None Supplied	W	2742876	c	pH at 20oC in water (automated)	L099-PL	c
P2	None Supplied	W	2742877	c	pH at 20oC in water (automated)	L099-PL	c
P3	None Supplied	W	2742878	c	pH at 20oC in water (automated)	L099-PL	c
P4	None Supplied	W	2742879	c	pH at 20oC in water (automated)	L099-PL	c

UKAS TESTING
4041

Environmental Science

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Analytical Report Number : 23-47847

Project / Site name:	Don Street	**Samples received on:**	27/07/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	31/07/2023
Your order number:	005643	**Analysis completed by:**	04/08/2023
Report Issue Number:	1	**Report issued on:**	04/08/2023
Samples Analysed:	4 water samples		

Signed:

Dominika Warjan
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Analytical Report Number: 23-47847
Project / Site name: Don Street

Your Order No: 005643

Lab Sample Number				2764533	2764534	2764535	2764536
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				26/07/2023	26/07/2023	26/07/2023	26/07/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
General Inorganics							
pH (L099)	pH Units	N/A	ISO 17025	8.2	8.2	8.2	8.2
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	4.7	6.1	5.8	5.1
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	5.63	5.5	5.48	5.99
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	6	5	7	4
Total Phenols							
Total Phenols (monohydric)	µg/l	1	ISO 17025	1	1.4	1.2	1.3
Heavy Metals / Metalloids							
Calcium (dissolved)	mg/l	0.012	ISO 17025	93	90	84	89
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	3.87	3.9	4.03	1.4
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	< 0.02	< 0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.3	0.4	0.5	< 0.2
Copper (dissolved)	µg/l	0.5	ISO 17025	8.1	8.1	5.6	3
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	0.5	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	5.6	4.8	4.7	0.89
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	1.9	1.6	1.6	0.6
Selenium (dissolved)	µg/l	0.6	ISO 17025	0.7	0.7	0.8	0.6
Zinc (dissolved)	µg/l	0.5	ISO 17025	8.4	6.6	7.1	2.2
Monoaromatics & Oxygenates							
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Petroleum Hydrocarbons							
TPH1 (C10 - C40) EH_1D_TOTAL_MS	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C5 - C6 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10## HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) HS+EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10

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Analytical Report Number: 23-47847
Project / Site name: Don Street

Your Order No: 005643

Lab Sample Number				2764533	2764534	2764535	2764536
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				26/07/2023	26/07/2023	26/07/2023	26/07/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
TPH-CWG - Aromatic >C5 - C7 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35) HS+EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
VOCs							
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chloroform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Carbontetrachloride	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-47847
Project / Site name: Don Street

Your Order No: 005643

Lab Sample Number				2764533	2764534	2764535	2764536
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				26/07/2023	26/07/2023	26/07/2023	26/07/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

SVOCs

Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01

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Analytical Report Number: 23-47847
Project / Site name: Don Street

Your Order No: 005643

Lab Sample Number				2764533	2764534	2764535	2764536
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				26/07/2023	26/07/2023	26/07/2023	26/07/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01

3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-47847
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025

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Analytical Report Number : 23-47847
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

- Quality control parameter has a high recovery (outside of limit); however the associated result is below the reporting limit, other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.

Sample Deviation Report

Analytical Report Number : 23-47847
Project / Site name: Don Street

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
P1	None Supplied	W	2764533	c	pH at 20oC in water (automated)	L099-PL	c
P2	None Supplied	W	2764534	c	pH at 20oC in water (automated)	L099-PL	c
P3	None Supplied	W	2764535	c	pH at 20oC in water (automated)	L099-PL	c
P4	None Supplied	W	2764536	c	pH at 20oC in water (automated)	L099-PL	c

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Analytical Report Number : 23-50844

Project / Site name:	Don Street	**Samples received on:**	14/08/2023
Your job number:	14 554	**Samples instructed on/ Analysis started on:**	14/08/2023
Your order number:	005797	**Analysis completed by:**	18/08/2023
Report Issue Number:	1	**Report issued on:**	18/08/2023
Samples Analysed:	4 water samples		

Signed:

Dominika Warjan
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-50844
Project / Site name: Don Street

Your Order No: 005797

Lab Sample Number				2780646	2780647	2780648	2780649
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				11/08/2023	11/08/2023	11/08/2023	11/08/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
General Inorganics							
pH (L099)	pH Units	N/A	ISO 17025	8.2	8.1	8.1	8.1
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	3.2	< 1.0	2.3	1.6
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	4.3	4.66	4.27	4.61
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	3	4	6	3
Total Phenols							
Total Phenols (monohydric)	µg/l	1	ISO 17025	< 1.0	< 1.0	1.4	< 1.0
Heavy Metals / Metalloids							
Calcium (dissolved)	mg/l	0.012	ISO 17025	78	78	84	85
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	U/S*	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	3.56	3.58	3.72	4
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	< 0.02	< 0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.4	0.5	0.5	0.5
Copper (dissolved)	µg/l	0.5	ISO 17025	3.2	3.2	4.2	3.2
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	1.1	1.5	1.2	1.5
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	1	1	1	1.1
Selenium (dissolved)	µg/l	0.6	ISO 17025	< 0.6	< 0.6	< 0.6	0.7
Zinc (dissolved)	µg/l	0.5	ISO 17025	2.5	3	3.8	3.2
Monoaromatics & Oxygenates							
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Petroleum Hydrocarbons							
TPH1 (C10 - C40) $_{EH\_1D\_TOTAL\_MS}$	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C5 - C6 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8## $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10## $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) $_{HS+EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10

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Analytical Report Number: 23-50844
Project / Site name: Don Street

Your Order No: 005797

Lab Sample Number				2780646	2780647	2780648	2780649
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				11/08/2023	11/08/2023	11/08/2023	11/08/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
TPH-CWG - Aromatic >C5 - C7 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35) $_{HS+EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10

VOCs

Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chloroform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Carbontetrachloride##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-50844
Project / Site name: Don Street

Your Order No: 005797

Lab Sample Number				2780646	2780647	2780648	2780649
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				11/08/2023	11/08/2023	11/08/2023	11/08/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

SVOCs

Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01

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Analytical Report Number: 23-50844
Project / Site name: Don Street

Your Order No: 005797

Lab Sample Number				2780646	2780647	2780648	2780649
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				11/08/2023	11/08/2023	11/08/2023	11/08/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-50844
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025

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Analytical Report Number : 23-50844
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

*U/S - Unsuitable for analysis due to high colour intensity.
- Quality control parameter has a high recovery (outside of limit); however the associated result is below the reporting limit, other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.

Sample Deviation Report

Analytical Report Number : 23-50844
Project / Site name: Don Street

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
P1	None Supplied	W	2780646	c	pH at 20oC in water (automated)	L099-PL	c
P2	None Supplied	W	2780647	c	pH at 20oC in water (automated)	L099-PL	c
P3	None Supplied	W	2780648	c	pH at 20oC in water (automated)	L099-PL	c
P4	None Supplied	W	2780649	c	pH at 20oC in water (automated)	L099-PL	c

4041

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Analytical Report Number : 24-77486

Project / Site name:	Don Street	**Samples received on:**	09/01/2024
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	09/01/2024
Your order number:	007121	**Analysis completed by:**	15/01/2024
Report Issue Number:	1	**Report issued on:**	15/01/2024
Samples Analysed:	4 water samples		

Izabela Wójcik
Signed:

Izabela Wójcik
Senior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Analytical Report Number: 24-77486
Project / Site name: Don Street

Your Order No: 007121

Lab Sample Number				2924482	2924483	2924484	2924485
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				08/01/2024	08/01/2024	08/01/2024	08/01/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
General Inorganics							
pH (L099)	pH Units	N/A	ISO 17025	7.8	7.8	7.9	7.9
Total Cyanide (Low Level 1 µg/l)	µg/l	1	NONE	4.1	3	3.1	1.7
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	4.47	4.04	3.99	4.2
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	39	19	30	6
Total Phenols							
Total Phenols (monohydric)	µg/l	1	ISO 17025	1.5	1.5	1.5	1.4
Heavy Metals / Metalloids							
Calcium (dissolved)	mg/l	0.012	ISO 17025	38	63	61	83
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	2.61	2.92	2.82	3.19
Cadmium (dissolved)	µg/l	0.02	ISO 17025	0.02	0.02	< 0.02	0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	1.4	0.3	0.7	1
Copper (dissolved)	µg/l	0.5	ISO 17025	5.8	12	13	5.3
Lead (dissolved)	µg/l	0.2	ISO 17025	0.4	< 0.2	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	93	120	120	100
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	2.3	1.9	1.8	1.6
Selenium (dissolved)	µg/l	0.6	ISO 17025	< 0.6	0.8	< 0.6	< 0.6
Zinc (dissolved)	µg/l	0.5	ISO 17025	25	16	21	11
Monoaromatics & Oxygenates							
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Petroleum Hydrocarbons							
TPH1 (C10 - C40) EH_1D_TOTAL_MS	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C5 - C6 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) HS+EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10

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Analytical Report Number: 24-77486
Project / Site name: Don Street

Your Order No: 007121

Lab Sample Number				2924482	2924483	2924484	2924485
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				08/01/2024	08/01/2024	08/01/2024	08/01/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
TPH-CWG - Aromatic >C5 - C7 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35) $_{HS+EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
VOCs							
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Chloroform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Carbontetrachloride	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 24-77486
Project / Site name: Don Street

Your Order No: 007121

Lab Sample Number				2924482	2924483	2924484	2924485
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				08/01/2024	08/01/2024	08/01/2024	08/01/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

SVOCs

Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01

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Analytical Report Number: 24-77486
Project / Site name: Don Street

Your Order No: 007121

Lab Sample Number				2924482	2924483	2924484	2924485
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				08/01/2024	08/01/2024	08/01/2024	08/01/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	0.12	0.13	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	0.32	0.27	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	0.29	0.24	< 0.01	< 0.01
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01

3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 24-77486
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.Accredited Matrices PW, SW, GW, FSE, PrW, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260. Refer to CoA for analyte specific accreditation	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	NONE
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Analytical Report Number : 24-77486
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Acronym	**Descriptions**				
HS	Headspace Analysis				
MS	Mass spectrometry				
FID	Flame Ionisation Detector				
GC	Gas Chromatography				
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))				
CU	Clean-up - e.g. by Florisil®, silica gel				
1D	GC - Single coil/column gas chromatography				
2D	GC-GC - Double coil/column gas chromatography				
Total	Aliphatics & Aromatics				
AL	Aliphatics				
AR	Aromatics				
#1	EH_2D_Total but with humics mathematically subtracted				
#2	EH_2D_Total but with fatty acids mathematically subtracted				
_	Operator - understore to separate acronyms (exception for +)				
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total				

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Analytical Report Number : 23-76378

Project / Site name:	Don Street	**Samples received on:**	21/12/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	21/12/2023
Your order number:	007036	**Analysis completed by:**	03/01/2024
Report Issue Number:	1	**Report issued on:**	03/01/2024
Samples Analysed:	4 water samples		

Signed: A. Czerwińska

Agnieszka Czerwińska
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

UKAS TESTING
4041

Analytical i2 Environmental Science

Analytical Report Number: 23-76378
Project / Site name: Don Street

Your Order No: 007036

Lab Sample Number				2919159	2919160	2919161	2919162
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				18/12/2023	18/12/2023	18/12/2023	18/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
General Inorganics							
pH (L099)	pH Units	N/A	ISO 17025	7.8	7.7	7.7	7.7
Total Cyanide (Low Level 1 µg/l)	µg/l	1	NONE	3.8	4.5	4.6	4.2
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	8.68	4.88	5.03	4.83
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	14	16	2	11
Total Phenols							
Total Phenols (monohydric)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
Heavy Metals / Metalloids							
Calcium (dissolved)	mg/l	0.012	ISO 17025	61	65	66	64
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	2.44	2.59	2.53	2.55
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	< 0.02	< 0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.7	0.6	0.7	1
Copper (dissolved)	µg/l	0.5	ISO 17025	3.8	2.4	2.3	2.2
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	1.4	0.67	0.67	0.67
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	1.6	1.4	1.6	1.4
Selenium (dissolved)	µg/l	0.6	ISO 17025	< 0.6	0.7	< 0.6	< 0.6
Zinc (dissolved)	µg/l	0.5	ISO 17025	9.8	10	8.1	7.5
Monoaromatics & Oxygenates							
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-76378
Project / Site name: Don Street

Your Order No: 007036

Lab Sample Number				2919159	2919160	2919161	2919162
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				18/12/2023	18/12/2023	18/12/2023	18/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Petroleum Hydrocarbons							
TPH1 (C10 - C40) EH_1D_TOTAL_MS	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C5 - C6 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) HS+EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C5 - C7 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35) HS+EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10

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Analytical Report Number: 23-76378
Project / Site name: Don Street

Your Order No: 007036

Lab Sample Number				2919159	2919160	2919161	2919162
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				18/12/2023	18/12/2023	18/12/2023	18/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
VOCs							
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0##	< 3.0##	< 3.0##	< 3.0##
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chloroform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Carbontetrachloride	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0##	< 3.0##	< 3.0##	< 3.0##
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-76378
Project / Site name: Don Street

Your Order No: 007036

Lab Sample Number				2919159	2919160	2919161	2919162
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				18/12/2023	18/12/2023	18/12/2023	18/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

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Project / Site name: Don Street

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Lab Sample Number				2919159	2919160	2919161	2919162
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				18/12/2023	18/12/2023	18/12/2023	18/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
SVOCs							
Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01

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Analytical Report Number: 23-76378
Project / Site name: Don Street

Your Order No: 007036

Lab Sample Number				2919159	2919160	2919161	2919162
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				18/12/2023	18/12/2023	18/12/2023	18/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-76378
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260. Refer to CoA for analyte specific accreditation	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	NONE
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Analytical Report Number : 23-76378
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

- Quality control parameter has a high recovery (outside of limit); however the associated result is below the reporting limit, other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised

Sample Deviation Report

Analytical Report Number : 23-76378

Project / Site name: Don Street

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
P1	None Supplied	W	2919159	c	pH at 20oC in water (automated)	L099-PL	c
P2	None Supplied	W	2919160	c	pH at 20oC in water (automated)	L099-PL	c
P3	None Supplied	W	2919161	c	pH at 20oC in water (automated)	L099-PL	c
P4	None Supplied	W	2919162	c	pH at 20oC in water (automated)	L099-PL	c

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Analytical Report Number : 23-73916

Project / Site name:	Don Street	**Samples received on:**	07/12/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	11/12/2023
Your order number:	006953	**Analysis completed by:**	21/12/2023
Report Issue Number:	1	**Report issued on:**	21/12/2023
Samples Analysed:	4 water samples		

Izabela Wójcik

Signed:

Izabela Wójcik
Senior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-73916
Project / Site name: Don Street

Your Order No: 006953

Lab Sample Number				2905228	2905229	2905230	2905231
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				07/12/2023	07/12/2023	07/12/2023	07/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
General Inorganics							
pH (L099)	pH Units	N/A	ISO 17025	7.8	7.8	7.8	7.7
Total Cyanide (Low Level 1 µg/l)	µg/l	1	NONE	3.5	4	4.2	3.6
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	9.46	5.48	8.36	5.24
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	640	260	390	360
Total Phenols							
Total Phenols (monohydric)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
Heavy Metals / Metalloids							
Calcium (dissolved)	mg/l	0.012	ISO 17025	62	66	49	83
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	2.36	2.83	2.83	2.4
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	0.02	0.03	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	1.1	0.8	1	0.8
Copper (dissolved)	µg/l	0.5	ISO 17025	4.8	4.8	3.9	5.3
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	40	59	100	41
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	1.8	1.7	2.1	33
Selenium (dissolved)	µg/l	0.6	ISO 17025	0.7	0.9	0.9	0.7
Zinc (dissolved)	µg/l	0.5	ISO 17025	18	13	29	45
Monoaromatics & Oxygenates							
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Petroleum Hydrocarbons							
TPH1 (C10 - C40) $_{EH\_1D\_TOTAL\_MS}$	µg/l	10	ISO 17025	30	35	45	30
TPH-CWG - Aliphatic >C5 - C6 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) $_{HS+EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10

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Analytical Report Number: 23-73916
Project / Site name: Don Street

Your Order No: 006953

Lab Sample Number				2905228	2905229	2905230	2905231
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				07/12/2023	07/12/2023	07/12/2023	07/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
TPH-CWG - Aromatic >C5 - C7 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	10	10	15	10
TPH-CWG - Aromatic >C21 - C35 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	20	25	30	20
TPH-CWG - Aromatic (C5 - C35) $_{HS+EH\_1D\_AR\_MS}$	µg/l	10	NONE	30	35	45	30
VOCs							
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0##
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chloroform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Carbontetrachloride	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-73916
Project / Site name: Don Street

Your Order No: 006953

Lab Sample Number				2905228	2905229	2905230	2905231
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				07/12/2023	07/12/2023	07/12/2023	07/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
SVOCs							
Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	0.14	0.21	0.25	0.12
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	0.15	< 0.01

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Analytical Report Number: 23-73916
Project / Site name: Don Street

Your Order No: 006953

Lab Sample Number				2905228	2905229	2905230	2905231
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				07/12/2023	07/12/2023	07/12/2023	07/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	0.51	0.92	1.4	0.5
Anthracene	µg/l	0.01	ISO 17025	0.13	0.22	0.48	0.14
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	1.1	2.2	3.9	1.2
Pyrene	µg/l	0.01	ISO 17025	1.1	2	3.5	1.1
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	0.5	0.89	1.7	0.61
Chrysene	µg/l	0.01	ISO 17025	0.53	1	1.8	0.63
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	0.6	1.2	2	0.78
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	0.25	0.34	0.81	0.33
Benzo(a)pyrene	µg/l	0.01	ISO 17025	0.48	0.95	1.7	0.64
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	0.22	0.39	0.76	0.3
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	0.27	0.49	0.86	0.35
3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-73916
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260. Refer to CoA for analyte specific accreditation	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	NONE
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Analytical Report Number : 23-73916
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

- Quality control parameter has a high recovery (outside of limit); however the associated result is below the reporting limit, other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised

Sample Deviation Report

Analytical Report Number : 23-73916
Project / Site name: Don Street

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
P1	None Supplied	W	2905228	c	pH at 20oC in water (automated)	L099-PL	c
P2	None Supplied	W	2905229	c	pH at 20oC in water (automated)	L099-PL	c
P3	None Supplied	W	2905230	c	pH at 20oC in water (automated)	L099-PL	c
P4	None Supplied	W	2905231	c	pH at 20oC in water (automated)	L099-PL	c

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Analytical Report Number : 23-71240

Project / Site name:	Don Street	**Samples received on:**	24/11/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	24/11/2023
Your order number:	006837	**Analysis completed by:**	01/12/2023
Report Issue Number:	1	**Report issued on:**	01/12/2023
Samples Analysed:	4 water samples		

Signed:

Joanna Wawrzeczko
Senior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-71240
Project / Site name: Don Street

Your Order No: 006837

Lab Sample Number				2890695	2890696	2890697	2890698
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				23/11/2023	23/11/2023	23/11/2023	23/11/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
General Inorganics							
pH (L099)	pH Units	N/A	ISO 17025	7.8	7.9	7.9	7.9
Total Cyanide (Low Level 1 µg/l)	µg/l	1	NONE	4.7	4.7	5.4	4.5
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	5.82	9.52	5.65	9.08
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	15	11	12	12
Total Phenols							
Total Phenols (monohydric)	µg/l	1	ISO 17025	1.2	< 1.0	< 1.0	< 1.0
Heavy Metals / Metalloids							
Calcium (dissolved)	mg/l	0.012	ISO 17025	62	67	71	64
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	3.34	3.52	3.32	3.67
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	< 0.02	< 0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.9	0.5	0.5	0.9
Copper (dissolved)	µg/l	0.5	ISO 17025	4.4	4.4	5.1	4.7
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	21	31	22	9.8
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	1.8	1.7	2	1.9
Selenium (dissolved)	µg/l	0.6	ISO 17025	0.7	< 0.6	< 0.6	< 0.6
Zinc (dissolved)	µg/l	0.5	ISO 17025	11	8	10	9.7
Monoaromatics & Oxygenates							
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-71240
Project / Site name: Don Street

Your Order No: 006837

Lab Sample Number				2890695	2890696	2890697	2890698
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				23/11/2023	23/11/2023	23/11/2023	23/11/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Petroleum Hydrocarbons							
TPH1 (C10 - C40) EH_1D_TOTAL_MS	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C5 - C6 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) HS+EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C5 - C7 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35) HS+EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
VOCs							
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chloroform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Carbontetrachloride	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-71240
Project / Site name: Don Street

Your Order No: 006837

Lab Sample Number				2890695	2890696	2890697	2890698
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				23/11/2023	23/11/2023	23/11/2023	23/11/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

SVOCs

Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05

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Analytical Report Number: 23-71240
Project / Site name: Don Street

Your Order No: 006837

Lab Sample Number				2890695	2890696	2890697	2890698
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				23/11/2023	23/11/2023	23/11/2023	23/11/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01

3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-71240
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260. Refer to CoA for analyte specific accreditation	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	NONE
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

4041

Analytical Report Number : 23-71240
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Acronym	**Descriptions**				
HS	Headspace Analysis				
MS	Mass spectrometry				
FID	Flame Ionisation Detector				
GC	Gas Chromatography				
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))				
CU	Clean-up - e.g. by Florisil®, silica gel				
1D	GC - Single coil/column gas chromatography				
2D	GC-GC - Double coil/column gas chromatography				
Total	Aliphatics & Aromatics				
AL	Aliphatics				
AR	Aromatics				
#1	EH_2D_Total but with humics mathematically subtracted				
#2	EH_2D_Total but with fatty acids mathematically subtracted				
_	Operator - understore to separate acronyms (exception for +)				
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total				

Sample Deviation Report

Analytical Report Number : 23-71240
Project / Site name: Don Street

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
P1	None Supplied	W	2890695	c	pH at 20oC in water (automated)	L099-PL	c
P2	None Supplied	W	2890696	c	pH at 20oC in water (automated)	L099-PL	c
P3	None Supplied	W	2890697	c	pH at 20oC in water (automated)	L099-PL	c
P4	None Supplied	W	2890698	c	pH at 20oC in water (automated)	L099-PL	c

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Analytical Report Number : 23-67947

Project / Site name:	Don Street	**Samples received on:**	09/11/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	09/11/2023
Your order number:	006719	**Analysis completed by:**	15/11/2023
Report Issue Number:	1	**Report issued on:**	15/11/2023
Samples Analysed:	4 water samples		

Signed:

Joanna Szwagrzak
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-67947
Project / Site name: Don Street

Your Order No: 006719

Lab Sample Number				2873524	2873525	2873526	2873527
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				07/11/2023	07/11/2023	07/11/2023	07/11/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
General Inorganics							
pH (L099)	pH Units	N/A	ISO 17025	8	8	7.9	7.9
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	5.4	4.7	5.3	4.3
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	9.16	12.9	9.31	12.6
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	8	8	6	7
Total Phenols							
Total Phenols (monohydric)	µg/l	1	ISO 17025	< 1.0	1	< 1.0	< 1.0
Heavy Metals / Metalloids							
Calcium (dissolved)	mg/l	0.012	ISO 17025	71	59	64	61
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	2.4	2.5	2.37	2.35
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	0.03	0.04	0.05
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.5	0.6	0.6	0.5
Copper (dissolved)	µg/l	0.5	ISO 17025	6.8	6.7	6.1	5.7
Lead (dissolved)	µg/l	0.2	ISO 17025	0.3	0.4	0.3	0.4
Manganese (dissolved)	µg/l	0.05	ISO 17025	2.1	2	1.2	1.5
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	1.9	2	1.9	1.9
Selenium (dissolved)	µg/l	0.6	ISO 17025	< 0.6	0.6	< 0.6	< 0.6
Zinc (dissolved)	µg/l	0.5	ISO 17025	8.7	18	17	21
Monoaromatics & Oxygenates							
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-67947
Project / Site name: Don Street

Your Order No: 006719

Lab Sample Number				2873524	2873525	2873526	2873527
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				07/11/2023	07/11/2023	07/11/2023	07/11/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Petroleum Hydrocarbons							
TPH1 (C10 - C40) EH_1D_TOTAL_MS	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C5 - C6 HS_1D_AL	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8 HS_1D_AL	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10 HS_1D_AL	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) HS+EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C5 - C7 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35) HS+EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
VOCs							
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane#	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Chloroform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Carbontetrachloride	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-67947
Project / Site name: Don Street

Your Order No: 006719

Lab Sample Number				2873524	2873525	2873526	2873527
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				07/11/2023	07/11/2023	07/11/2023	07/11/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

SVOCs

Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05

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Analytical Report Number: 23-67947
Project / Site name: Don Street

Your Order No: 006719

Lab Sample Number				2873524	2873525	2873526	2873527
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				07/11/2023	07/11/2023	07/11/2023	07/11/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01

3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-67947
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260. Refer to CoA for analyte specific accreditation	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025

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Analytical Report Number : 23-67947
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

- Data reported unaccredited due to quality control parameter failure associated with this result; other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.

4041

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Analytical Report Number : 23-65120

Project / Site name:	Don Street	**Samples received on:**	26/10/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	26/10/2023
Your order number:	006588	**Analysis completed by:**	01/11/2023
Report Issue Number:	1	**Report issued on:**	01/11/2023
Samples Analysed:	4 water samples		

Signed:

Joanna Wawrzeczko
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

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Analytical Report Number: 23-65120
Project / Site name: Don Street

Your Order No: 006588

Lab Sample Number				2859056	2859057	2859058	2859059
Sample Reference				P1 (Upstream)	P2 (Mid 1)	P3 (Mid 2)	P4 (Downstream)
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				25/10/2023	25/10/2023	25/10/2023	25/10/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
General Inorganics							
pH (L099)	pH Units	N/A	ISO 17025	8	8	8	8.1
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	3.3	3.4	3.5	3.3
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	6.3	9.92	6.06	10.2
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	4	< 2.0	< 2.0	< 2.0
Total Phenols							
Total Phenols (monohydric)	µg/l	1	ISO 17025	1	1.2	1.1	1
Heavy Metals / Metalloids							
Calcium (dissolved)	mg/l	0.012	ISO 17025	92	84	83	70
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	3.29	3.29	3.3	3.24
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	< 0.02	< 0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.4	0.4	0.4	0.4
Copper (dissolved)	µg/l	0.5	ISO 17025	4.6	3.9	5	5.8
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	1.9	8.6	5.8	13
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	1.7	1.7	1.7	1.7
Selenium (dissolved)	µg/l	0.6	ISO 17025	< 0.6	0.7	< 0.6	< 0.6
Zinc (dissolved)	µg/l	0.5	ISO 17025	5.4	5.1	6.1	6.2
Monoaromatics & Oxygenates							
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

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4041

Analytical Report Number: 23-65120
Project / Site name: Don Street

Your Order No: 006588

Lab Sample Number				2859056	2859057	2859058	2859059
Sample Reference				P1 (Upstream)	P2 (Mid 1)	P3 (Mid 2)	P4 (Downstream)
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				25/10/2023	25/10/2023	25/10/2023	25/10/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Petroleum Hydrocarbons							
TPH1 (C10 - C40) EH_1D_TOTAL_MS	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C5 - C6 HS_1D_AL	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8 HS_1D_AL	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10 HS_1D_AL	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) HS+EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C5 - C7 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35) HS+EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
VOCs							
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chloroform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Carbontetrachloride	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-65120
Project / Site name: Don Street

Your Order No: 006588

Lab Sample Number				2859056	2859057	2859058	2859059
Sample Reference				P1 (Upstream)	P2 (Mid 1)	P3 (Mid 2)	P4 (Downstream)
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				25/10/2023	25/10/2023	25/10/2023	25/10/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

SVOCs

Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05

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Analytical Report Number: 23-65120
Project / Site name: Don Street

Your Order No: 006588

Lab Sample Number				2859056	2859057	2859058	2859059
Sample Reference				P1 (Upstream)	P2 (Mid 1)	P3 (Mid 2)	P4 (Downstream)
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				25/10/2023	25/10/2023	25/10/2023	25/10/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-65120
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260. Refer to CoA for analyte specific accreditation	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025

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Analytical Report Number : 23-65120
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

UKAS TESTING
4041

Analytical i2 Environmental Science

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Analytical Report Number : 23-60519

Project / Site name:	Don Street	**Samples received on:**	04/10/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	04/10/2023
Your order number:	006370	**Analysis completed by:**	11/10/2023
Report Issue Number:	1	**Report issued on:**	11/10/2023
Samples Analysed:	4 water samples		

Signed:

Anna Goc
PL Head of Reporting Team
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-60519
Project / Site name: Don Street

Your Order No: 006370

Lab Sample Number				2834472	2834473	2834474	2834475
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				03/10/2023	03/10/2023	03/10/2023	03/10/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
General Inorganics							
pH (L099)	pH Units	N/A	ISO 17025	7.9	7.9	7.7	7.6
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	5.1	2.5	3.4	2.2
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	7.36	7.99	8.17	7.07
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	34	44	51	44
Total Phenols							
Total Phenols (monohydric)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
Heavy Metals / Metalloids							
Calcium (dissolved)	mg/l	0.012	ISO 17025	59	57	53	45
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	2.68	1.84	1.88	1.52
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	< 0.02	< 0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.4	0.7	0.7	0.7
Copper (dissolved)	µg/l	0.5	ISO 17025	5.2	5.2	7.3	6.1
Lead (dissolved)	µg/l	0.2	ISO 17025	0.3	< 0.2	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	5.1	1.3	1.5	1.4
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	1.4	1.4	2.1	1.2
Selenium (dissolved)	µg/l	0.6	ISO 17025	< 0.6	< 0.6	< 0.6	< 0.6
Zinc (dissolved)	µg/l	0.5	ISO 17025	6.3	11	8.7	11
Monoaromatics & Oxygenates							
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-60519
Project / Site name: Don Street

Your Order No: 006370

Lab Sample Number				2834472	2834473	2834474	2834475
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				03/10/2023	03/10/2023	03/10/2023	03/10/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Petroleum Hydrocarbons							
TPH1 (C10 - C40) EH_1D_TOTAL_MS	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C5 - C6 HS_1D_AL	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8 HS_1D_AL	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10 HS_1D_AL	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) HS+EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C5 - C7 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35) HS+EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
VOCs							
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane ##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chloroform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Carbontetrachloride	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-60519
Project / Site name: Don Street

Your Order No: 006370

Lab Sample Number				2834472	2834473	2834474	2834475
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				03/10/2023	03/10/2023	03/10/2023	03/10/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

SVOCs

Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05

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Analytical Report Number: 23-60519
Project / Site name: Don Street

Your Order No: 006370

Lab Sample Number				2834472	2834473	2834474	2834475
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				03/10/2023	03/10/2023	03/10/2023	03/10/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01

3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-60519
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260. Refer to CoA for analyte specific accreditation	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025

4041

Analytical Report Number : 23-60519
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

- Quality control parameter has a high recovery (outside of limit); however the associated result is below the reporting limit, other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.

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Analytical Report Number : 23-58057

Project / Site name:	Don Street	**Samples received on:**	22/09/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	22/09/2023
Your order number:	006264	**Analysis completed by:**	27/09/2023
Report Issue Number:	1	**Report issued on:**	27/09/2023
Samples Analysed:	4 water samples		

Signed:

Dominika Warjan
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-58057
Project / Site name: Don Street

Your Order No: 006264

Lab Sample Number				2820747	2820748	2820749	2820750
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				20/09/2023	20/09/2023	20/09/2023	20/09/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
General Inorganics							
pH (L099)	pH Units	N/A	ISO 17025	7.8	7.8	7.7	7.7
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	4.1	4.1	4.8	4.6
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	9.02	9.08	8.54	8.61
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	20	13	28	37
Total Phenols							
Total Phenols (monohydric)	µg/l	1	ISO 17025	1	1.1	< 1.0	1
Heavy Metals / Metalloids							
Calcium (dissolved)	mg/l	0.012	ISO 17025	43	48	65	50
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	2.4	2.44	2.4	8.18
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	0.02	< 0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.9	0.9	0.9	0.6
Copper (dissolved)	µg/l	0.5	ISO 17025	9.9	7.3	16	14
Lead (dissolved)	µg/l	0.2	ISO 17025	0.4	0.5	0.4	3.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	2	3	2.9	35
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	1.8	2.1	1.7	2
Selenium (dissolved)	µg/l	0.6	ISO 17025	< 0.6	< 0.6	< 0.6	< 0.6
Zinc (dissolved)	µg/l	0.5	ISO 17025	12	5.2	9.8	8.2
Monoaromatics & Oxygenates							
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Petroleum Hydrocarbons							
TPH1 (C10 - C40) $_{EH\_1D\_TOTAL\_MS}$	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C5 - C6 $_{HS\_1D\_AL}$	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8 $_{HS\_1D\_AL}$	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10 $_{HS\_1D\_AL}$	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) $_{HS+EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10

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Analytical Report Number: 23-58057
Project / Site name: Don Street

Your Order No: 006264

Lab Sample Number				2820747	2820748	2820749	2820750
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				20/09/2023	20/09/2023	20/09/2023	20/09/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
TPH-CWG - Aromatic >C5 - C7 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35) $_{HS+EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
VOCs							
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chloroform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Carbontetrachloride	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene#	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-58057
Project / Site name: Don Street

Your Order No: 006264

Lab Sample Number				2820747	2820748	2820749	2820750
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				20/09/2023	20/09/2023	20/09/2023	20/09/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

SVOCs

Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-58057
Project / Site name: Don Street

Your Order No: 006264

Lab Sample Number				2820747	2820748	2820749	2820750
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				20/09/2023	20/09/2023	20/09/2023	20/09/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01

3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-58057
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260. Refer to CoA for analyte specific accreditation	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025

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Analytical Report Number : 23-58057
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

- Data reported unaccredited due to quality control parameter failure associated with this result; other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.

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Analytical Report Number : 23-55330

Project / Site name:	Don Street	**Samples received on:**	07/09/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	07/09/2023
Your order number:	006051	**Analysis completed by:**	13/09/2023
Report Issue Number:	1	**Report issued on:**	13/09/2023
Samples Analysed:	4 water samples		

Signed:

Adam Fenwick
Technical Reviewer
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-55330
Project / Site name: Don Street

Your Order No: 006051

Lab Sample Number				2804821	2804822	2804823	2804824
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				06/09/2023	06/09/2023	06/09/2023	06/09/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
General Inorganics							
pH (L099)	pH Units	N/A	ISO 17025	8.1	8	8	8.1
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	3.1	3.1	2.9	2.8
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	3.41	3.07	3.38	3
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	2	< 2.0	< 2.0	< 2.0
Total Phenols							
Total Phenols (monohydric)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
Heavy Metals / Metalloids							
Calcium (dissolved)	mg/l	0.012	ISO 17025	85	99	87	82
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	2.44	3.62	3.73	3.92
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	< 0.02	< 0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	1	1	1.2	0.7
Copper (dissolved)	µg/l	0.5	ISO 17025	2.1	3.6	3.5	3
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	0.66	2	1.2	1.3
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	0.8	1	1.1	1.1
Selenium (dissolved)	µg/l	0.6	ISO 17025	< 0.6	< 0.6	< 0.6	< 0.6
Zinc (dissolved)	µg/l	0.5	ISO 17025	1.5	2.2	2	3.5
Monoaromatics & Oxygenates							
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Petroleum Hydrocarbons							
TPH1 (C10 - C40) $_{EH\_1D\_TOTAL\_MS}$	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C5 - C6 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0##	< 1.0##	< 1.0##	< 1.0##
TPH-CWG - Aliphatic >C6 - C8 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0##	< 1.0##	< 1.0##	< 1.0##
TPH-CWG - Aliphatic >C8 - C10 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0##	< 1.0##	< 1.0##	< 1.0##
TPH-CWG - Aliphatic >C10 - C12 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) $_{HS+EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C5 - C7 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10

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Analytical Report Number: 23-55330
Project / Site name: Don Street

Your Order No: 006051

Lab Sample Number				2804821	2804822	2804823	2804824
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				06/09/2023	06/09/2023	06/09/2023	06/09/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
TPH-CWG - Aromatic (C5 - C35) HS+EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
VOCs							
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chloroform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Carbontetrachloride	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-55330
Project / Site name: Don Street

Your Order No: 006051

Lab Sample Number				2804821	2804822	2804823	2804824
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				06/09/2023	06/09/2023	06/09/2023	06/09/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

SVOCs

Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05

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Analytical Report Number: 23-55330
Project / Site name: Don Street

Your Order No: 006051

Lab Sample Number				2804821	2804822	2804823	2804824
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				06/09/2023	06/09/2023	06/09/2023	06/09/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-55330
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

4041

Analytical Report Number : 23-55330
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-53489

Project / Site name:	Don Street	**Samples received on:**	29/08/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	29/08/2023
Your order number:	005941	**Analysis completed by:**	04/09/2023
Report Issue Number:	1	**Report issued on:**	04/09/2023
Samples Analysed:	4 water samples		

Signed:

Anna Goc
PL Head of Reporting Team
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Analytical Report Number: 23-53489
Project / Site name: Don Street

Your Order No: 005941

Lab Sample Number				2794537	2794538	2794539	2794540
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				25/08/2023	25/08/2023	25/08/2023	25/08/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
General Inorganics							
pH (L099)	pH Units	N/A	ISO 17025	8	7.9	7.9	7.9
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	2.5	2.5	2	2.8
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	3.28	4	3.45	3.49
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	18	9	5	9
Total Phenols							
Total Phenols (monohydric)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	1
Heavy Metals / Metalloids							
Calcium (dissolved)	mg/l	0.012	ISO 17025	89	91	100	97
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	3.21	3.12	3.16	3.21
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	< 0.02	< 0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.3	0.2	0.3	0.3
Copper (dissolved)	µg/l	0.5	ISO 17025	3.8	3.3	4.1	3.2
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	1.5	2.2	1.5	1.7
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	0.9	1.1	1.2	1
Selenium (dissolved)	µg/l	0.6	ISO 17025	0.9	0.9	0.6	0.6
Zinc (dissolved)	µg/l	0.5	ISO 17025	4	4.3	4.7	7.4
Monoaromatics & Oxygenates							
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

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Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				25/08/2023	25/08/2023	25/08/2023	25/08/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Petroleum Hydrocarbons							
TPH1 (C10 - C40) EH_1D_TOTAL_MS	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C5 - C6 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) HS+EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C5 - C7 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35) HS+EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10

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Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				25/08/2023	25/08/2023	25/08/2023	25/08/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
VOCs							
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene ##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane ##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chloroform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Carbontetrachloride ##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

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Lab Sample Number				2794537	2794538	2794539	2794540
Sample Reference				P1	P2	P3	P4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				25/08/2023	25/08/2023	25/08/2023	25/08/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

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Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				25/08/2023	25/08/2023	25/08/2023	25/08/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
SVOCs							
Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01

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Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				25/08/2023	25/08/2023	25/08/2023	25/08/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Analytical Report Number : 23-53489
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

- Quality control parameter has a high recovery (outside of limit); however the associated result is below the reporting limit, other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.

Sample Deviation Report

Analytical Report Number : 23-53489

Project / Site name: Don Street

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
P1	None Supplied	W	2794537	c	pH at 20oC in water (automated)	L099-PL	c
P2	None Supplied	W	2794538	c	pH at 20oC in water (automated)	L099-PL	c
P3	None Supplied	W	2794539	c	pH at 20oC in water (automated)	L099-PL	c
P4	None Supplied	W	2794540	c	pH at 20oC in water (automated)	L099-PL	c

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Analytical Report Number : 22-95809

Project / Site name:	Don Street	**Samples received on:**	07/11/2022
Your job number:	14 554	**Samples instructed on/ Analysis started on:**	10/11/2022
Your order number:	003452	**Analysis completed by:**	28/11/2022
Report Issue Number:	1	**Report issued on:**	28/11/2022
Samples Analysed:	4 soil samples		

Signed:

Anna Goc
Junior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing

Analytical Report Number: 22-95809
Project / Site name: Don Street
Your Order No: 003452

Lab Sample Number				2494577	2494578	2494579	2494580
Sample Reference				WS17 Sample A	WS17 Sample B	WS17 Sample C	WS17 Base
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				03/11/2022	03/11/2022	03/11/2022	03/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	12	18	21	18
Total mass of sample received	kg	0.001	NONE	0.5	0.5	0.5	0.5
Speciated PAHs							
Naphthalene	mg/kg	0.05	NONE	1.7	37	0.98	< 0.05
Acenaphthylene	mg/kg	0.05	NONE	0.64	3.1	0.33	0.25
Acenaphthene	mg/kg	0.05	NONE	1.7	18	2.1	0.19
Fluorene	mg/kg	0.05	NONE	1.4	19	1.6	0.21
Phenanthrene	mg/kg	0.05	NONE	11	90	19	2.2
Anthracene	mg/kg	0.05	NONE	3.8	28	4.9	1.2
Fluoranthene	mg/kg	0.05	NONE	15	85	25	6
Pyrene	mg/kg	0.05	NONE	14	78	25	6
Benzo(a)anthracene	mg/kg	0.05	NONE	7.1	44	12	3.7
Chrysene	mg/kg	0.05	NONE	6.4	45	12	3.5
Benzo(b)fluoranthene	mg/kg	0.05	NONE	8.2	45	9.7	4.3
Benzo(k)fluoranthene	mg/kg	0.05	NONE	2.8	15	7.2	1.8
Benzo(a)pyrene	mg/kg	0.05	NONE	7.1	40	11	3.9
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	3.1	16	6.4	1.7
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	0.83	4.6	1.3	0.47
Benzo(ghi)perylene	mg/kg	0.05	NONE	3.5	17	6.7	1.8
Total PAH							
Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	87.1	586	146	37.2
Petroleum Hydrocarbons							
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	NONE	< 2.0	34	< 2.0	< 2.0
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	NONE	14	93	10	< 4.0
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	95	400	110	120
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	210	620	310	410
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	32	11	55	24
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	350	1200	480	550

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Analytical Report Number: 22-95809
Project / Site name: Don Street
Your Order No: 003452

Lab Sample Number				2494577	2494578	2494579	2494580
Sample Reference				WS17 Sample A	WS17 Sample B	WS17 Sample C	WS17 Base
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				03/11/2022	03/11/2022	03/11/2022	03/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
VOCs							
Chloromethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Bromomethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl Chloride	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Trichlorofluoromethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Cis-1,2-dichloroethene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
2,2-Dichloropropane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Trichloromethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloropropene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Trans-1,2-dichloroethene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Benzene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloromethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Dibromomethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Cis-1,3-dichloropropene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Trans-1,3-dichloropropene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichloropropane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Dibromochloromethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1,2-Tetrachloroethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
p & m-Xylene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Tribromomethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Bromobenzene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
n-Propylbenzene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
2-Chlorotoluene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
4-Chlorotoluene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
tert-Butylbenzene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
sec-Butylbenzene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
p-Isopropyltoluene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Butylbenzene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0

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Analytical Report Number: 22-95809
Project / Site name: Don Street
Your Order No: 003452

Lab Sample Number				2494577	2494578	2494579	2494580
Sample Reference				WS17 Sample A	WS17 Sample B	WS17 Sample C	WS17 Base
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				03/11/2022	03/11/2022	03/11/2022	03/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
1,2-Dibromo-3-chloropropane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Hexachlorobutadiene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0

SVOCs

Aniline	mg/kg	0.1	NONE	< 0.1	< 0.1	0.4	< 0.1
Phenol	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
2-Chlorophenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylphenol	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Hexachloroethane	mg/kg	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	4.3	< 0.2	< 0.2
Isophorone	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
2-Nitrophenol	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	NONE	< 0.3	2.3	< 0.3	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Naphthalene	mg/kg	0.05	NONE	1.7	37	0.98	< 0.05
2,4-Dichlorophenol	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorobutadiene	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	1.4	21	0.8	< 0.1
2-Chloronaphthalene	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Dimethylphthalate	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthylene	mg/kg	0.05	NONE	0.64	3.1	0.33	0.25
Acenaphthene	mg/kg	0.05	NONE	1.7	18	2.1	0.19
2,4-Dinitrotoluene	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Dibenzofuran	mg/kg	0.2	NONE	0.9	13	1.1	< 0.2
4-Chlorophenyl phenyl ether	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Diethyl phthalate	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
4-Nitroaniline	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Fluorene	mg/kg	0.05	NONE	1.4	19	1.6	0.21
Azobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Hexachlorobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Phenanthrene	mg/kg	0.05	NONE	11	90	19	2.2
Anthracene	mg/kg	0.05	NONE	3.8	28	4.9	1.2
Carbazole	mg/kg	0.3	NONE	1	11	1	< 0.3
Dibutyl phthalate	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Anthraquinone	mg/kg	0.3	NONE	1	7.5	1.5	< 0.3
Fluoranthene	mg/kg	0.05	NONE	15	85	25	6
Pyrene	mg/kg	0.05	NONE	14	78	25	6
Butyl benzyl phthalate	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3

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Analytical Report Number: 22-95809
Project / Site name: Don Street
Your Order No: 003452

Lab Sample Number				2494577	2494578	2494579	2494580
Sample Reference				WS17 Sample A	WS17 Sample B	WS17 Sample C	WS17 Base
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				03/11/2022	03/11/2022	03/11/2022	03/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Benzo(a)anthracene	mg/kg	0.05	NONE	7.1	44	12	3.7
Chrysene	mg/kg	0.05	NONE	6.4	45	12	3.5
Benzo(b)fluoranthene	mg/kg	0.05	NONE	8.2	45	9.7	4.3
Benzo(k)fluoranthene	mg/kg	0.05	NONE	2.8	15	7.2	1.8
Benzo(a)pyrene	mg/kg	0.05	NONE	7.1	40	11	3.9
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	3.1	16	6.4	1.7
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	0.83	4.6	1.3	0.47
Benzo(ghi)perylene	mg/kg	0.05	NONE	3.5	17	6.7	1.8

U/S = Unsuitable Sample I/S = Insufficient Sample

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number : 22-95809
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2494577	WS17 Sample A	None Supplied	None Supplied	Brown clay and sand with gravel.
2494578	WS17 Sample B	None Supplied	None Supplied	Brown clay and sand with gravel.
2494579	WS17 Sample C	None Supplied	None Supplied	Brown clay and sand with gravel.
2494580	WS17 Base	None Supplied	None Supplied	Brown clay and sand.

Analytical Report Number : 22-95809
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-PL	D	NONE
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	NONE
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	NONE

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

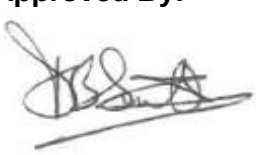
Eurofins Chemtest Ltd
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

Final Report

Report No.:	24-14785-1
Initial Date of Issue:	17-May-2024
Re-Issue Details:	
Client	E3P
Client Address:	Taylor Road Trafford Park Urmston Manchester M41 7JQ
Contact(s):	gcalvert@e3p.co.uk; mdee@e3p.co.uk
Project	Don Street 14-554

Quotation No.:	Q23-31421	**Date Received:**	10-May-2024
Order No.:	8170	**Date Instructed:**	10-May-2024
No. of Samples:	10		
Turnaround (Wkdays):	5	**Results Due:**	16-May-2024
Date Approved:	17-May-2024		

Approved By:



Details: David Smith, Technical Director

For details about application of accreditation to specific matrix types, please refer to the Table at the back of this report

Results - Soil

Project: Don Street 14-554

Client: E3P				**Chemtest Job No.:**		24-14785	24-14785	24-14785	24-14785	24-14785	24-14785	24-14785
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1805765	1805766	1805767	1805768	1805769	1805770	1805771
				Client Sample ID.:		SW-TS011	SW-TS012	SW-TS013	SW-TS014	SW-TS015	SW-SS-006	SW-SS-007
				Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
				Date Sampled:		08-May-2024	08-May-2024	08-May-2024	08-May-2024	08-May-2024	08-May-2024	08-May-2024
				Time Sampled:		0:00	0:00	0:00	0:00	0:00	0:00	0:00
				Asbestos Lab:		DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**							
ACM Type		U	2192		N/A	-	-	-	-	-	-	-
Asbestos Identification		U	2192		N/A	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
Moisture		N	2030	%	0.020	21	20	21	19	20	8.9	8.3
Soil Colour		N	2040		N/A	Brown	Brown	Brown	Brown	Brown	Black	Brown
Other Material		N	2040		N/A	Stones and Roots	Stones and Roots	Stones and Roots	Stones and Roots	Stones	Stones	Stones
Soil Texture		N	2040		N/A	Clay	Clay	Clay	Clay	Clay	Sand	Sand
pH at 20C		M	2010		4.0	6.8	6.9	6.9	7.1	6.8	6.9	8.0
Sulphate (2:1 Water Soluble) as SO4		M	2120	g/l	0.010	0.010	0.061	0.047	0.056	0.046	0.039	0.020
Total Sulphur		U	2175	%	0.010	0.057	0.069	0.047	0.052	0.054	0.020	0.014
Cyanide (Total)		M	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Sulphide (Easily Liberatable)		N	2325	mg/kg	0.50	4.6	4.3	7.7	4.0	4.2	5.4	4.0
Sulphate (Total)		U	2430	%	0.010	0.10	0.056	0.13	0.12	0.11	< 0.010	< 0.010
Arsenic		M	2455	mg/kg	0.5	14	4.8	10	10	14	4.4	4.0
Cadmium		M	2455	mg/kg	0.10	0.22	< 0.10	0.14	0.22	0.19	< 0.10	< 0.10
Chromium		M	2455	mg/kg	0.5	5.9	< 0.5	1.0	3.4	6.2	< 0.5	< 0.5
Copper		M	2455	mg/kg	0.50	31	11	22	24	31	7.6	7.3
Mercury		M	2455	mg/kg	0.05	0.33	0.12	0.23	0.20	0.31	0.05	< 0.05
Nickel		M	2455	mg/kg	0.50	16	5.4	11	12	15	5.5	5.9
Lead		M	2455	mg/kg	0.50	63	22	44	54	61	12	9.6
Selenium		M	2455	mg/kg	0.25	1.1	0.44	0.71	0.79	0.94	0.37	0.35
Zinc		M	2455	mg/kg	0.50	65	24	46	53	69	20	21
Chromium (Hexavalent)		N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Organic Matter		M	2625	%	0.40	5.1	3.7	4.4	4.8	4.3	0.64	0.43
Total Organic Carbon		M	2625	%	0.20	3.0	2.2	2.5	2.8	2.5	0.37	0.25
TPH >C6-C8	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C8-C10	EH_1D_Total	N	2670	mg/kg	1.0	8.1	6.5	6.1	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C10-C12	EH_1D_Total	N	2670	mg/kg	1.0	12	10	10	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C12-C16	EH_1D_Total	N	2670	mg/kg	1.0	17	15	13	< 1.0	< 1.0	3.5	< 1.0
TPH >C16-C21	EH_1D_Total	N	2670	mg/kg	1.0	22	20	14	26	18	5.6	13
TPH >C21-C25	EH_1D_Total	N	2670	mg/kg	1.0	50	45	41	12	8.6	2.0	6.2
TPH >C25-C35	EH_1D_Total	N	2670	mg/kg	1.0	73	69	36	72	32	< 1.0	15
TPH >C35-C40	EH_1D_Total	N	2670	mg/kg	1.0	9.6	9.3	4.8	5.9	4.8	< 1.0	3.2
Total TPH >C6-C40	EH_1D_Total	M	2670	mg/kg	10	190	170	120	120	64	11	37
Naphthalene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene		N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

Results - Soil

Project: Don Street 14-554

Client: E3P				**Chemtest Job No.:**		24-14785	24-14785	24-14785	24-14785	24-14785	24-14785	24-14785
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1805765	1805766	1805767	1805768	1805769	1805770	1805771
				Client Sample ID.:		SW-TS011	SW-TS012	SW-TS013	SW-TS014	SW-TS015	SW-SS-006	SW-SS-007
				Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
				Date Sampled:		08-May-2024	08-May-2024	08-May-2024	08-May-2024	08-May-2024	08-May-2024	08-May-2024
				Time Sampled:		0:00	0:00	0:00	0:00	0:00	0:00	0:00
				Asbestos Lab:		DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**							
Phenanthrene		M	2800	mg/kg	0.10	0.50	0.49	< 0.10	0.54	0.28	< 0.10	< 0.10
Anthracene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene		M	2800	mg/kg	0.10	0.69	0.78	0.73	1.1	0.58	< 0.10	< 0.10
Pyrene		M	2800	mg/kg	0.10	0.65	0.72	0.62	1.1	0.54	< 0.10	< 0.10
Benzo[a]anthracene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.25	< 0.10	< 0.10
Chrysene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.29	< 0.10	< 0.10
Benzo[b]fluoranthene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.39	< 0.10	< 0.10
Benzo[k]fluoranthene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.14	< 0.10	< 0.10
Benzo[a]pyrene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.33	< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.21	< 0.10	< 0.10
Dibenz(a,h)Anthracene		N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.24	< 0.10	< 0.10
Total Of 16 PAH's		N	2800	mg/kg	2.0	< 2.0	< 2.0	< 2.0	2.7	3.3	< 2.0	< 2.0
Total Phenols		M	2920	mg/kg	0.10	0.42	0.57	0.74	0.38	0.78	< 0.10	< 0.10

Results - Soil

Project: Don Street 14-554

Client: E3P				**Chemtest Job No.:**		24-14785	24-14785	24-14785
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1805772	1805773	1805774
				Client Sample ID.:		SW-SS-008	SW-SS-009	SW-SS-010
				Sample Type:		SOIL	SOIL	SOIL
				Date Sampled:		08-May-2024	08-May-2024	08-May-2024
				Time Sampled:		0:00	0:00	0:00
				Asbestos Lab:		DURHAM	DURHAM	DURHAM
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**			
ACM Type		U	2192		N/A	-	-	-
Asbestos Identification		U	2192		N/A	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
Moisture		N	2030	%	0.020	7.3	7.2	6.2
Soil Colour		N	2040		N/A	Brown	Brown	Brown
Other Material		N	2040		N/A	Stones	Stones	Stones
Soil Texture		N	2040		N/A	Sand	Sand	Sand
pH at 20C		M	2010		4.0	7.8	8.2	8.0
Sulphate (2:1 Water Soluble) as SO4		M	2120	g/l	0.010	0.023	0.029	0.035
Total Sulphur		U	2175	%	0.010	0.013	0.012	0.017
Cyanide (Total)		M	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Sulphide (Easily Liberatable)		N	2325	mg/kg	0.50	4.0	5.6	4.1
Sulphate (Total)		U	2430	%	0.010	0.012	< 0.010	0.013
Arsenic		M	2455	mg/kg	0.5	4.2	2.0	5.2
Cadmium		M	2455	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Chromium		M	2455	mg/kg	0.5	< 0.5	< 0.5	< 0.5
Copper		M	2455	mg/kg	0.50	8.0	4.0	12
Mercury		M	2455	mg/kg	0.05	< 0.05	< 0.05	0.05
Nickel		M	2455	mg/kg	0.50	7.1	3.6	9.1
Lead		M	2455	mg/kg	0.50	9.4	4.6	39
Selenium		M	2455	mg/kg	0.25	0.45	< 0.25	0.42
Zinc		M	2455	mg/kg	0.50	24	13	35
Chromium (Hexavalent)		N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Organic Matter		M	2625	%	0.40	0.55	0.62	0.47
Total Organic Carbon		M	2625	%	0.20	0.32	0.36	0.27
TPH >C6-C8	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0
TPH >C8-C10	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0
TPH >C10-C12	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0
TPH >C12-C16	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0
TPH >C16-C21	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	40
TPH >C21-C25	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	54
TPH >C25-C35	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	83
TPH >C35-C40	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	9.8
Total TPH >C6-C40	EH_1D_Total	M	2670	mg/kg	10	< 10	< 10	190
Naphthalene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene		N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Acenaphthene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Fluorene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10

Results - Soil

Project: Don Street 14-554

Client: E3P				**Chemtest Job No.:**		24-14785	24-14785	24-14785
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1805772	1805773	1805774
				Client Sample ID.:		SW-SS-008	SW-SS-009	SW-SS-010
				Sample Type:		SOIL	SOIL	SOIL
				Date Sampled:		08-May-2024	08-May-2024	08-May-2024
				Time Sampled:		0:00	0:00	0:00
				Asbestos Lab:		DURHAM	DURHAM	DURHAM
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**			
Phenanthrene		M	2800	mg/kg	0.10	0.20	< 0.10	< 0.10
Anthracene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Fluoranthene		M	2800	mg/kg	0.10	0.55	< 0.10	< 0.10
Pyrene		M	2800	mg/kg	0.10	0.47	< 0.10	< 0.10
Benzo[a]anthracene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Chrysene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Benzo[b]fluoranthene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)Anthracene		N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Total Of 16 PAH's		N	2800	mg/kg	2.0	< 2.0	< 2.0	< 2.0
Total Phenols		M	2920	mg/kg	0.10	< 0.10	< 0.10	< 0.10

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
2010	pH Value of Soils	pH at 20°C	pH Meter	
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <30°C.	
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930	
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES	
2175	Total Sulphur in Soils	Total Sulphur	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.	
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry	
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Allkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.	
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N–dimethyl-p-phenylenediamine.	
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.	
2455	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.	
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.	
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.	
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID	
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS	
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.	

Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

This report shall not be reproduced except in full, and only with the prior approval of the laboratory.
Any comments or interpretations are outside the scope of UKAS accreditation.
The Laboratory is not accredited for any sampling activities and reported results relate to the samples 'as received' at the laboratory.
Uncertainty of measurement for the determinands tested are available upon request .
None of the results in this report have been recovery corrected.
All results are expressed on a dry weight basis.

The following tests were analysed on samples 'as received' and the results subsequently corrected to a dry weight basis EPH, VPH, TPH, BTEX, VOCs, SVOCs, PCBs, Phenols.

For all other tests the samples were dried at ≤ 30°C prior to analysis.
All Asbestos testing is performed at the indicated laboratory .
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1.

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt.
All water samples will be retained for 14 days from the date of receipt.
Charges may apply to extended sample storage.

Water Sample Category Key for Accreditation

DW - Drinking Water
GW - Ground Water
LE - Land Leachate
NA - Not Applicable

Report Information

PL - Prepared Leachate
PW - Processed Water
RE - Recreational Water
SA - Saline Water
SW - Surface Water
TE - Treated Effluent
TS - Treated Sewage
UL - Unspecified Liquid

Clean Up Codes

NC - No Clean Up
MC - Mathematical Clean Up
FC - Florisil Clean Up

HWOL Acronym System

HS - Headspace analysis
EH - Extractable hydrocarbons – i.e. everything extracted by the solvent
CU - Clean-up – e.g. by Florisil, silica gel
1D - GC – Single coil gas chromatography
Total - Aliphatics & Aromatics
AL - Aliphatics only
AR - Aromatic only
2D - GC-GC – Double coil gas chromatography
#1 - EH_2D_Total but with humics mathematically subtracted
#2 - EH_2D_Total but with fatty acids mathematically subtracted
+ - Operator to indicate cumulative e.g. EH+EH_Total or EH_CU+HS_Total

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com

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Analytical Report Number : 22-14259

Project / Site name:	Don Street	**Samples received on:**	20/12/2022
Your job number:	14 554	**Samples instructed on/ Analysis started on:**	20/12/2022
Your order number:	003751	**Analysis completed by:**	03/01/2023
Report Issue Number:	1	**Report issued on:**	03/01/2023
Samples Analysed:	10 soil samples		

Signed:

Dominika Warjan
Junior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 22-14259
Project / Site name: Don Street
Your Order No: 003751

Lab Sample Number				2539789	2539790	2539791	2539792	2539793
Sample Reference				TS 001 Parcel B	TS 002 Parcel B	TS 003 Parcel B	TS 004 Parcel B	TS 005 Parcel B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				19/12/2022	19/12/2022	19/12/2022	19/12/2022	19/12/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	25	26	25	38	22
Total mass of sample received	kg	0.001	NONE	0.4	0.3	0.3	0.4	0.3
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	MLO	MLO	MLO	MLO	KSZ
General Inorganics								
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs*								
Naphthalene	mg/kg	0.05	NONE	0.12	0.09	0.1	0.09	0.1
Acenaphthylene	mg/kg	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	NONE	0.06	< 0.05	0.11	0.07	0.11
Fluorene	mg/kg	0.05	NONE	< 0.05	0.06	0.1	0.06	0.12
Phenanthrene	mg/kg	0.05	NONE	0.53	0.84	0.96	0.46	0.88
Anthracene	mg/kg	0.05	NONE	0.09	0.18	0.18	0.1	0.18
Fluoranthene	mg/kg	0.05	NONE	0.94	2.3	1.1	0.72	1.4
Pyrene	mg/kg	0.05	NONE	0.91	2.5	1.2	0.69	1.3
Benzo(a)anthracene	mg/kg	0.05	NONE	0.45	1	0.62	0.36	0.7
Chrysene	mg/kg	0.05	NONE	0.51	0.89	0.52	0.35	0.63
Benzo(b)fluoranthene	mg/kg	0.05	NONE	0.56	1.2	0.65	0.45	0.79
Benzo(k)fluoranthene	mg/kg	0.05	NONE	0.29	0.55	0.31	0.19	0.34
Benzo(a)pyrene	mg/kg	0.05	NONE	0.44	0.88	0.47	0.36	0.48
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	0.21	0.46	0.22	0.17	0.27
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	0.05	0.07	0.05	< 0.05	0.05
Benzo(ghi)perylene	mg/kg	0.05	NONE	0.23	0.56	0.31	0.25	0.46
Total PAH*								
Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	5.39	11.5	6.93	4.32	7.8
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	12	11	12	9.8	11
Barium (aqua regia extractable)	mg/kg	1	MCERTS	48	60	55	55	54
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.52	0.59	0.53	0.49	0.52
Boron (water soluble)	mg/kg	0.2	MCERTS	0.3	0.6	0.2	0.5	0.3
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Copper (aqua regia extractable)	mg/kg	1	MCERTS	21	19	27	21	26
Lead (aqua regia extractable)	mg/kg	1	MCERTS	50	41	51	42	48
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	0.3	0.5	0.4
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	11	11	12	11	12
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	20	20	21	17	19
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	44	45	49	47	47

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Analytical Report Number: 22-14259
Project / Site name: Don Street
Your Order No: 003751

Lab Sample Number				2539789	2539790	2539791	2539792	2539793
Sample Reference				TS 001 Parcel B	TS 002 Parcel B	TS 003 Parcel B	TS 004 Parcel B	TS 005 Parcel B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				19/12/2022	19/12/2022	19/12/2022	19/12/2022	19/12/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Petroleum Hydrocarbons								
TPH (C5 - C6) HS_1D_TOTAL	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH (C6 - C8) HS_1D_TOTAL	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C8 - C10) HS_1D_TOTAL	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C10 - C12) EH_CU_1D_TOTAL	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH (C12 - C16) EH_CU_1D_TOTAL	mg/kg	4	MCERTS	< 4.0	6	< 4.0	< 4.0	< 4.0
TPH (C16 - C21) EH_CU_1D_TOTAL	mg/kg	1	MCERTS	< 1.0	14	7	11	8.3
TPH (C21 - C35) EH_CU_1D_TOTAL	mg/kg	1	MCERTS	2	28	14	22	16
TPH (C35 - C40) EH_CU_1D_TOTAL	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH Total C5 - C40 EH_CU+HS_1D_TOTAL	mg/kg	10	NONE	< 10	48	20	33	24

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

*Data reported unaccredited due to quality control parameter failure associated with this result; other checks applied prior to reporting the data have been accepted and the failure justified as having no significant impact on sample data reported.

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Analytical Report Number: 22-14259
Project / Site name: Don Street
Your Order No: 003751

Lab Sample Number				2539794	2539795	2539796	2539797	2539798
Sample Reference				TS 006 Parcel B	TS 007 Parcel B	TS 008 Parcel B	TS 009 Parcel B	TS 010 Parcel B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				19/12/2022	19/12/2022	19/12/2022	19/12/2022	19/12/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	26	24	29	25	26
Total mass of sample received	kg	0.001	NONE	0.3	0.3	0.3	0.3	0.3
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	KSZ	KSZ	KSZ	KSZ	KSZ
General Inorganics								
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs*								
Naphthalene	mg/kg	0.05	NONE	0.12	0.74	0.17	0.11	0.15
Acenaphthylene	mg/kg	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	NONE	0.08	0.4	0.06	< 0.05	0.1
Fluorene	mg/kg	0.05	NONE	0.06	0.3	0.07	0.05	0.05
Phenanthrene	mg/kg	0.05	NONE	0.64	2.8	0.34	0.31	0.66
Anthracene	mg/kg	0.05	NONE	0.13	0.52	0.07	0.07	0.11
Fluoranthene	mg/kg	0.05	NONE	1.2	2.6	0.65	0.75	1.2
Pyrene	mg/kg	0.05	NONE	1.1	2.3	0.66	0.76	1.1
Benzo(a)anthracene	mg/kg	0.05	NONE	0.6	1.1	0.37	0.32	0.54
Chrysene	mg/kg	0.05	NONE	0.57	1	0.32	0.31	0.48
Benzo(b)fluoranthene	mg/kg	0.05	NONE	0.7	1.1	0.41	0.5	0.59
Benzo(k)fluoranthene	mg/kg	0.05	NONE	0.32	0.49	0.22	0.11	0.3
Benzo(a)pyrene	mg/kg	0.05	NONE	0.49	0.87	0.29	0.28	0.42
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	0.19	0.41	0.17	0.16	0.18
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	< 0.05	0.09	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	NONE	0.25	0.53	0.22	0.21	0.28
Total PAH*								
Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	6.41	15.3	4.02	3.94	6.16
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	11	13	13	11	14
Barium (aqua regia extractable)	mg/kg	1	MCERTS	57	56	56	56	55
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.54	0.61	0.57	0.54	0.59
Boron (water soluble)	mg/kg	0.2	MCERTS	0.3	< 0.2	0.2	0.3	< 0.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Copper (aqua regia extractable)	mg/kg	1	MCERTS	24	25	23	25	25
Lead (aqua regia extractable)	mg/kg	1	MCERTS	48	49	55	47	56
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.4	< 0.3	< 0.3	0.5	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	11	14	12	12	13
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	19	21	21	20	22
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	46	48	48	48	49

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 22-14259
Project / Site name: Don Street
Your Order No: 003751

Lab Sample Number				2539794	2539795	2539796	2539797	2539798
Sample Reference				TS 006 Parcel B	TS 007 Parcel B	TS 008 Parcel B	TS 009 Parcel B	TS 010 Parcel B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				19/12/2022	19/12/2022	19/12/2022	19/12/2022	19/12/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Petroleum Hydrocarbons								
TPH (C5 - C6) HS_1D_TOTAL	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH (C6 - C8) HS_1D_TOTAL	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C8 - C10) HS_1D_TOTAL	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C10 - C12) EH_CU_1D_TOTAL	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH (C12 - C16) EH_CU_1D_TOTAL	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
TPH (C16 - C21) EH_CU_1D_TOTAL	mg/kg	1	MCERTS	7.1	6.9	5.9	7.6	7
TPH (C21 - C35) EH_CU_1D_TOTAL	mg/kg	1	MCERTS	12	7.1	5.9	12	12
TPH (C35 - C40) EH_CU_1D_TOTAL	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH Total C5 - C40 EH_CU+HS_1D_TOTAL	mg/kg	10	NONE	19	14	12	20	19

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

*Data reported unaccredited due to quality control parameter failure associated with this result; other checks applied prior to reporting the data have been accepted and the failure justified as having no significant impact on sample data reported.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number : 22-14259
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2539789	TS 001 Parcel B	None Supplied	None Supplied	Brown clay and loam with vegetation.
2539790	TS 002 Parcel B	None Supplied	None Supplied	Brown clay and loam with vegetation.
2539791	TS 003 Parcel B	None Supplied	None Supplied	Brown clay and loam with vegetation.
2539792	TS 004 Parcel B	None Supplied	None Supplied	Brown clay and loam with vegetation.
2539793	TS 005 Parcel B	None Supplied	None Supplied	Brown clay and loam with vegetation.
2539794	TS 006 Parcel B	None Supplied	None Supplied	Brown clay and loam with vegetation.
2539795	TS 007 Parcel B	None Supplied	None Supplied	Brown clay and loam with vegetation.
2539796	TS 008 Parcel B	None Supplied	None Supplied	Brown clay and loam with vegetation.
2539797	TS 009 Parcel B	None Supplied	None Supplied	Brown clay and loam with gravel and vegetation.
2539798	TS 010 Parcel B	None Supplied	None Supplied	Brown clay and loam with gravel and vegetation.

Analytical Report Number : 22-14259
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS

Analytical Report Number : 22-14259
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 22-97516

Project / Site name:	Don Street	**Samples received on:**	17/11/2022
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	17/11/2022
Your order number:	003509	**Analysis completed by:**	29/11/2022
Report Issue Number:	1	**Report issued on:**	29/11/2022
Samples Analysed:	42 soil samples		

Signed:

Joanna Wawrzeczko
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Analytical Report Number: 22-97516
Project / Site name: Don Street
Your Order No: 003509

Lab Sample Number				2503934	2503935	2503936	2503937	2503938
Sample Reference				TP519 NORTH	TP519 EAST	TP519 SOUTH	TP519 WEST	TP519 BASE
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				16/11/2022	16/11/2022	16/11/2022	16/11/2022	16/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	16	< 0.1	13	< 0.1
Moisture Content	%	0.01	NONE	19	16	18	14	15
Total mass of sample received	kg	0.001	NONE	0.7	0.7	0.4	0.4	0.4
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	-	-	-	-
Sulphide	mg/kg	1	NONE	-	-	-	-	-
Total Sulphur	mg/kg	50	MCERTS	-	-	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	-	-	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	NONE	-	-	-	-	-
Acenaphthylene	mg/kg	0.05	NONE	-	-	-	-	-
Acenaphthene	mg/kg	0.05	NONE	-	-	-	-	-
Fluorene	mg/kg	0.05	NONE	-	-	-	-	-
Phenanthrene	mg/kg	0.05	NONE	-	-	-	-	-
Anthracene	mg/kg	0.05	NONE	-	-	-	-	-
Fluoranthene	mg/kg	0.05	NONE	-	-	-	-	-
Pyrene	mg/kg	0.05	NONE	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	NONE	-	-	-	-	-
Chrysene	mg/kg	0.05	NONE	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	NONE	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	NONE	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	NONE	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	NONE	-	-	-	-	-
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	-	-	-	-	-

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Analytical Report Number: 22-97516
Project / Site name: Don Street
Your Order No: 003509

Lab Sample Number				2503934	2503935	2503936	2503937	2503938
Sample Reference				TP519 NORTH	TP519 EAST	TP519 SOUTH	TP519 WEST	TP519 BASE
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				16/11/2022	16/11/2022	16/11/2022	16/11/2022	16/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	22	21	21	17	21
Barium (aqua regia extractable)	mg/kg	1	MCERTS	740	720	870	630	700
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	1.5	1.5	1.5	1.2	1.2
Boron (water soluble)	mg/kg	0.2	MCERTS	1.8	3.2	2.4	4	2.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	1.3	1.3	3.3	1.2	1.4
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	590	260	420	280	460
Lead (aqua regia extractable)	mg/kg	1	MCERTS	280	230	300	260	360
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	1.5	0.8	1.1	0.6	0.6
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	35	29	28	24	27
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	40	39	38	33	34
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	1100	810	1200	770	760
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	NONE	-	-	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	NONE	-	-	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample

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Analytical Report Number: 22-97516
Project / Site name: Don Street
Your Order No: 003509

Lab Sample Number				2503939	2503940	2503941	2503942	2503943
Sample Reference				TP519 ARISINGS	TP516 NORTH	TP516 EAST	TP516 SOUTH	TP516 WEST
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				16/11/2022	16/11/2022	16/11/2022	16/11/2022	16/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	-	-	-	-
Moisture Content	%	0.01	NONE	10	-	-	-	-
Total mass of sample received	kg	0.001	NONE	0.3	-	-	-	-
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	Chrysotile	-	Amosite	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Detected	Not-detected	Detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	< 0.001	-	< 0.001	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	< 0.001	-	< 0.001	-
Asbestos Analyst ID	N/A	N/A	N/A	SFS	SFS	SFS	SFS	SFS
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	9.2	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1.0	-	-	-	-
Total Sulphate as SO4	mg/kg	50	MCERTS	2500	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.24	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	480	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	240	-	-	-	-
Sulphide	mg/kg	1	NONE	140	-	-	-	-
Total Sulphur	mg/kg	50	MCERTS	1800	-	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.7	-	-	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	-	-	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	NONE	1	-	-	-	-
Acenaphthylene	mg/kg	0.05	NONE	0.14	-	-	-	-
Acenaphthene	mg/kg	0.05	NONE	1.1	-	-	-	-
Fluorene	mg/kg	0.05	NONE	1.2	-	-	-	-
Phenanthrene	mg/kg	0.05	NONE	8.8	-	-	-	-
Anthracene	mg/kg	0.05	NONE	2.4	-	-	-	-
Fluoranthene	mg/kg	0.05	NONE	11	-	-	-	-
Pyrene	mg/kg	0.05	NONE	11	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	NONE	5.4	-	-	-	-
Chrysene	mg/kg	0.05	NONE	5.8	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	NONE	6.4	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	NONE	1.8	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	NONE	5.8	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	2.9	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	0.68	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	NONE	3.2	-	-	-	-
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	69	-	-	-	-

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Analytical Report Number: 22-97516
Project / Site name: Don Street
Your Order No: 003509

Lab Sample Number				2503939	2503940	2503941	2503942	2503943
Sample Reference				TP519 ARISINGS	TP516 NORTH	TP516 EAST	TP516 SOUTH	TP516 WEST
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				16/11/2022	16/11/2022	16/11/2022	16/11/2022	16/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	17	-	-	-	-
Barium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	-	-	-	-	-
Boron (water soluble)	mg/kg	0.2	MCERTS	-	-	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	1.2	-	-	-	-
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	-	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	17	-	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	220	-	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	220	-	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.5	-	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	20	-	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	-	-	-	-
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	790	-	-	-	-
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	-	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	-	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	-	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	NONE	2	-	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	NONE	11	-	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	76	-	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	350	-	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	65	-	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	510	-	-	-	-

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Analytical Report Number: 22-97516
Project / Site name: Don Street
Your Order No: 003509

Lab Sample Number				2503944	2503945	2503946	2503947	2503948
Sample Reference				TP516 BASE	TP516 ARISINGS	TP6 NORTH	TP6 EAST	TP6 SOUTH
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				16/11/2022	16/11/2022	16/11/2022	16/11/2022	16/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	-	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	-	14	18	18	20
Total mass of sample received	kg	0.001	NONE	-	0.3	0.4	0.4	0.4
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	-	-	-
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	SFS	SFS	N/A	N/A	N/A
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	8.4	-	-	-
Total Cyanide	mg/kg	1	MCERTS	-	< 1.0	-	-	-
Total Sulphate as SO4	mg/kg	50	MCERTS	-	630	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	0.041	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	82	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	41	-	-	-
Sulphide	mg/kg	1	NONE	-	27	-	-	-
Total Sulphur	mg/kg	50	MCERTS	-	610	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	3	-	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	< 1.0	-	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	NONE	-	0.72	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	NONE	-	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	NONE	-	1	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	NONE	-	0.75	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	NONE	-	4.8	< 0.05	< 0.05	< 0.05
Anthracene	mg/kg	0.05	NONE	-	1.5	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	NONE	-	9.7	< 0.05	< 0.05	0.12
Pyrene	mg/kg	0.05	NONE	-	9.1	< 0.05	< 0.05	0.12
Benzo(a)anthracene	mg/kg	0.05	NONE	-	4.3	< 0.05	< 0.05	< 0.05
Chrysene	mg/kg	0.05	NONE	-	4.8	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	NONE	-	4.7	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	NONE	-	2.5	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	NONE	-	4.3	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	-	2.4	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	-	0.56	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	NONE	-	2.6	< 0.05	< 0.05	< 0.05
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	-	53.5	< 0.80	< 0.80	< 0.80

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Analytical Report Number: 22-97516
Project / Site name: Don Street
Your Order No: 003509

Lab Sample Number				2503944	2503945	2503946	2503947	2503948
Sample Reference				TP516 BASE	TP516 ARISINGS	TP6 NORTH	TP6 EAST	TP6 SOUTH
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				16/11/2022	16/11/2022	16/11/2022	16/11/2022	16/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	21	-	-	-
Barium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	-	-	-	-	-
Boron (water soluble)	mg/kg	0.2	MCERTS	-	-	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	0.9	-	-	-
Chromium (hexavalent)	mg/kg	1.8	MCERTS	-	< 1.8	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	33	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	63	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	110	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	0.5	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	24	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	< 1.0	-	-	-
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	210	-	-	-
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	< 1.0	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	< 0.1	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	< 0.1	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	NONE	-	< 2.0	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	NONE	-	< 4.0	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	19	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	59	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	-	17	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	95	-	-	-

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Analytical Report Number: 22-97516
Project / Site name: Don Street
Your Order No: 003509

Lab Sample Number				2503949	2503950	2503951	2503952	2503953
Sample Reference				TP6 WEST	TP6 BASE	TP6 ARISINGS	TP27 NORTH	TP27 EAST
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				16/11/2022	16/11/2022	16/11/2022	16/11/2022	16/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	21	15	12	14	11
Total mass of sample received	kg	0.001	NONE	0.4	0.4	0.3	0.3	0.4
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	-	-	Not-detected	-	-
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A	N/A	SFS	N/A	N/A
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	-	8.1	-	-
Total Cyanide	mg/kg	1	MCERTS	-	-	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	-	-	820	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	-	0.13	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	-	260	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	-	130	-	-
Sulphide	mg/kg	1	NONE	-	-	18	-	-
Total Sulphur	mg/kg	50	MCERTS	-	-	810	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	-	1.9	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	< 1.0	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	NONE	< 0.05	< 0.05	< 0.05	-	-
Acenaphthylene	mg/kg	0.05	NONE	< 0.05	< 0.05	< 0.05	-	-
Acenaphthene	mg/kg	0.05	NONE	< 0.05	< 0.05	0.21	-	-
Fluorene	mg/kg	0.05	NONE	< 0.05	< 0.05	0.13	-	-
Phenanthrene	mg/kg	0.05	NONE	< 0.05	< 0.05	1.1	-	-
Anthracene	mg/kg	0.05	NONE	< 0.05	< 0.05	0.41	-	-
Fluoranthene	mg/kg	0.05	NONE	< 0.05	< 0.05	5.1	-	-
Pyrene	mg/kg	0.05	NONE	< 0.05	< 0.05	5	-	-
Benzo(a)anthracene	mg/kg	0.05	NONE	< 0.05	< 0.05	3.1	-	-
Chrysene	mg/kg	0.05	NONE	< 0.05	< 0.05	2.5	-	-
Benzo(b)fluoranthene	mg/kg	0.05	NONE	< 0.05	< 0.05	3.9	-	-
Benzo(k)fluoranthene	mg/kg	0.05	NONE	< 0.05	< 0.05	0.97	-	-
Benzo(a)pyrene	mg/kg	0.05	NONE	< 0.05	< 0.05	2.9	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	< 0.05	< 0.05	1.5	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	< 0.05	< 0.05	0.37	-	-
Benzo(ghi)perylene	mg/kg	0.05	NONE	< 0.05	< 0.05	1.7	-	-
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	< 0.80	< 0.80	29	-	-

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 22-97516
Project / Site name: Don Street
Your Order No: 003509

Lab Sample Number				2503949	2503950	2503951	2503952	2503953
Sample Reference				TP6 WEST	TP6 BASE	TP6 ARISINGS	TP27 NORTH	TP27 EAST
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				16/11/2022	16/11/2022	16/11/2022	16/11/2022	16/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	-	21	7.3	3.7
Barium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	220	340
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	-	-	-	0.43	0.18
Boron (water soluble)	mg/kg	0.2	MCERTS	-	-	-	0.2	< 0.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	-	< 0.2	2.3	2.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	-	-	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	15	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	-	42	19	5.4
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-	67	40	27
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	-	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	-	18	12	5.8
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	16	8.9
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	-	67	140	92
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	< 1.0	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	< 0.1	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	< 0.1	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	NONE	-	-	< 2.0	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	NONE	-	-	< 4.0	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	13	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	29	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	< 10	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	42	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample

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Analytical Report Number: 22-97516
Project / Site name: Don Street
Your Order No: 003509

Lab Sample Number				2503954	2503955	2503956	2503957	2503958
Sample Reference				TP27 SOUTH	TP27 WEST	TP27 BASE	TP27 ARISINGS	TP41 NORTH
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				16/11/2022	16/11/2022	16/11/2022	16/11/2022	16/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	21
Moisture Content	%	0.01	NONE	6.8	11	12	14	12
Total mass of sample received	kg	0.001	NONE	0.4	0.4	0.4	0.3	0.4
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	-	-	-	Not-detected	-
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A	N/A	N/A	SFS	N/A
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	-	-	7.6	-
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
Total Sulphate as SO4	mg/kg	50	MCERTS	-	-	-	1200	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	-	-	0.04	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	-	-	80	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	-	-	39.9	-
Sulphide	mg/kg	1	NONE	-	-	-	5.3	-
Total Sulphur	mg/kg	50	MCERTS	-	-	-	630	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	-	-	6.8	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-	< 1.0	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	NONE	-	-	-	0.33	9.9
Acenaphthylene	mg/kg	0.05	NONE	-	-	-	0.05	< 0.05
Acenaphthene	mg/kg	0.05	NONE	-	-	-	0.81	8.7
Fluorene	mg/kg	0.05	NONE	-	-	-	0.55	6.5
Phenanthrene	mg/kg	0.05	NONE	-	-	-	6.6	43
Anthracene	mg/kg	0.05	NONE	-	-	-	1.6	10
Fluoranthene	mg/kg	0.05	NONE	-	-	-	9.2	44
Pyrene	mg/kg	0.05	NONE	-	-	-	8.8	39
Benzo(a)anthracene	mg/kg	0.05	NONE	-	-	-	4.5	20
Chrysene	mg/kg	0.05	NONE	-	-	-	4.1	16
Benzo(b)fluoranthene	mg/kg	0.05	NONE	-	-	-	5	18
Benzo(k)fluoranthene	mg/kg	0.05	NONE	-	-	-	1.3	7.8
Benzo(a)pyrene	mg/kg	0.05	NONE	-	-	-	3.8	17
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	-	-	-	1.7	6.5
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	-	-	-	0.44	1.5
Benzo(ghi)perylene	mg/kg	0.05	NONE	-	-	-	2	7
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	-	-	-	50.8	256

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Analytical Report Number: 22-97516
Project / Site name: Don Street
Your Order No: 003509

Lab Sample Number				2503954	2503955	2503956	2503957	2503958
Sample Reference				TP27 SOUTH	TP27 WEST	TP27 BASE	TP27 ARISINGS	TP41 NORTH
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				16/11/2022	16/11/2022	16/11/2022	16/11/2022	16/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	3.4	6.9	5.5	10	-
Barium (aqua regia extractable)	mg/kg	1	MCERTS	1400	420	510	-	-
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.19	0.3	0.27	-	-
Boron (water soluble)	mg/kg	0.2	MCERTS	< 0.2	0.2	< 0.2	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	17	4.2	3.6	2.9	-
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	15	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	11	12	9.7	47	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	110	53	40	130	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	5.7	7.7	8.6	16	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	8.9	12	13	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	430	170	140	420	-
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	< 1.0	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	< 0.1	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	< 0.1	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	NONE	-	-	-	< 2.0	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	NONE	-	-	-	4.1	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	12	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	52	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	12	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	81	-

U/S = Unsuitable Sample I/S = Insufficient Sample

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Analytical Report Number: 22-97516
Project / Site name: Don Street
Your Order No: 003509

Lab Sample Number				2503959	2503960	2503961	2503962	2503963
Sample Reference				TP41 EAST	TP41 SOUTH	TP41 WEST	TP41 BASE	TP41 ARISINGS
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				16/11/2022	16/11/2022	16/11/2022	16/11/2022	16/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	31	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	13	13	15	13	16
Total mass of sample received	kg	0.001	NONE	0.4	0.4	0.4	0.4	0.3
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	-	-	-	-	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A	N/A	N/A	N/A	SFS
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	-	-	-	7.8
Total Cyanide	mg/kg	1	MCERTS	-	-	-	-	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	-	-	-	-	770
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	-	-	-	0.02
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	-	-	-	40
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	-	-	-	20
Sulphide	mg/kg	1	NONE	-	-	-	-	4.1
Total Sulphur	mg/kg	50	MCERTS	-	-	-	-	490
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	-	-	-	3.2
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-	-	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	NONE	0.54	2	5.6	0.73	1
Acenaphthylene	mg/kg	0.05	NONE	< 0.05	< 0.05	0.36	0.07	< 0.05
Acenaphthene	mg/kg	0.05	NONE	1.3	4.1	12	2.2	3.4
Fluorene	mg/kg	0.05	NONE	0.87	2.8	9.5	1.5	2.1
Phenanthrene	mg/kg	0.05	NONE	8.3	22	84	13	21
Anthracene	mg/kg	0.05	NONE	2	5.3	23	3.2	5.2
Fluoranthene	mg/kg	0.05	NONE	11	26	110	18	32
Pyrene	mg/kg	0.05	NONE	10	24	100	17	31
Benzo(a)anthracene	mg/kg	0.05	NONE	4.4	11	45	7.8	17
Chrysene	mg/kg	0.05	NONE	4.7	11	44	8.3	16
Benzo(b)fluoranthene	mg/kg	0.05	NONE	5.8	12	48	9.7	19
Benzo(k)fluoranthene	mg/kg	0.05	NONE	1.5	4.1	19	2.7	6.4
Benzo(a)pyrene	mg/kg	0.05	NONE	4.6	9.9	43	8.2	16
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	1.9	3.8	19	3.3	6.8
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	0.37	1	5.1	0.78	1.7
Benzo(ghi)perylene	mg/kg	0.05	NONE	2.1	4.7	20	3.7	8
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	59.4	144	582	101	186

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Analytical Report Number: 22-97516
Project / Site name: Don Street
Your Order No: 003509

Lab Sample Number				2503959	2503960	2503961	2503962	2503963
Sample Reference				TP41 EAST	TP41 SOUTH	TP41 WEST	TP41 BASE	TP41 ARISINGS
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				16/11/2022	16/11/2022	16/11/2022	16/11/2022	16/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	17
Barium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	-	-	-	-	-
Boron (water soluble)	mg/kg	0.2	MCERTS	-	-	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	-	-	-	-	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	18
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	67
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	120
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	-	-	-	0.4
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	19
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	240
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	NONE	-	-	-	-	< 2.0
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	NONE	-	-	-	-	9.5
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	61
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	120
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	-	16
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	-	210

U/S = Unsuitable Sample I/S = Insufficient Sample

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Analytical Report Number: 22-97516
Project / Site name: Don Street
Your Order No: 003509

Lab Sample Number				2503964	2503965	2503966	2503967	2503968
Sample Reference				TP11 NORTH	TP11 EAST	TP11 SOUTH	TP11 WEST	TP11 BASE
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				16/11/2022	16/11/2022	16/11/2022	16/11/2022	16/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	3.3	6.6
Moisture Content	%	0.01	NONE	14	14	12	12	9.2
Total mass of sample received	kg	0.001	NONE	0.4	0.4	0.4	0.4	0.4
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	-	-	-	-	-
Total Sulphate as SO4	mg/kg	50	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	-	-	-	-
Sulphide	mg/kg	1	NONE	-	-	-	-	-
Total Sulphur	mg/kg	50	MCERTS	-	-	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	-	-	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	NONE	0.39	1.6	2.4	0.3	0.28
Acenaphthylene	mg/kg	0.05	NONE	< 0.05	0.43	0.47	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	NONE	0.46	4	4.6	< 0.05	0.83
Fluorene	mg/kg	0.05	NONE	0.27	2.7	4.1	< 0.05	0.5
Phenanthrene	mg/kg	0.05	NONE	2.7	14	34	0.58	7.3
Anthracene	mg/kg	0.05	NONE	1	5.9	9.7	0.13	1.7
Fluoranthene	mg/kg	0.05	NONE	12	53	54	1.2	9.8
Pyrene	mg/kg	0.05	NONE	12	52	52	1.2	9.2
Benzo(a)anthracene	mg/kg	0.05	NONE	5.6	26	27	0.86	4.4
Chrysene	mg/kg	0.05	NONE	4.6	24	26	0.79	4.1
Benzo(b)fluoranthene	mg/kg	0.05	NONE	7.3	35	32	1.2	4.4
Benzo(k)fluoranthene	mg/kg	0.05	NONE	3.2	9.8	10	0.46	1.5
Benzo(a)pyrene	mg/kg	0.05	NONE	7.1	32	29	1.2	4
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	3.8	16	15	0.74	1.9
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	1	3.9	3.3	0.22	0.57
Benzo(ghi)perylene	mg/kg	0.05	NONE	4.5	17	16	0.84	2.3
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	65.5	298	319	9.71	52.6

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Analytical Report Number: 22-97516
Project / Site name: Don Street
Your Order No: 003509

Lab Sample Number				2503964	2503965	2503966	2503967	2503968
Sample Reference				TP11 NORTH	TP11 EAST	TP11 SOUTH	TP11 WEST	TP11 BASE
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				16/11/2022	16/11/2022	16/11/2022	16/11/2022	16/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Barium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	-	-	-	-	-
Boron (water soluble)	mg/kg	0.2	MCERTS	-	-	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	-	-	-	-
Chromium (hexavalent)	mg/kg	1.8	MCERTS	-	-	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	-	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	NONE	-	-	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	NONE	-	-	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample

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Analytical Report Number: 22-97516
Project / Site name: Don Street
Your Order No: 003509

Lab Sample Number				2503969	2503970	2503971	2503972	2503973
Sample Reference				TP11 ARISINGS	TP305 NORTH	TP305 EAST	TP305 SOUTH	TP305 WEST
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				16/11/2022	16/11/2022	16/11/2022	16/11/2022	16/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	14	-	-	-	-
Moisture Content	%	0.01	NONE	4.2	-	-	-	-
Total mass of sample received	kg	0.001	NONE	0.4	-	-	-	-

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	Chrysotile & Amosite	-	Amosite	Amosite
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Detected	Not-detected	Detected	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	0.001	-	< 0.001	< 0.001
Asbestos Quantification Total	%	0.001	ISO 17025	-	0.001	-	< 0.001	< 0.001
Asbestos Analyst ID	N/A	N/A	N/A	MLO	MJN	MJN	MJN	MLO

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.5	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1.0	-	-	-	-
Total Sulphate as SO4	mg/kg	50	MCERTS	370	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.014	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	29	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	14.3	-	-	-	-
Sulphide	mg/kg	1	NONE	27	-	-	-	-
Total Sulphur	mg/kg	50	MCERTS	320	-	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	3.7	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	-	-	-	-

Speciated PAHs

Naphthalene	mg/kg	0.05	NONE	< 0.05	-	-	-	-
Acenaphthylene	mg/kg	0.05	NONE	2.1	-	-	-	-
Acenaphthene	mg/kg	0.05	NONE	8.4	-	-	-	-
Fluorene	mg/kg	0.05	NONE	5.8	-	-	-	-
Phenanthrene	mg/kg	0.05	NONE	48	-	-	-	-
Anthracene	mg/kg	0.05	NONE	25	-	-	-	-
Fluoranthene	mg/kg	0.05	NONE	310	-	-	-	-
Pyrene	mg/kg	0.05	NONE	300	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	NONE	140	-	-	-	-
Chrysene	mg/kg	0.05	NONE	150	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	NONE	180	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	NONE	65	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	NONE	160	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	94	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	29	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	NONE	99	-	-	-	-

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	1630	-	-	-	-

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Analytical Report Number: 22-97516
Project / Site name: Don Street
Your Order No: 003509

Lab Sample Number				2503969	2503970	2503971	2503972	2503973
Sample Reference				TP11 ARISINGS	TP305 NORTH	TP305 EAST	TP305 SOUTH	TP305 WEST
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				16/11/2022	16/11/2022	16/11/2022	16/11/2022	16/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	14	-	-	-	-
Barium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	-	-	-	-	-
Boron (water soluble)	mg/kg	0.2	MCERTS	-	-	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	1.2	-	-	-	-
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	-	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	11	-	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	44	-	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	48	-	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	23	-	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	-	-	-	-
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	320	-	-	-	-
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	-	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	-	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	-	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	NONE	4.8	-	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	NONE	40	-	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	370	-	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	810	-	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	130	-	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	1400	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample

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Analytical Report Number: 22-97516
Project / Site name: Don Street
Your Order No: 003509

Lab Sample Number				2503974	2503975
Sample Reference				TP305 BASE	TP305 ARISINGS
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				16/11/2022	16/11/2022
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	-	< 0.1
Moisture Content	%	0.01	NONE	-	9.1
Total mass of sample received	kg	0.001	NONE	-	0.4
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	Chrysotile
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	0.002
Asbestos Quantification Total	%	0.001	ISO 17025	-	0.002
Asbestos Analyst ID	N/A	N/A	N/A	MLO	MLO

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	-	8.4
Total Cyanide	mg/kg	1	MCERTS	-	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	-	670
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	0.16
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	320
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	162
Sulphide	mg/kg	1	NONE	-	57
Total Sulphur	mg/kg	50	MCERTS	-	1000
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	1.5

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	-	< 1.0

Speciated PAHs

Naphthalene	mg/kg	0.05	NONE	-	0.55
Acenaphthylene	mg/kg	0.05	NONE	-	0.12
Acenaphthene	mg/kg	0.05	NONE	-	0.73
Fluorene	mg/kg	0.05	NONE	-	0.9
Phenanthrene	mg/kg	0.05	NONE	-	7.2
Anthracene	mg/kg	0.05	NONE	-	1.9
Fluoranthene	mg/kg	0.05	NONE	-	6.9
Pyrene	mg/kg	0.05	NONE	-	6.5
Benzo(a)anthracene	mg/kg	0.05	NONE	-	3.2
Chrysene	mg/kg	0.05	NONE	-	2.7
Benzo(b)fluoranthene	mg/kg	0.05	NONE	-	3
Benzo(k)fluoranthene	mg/kg	0.05	NONE	-	1.2
Benzo(a)pyrene	mg/kg	0.05	NONE	-	2.8
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	-	1.4
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	-	0.33
Benzo(ghi)perylene	mg/kg	0.05	NONE	-	1.5

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	-	40.8

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Analytical Report Number: 22-97516
Project / Site name: Don Street
Your Order No: 003509

Lab Sample Number				2503974	2503975
Sample Reference				TP305 BASE	TP305 ARISINGS
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				16/11/2022	16/11/2022
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Heavy Metals / Metalloids					
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	21
Barium (aqua regia extractable)	mg/kg	1	MCERTS	-	-
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	-	-
Boron (water soluble)	mg/kg	0.2	MCERTS	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	-	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	18
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	43
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	97
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	27
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	130
Petroleum Hydrocarbons					
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	NONE	-	2.4
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	NONE	-	5.4
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	15
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	20
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	-	< 10
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	43

U/S = Unsuitable Sample I/S = Insufficient Sample

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The results included within the report relate only to the sample(s) submitted for testing.

UKAS TESTING
4041

Analytical i2 Environmental Science

Analytical Report Number: 22-97516
Project / Site name: Don Street
Your Order No: 003509

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2503940	TP516 NORTH		127	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**
2503942	TP516 SOUTH		148	Loose Fibres	**Amosite**	< 0.001	**< 0.001**
2503970	TP305 NORTH		161	Loose Fibres	**Chrysotile & Amosite**	0.001	**0.001**
2503972	TP305 SOUTH		170	Loose Fibres	**Amosite**	< 0.001	**< 0.001**
2503973	TP305 WEST		143	Loose Fibres	**Amosite**	< 0.001	**< 0.001**
2503975	TP305 ARISINGS		162	Loose Fibrous Debris	**Chrysotile**	0.002	**0.002**

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 22-97516
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2503934	TP519 NORTH	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2503935	TP519 EAST	None Supplied	None Supplied	Brown loam and sand with gravel and stones.
2503936	TP519 SOUTH	None Supplied	None Supplied	Brown clay and loam with gravel and vegetation.
2503937	TP519 WEST	None Supplied	None Supplied	Brown loam and clay with gravel and stones.
2503938	TP519 BASE	None Supplied	None Supplied	Brown loam and clay with gravel and vegetation.
2503939	TP519 ARISINGS	None Supplied	None Supplied	Brown loam and clay with gravel and vegetation.
2503945	TP516 ARISINGS	None Supplied	None Supplied	Brown clay and sand.
2503946	TP6 NORTH	None Supplied	None Supplied	Brown clay and sand.
2503947	TP6 EAST	None Supplied	None Supplied	Brown clay and sand.
2503948	TP6 SOUTH	None Supplied	None Supplied	Brown clay and sand with vegetation.
2503949	TP6 WEST	None Supplied	None Supplied	Brown clay and sand with vegetation.
2503950	TP6 BASE	None Supplied	None Supplied	Brown sand with gravel.
2503951	TP6 ARISINGS	None Supplied	None Supplied	Brown clay and sand with gravel.
2503952	TP27 NORTH	None Supplied	None Supplied	Brown clay and loam with gravel and vegetation.
2503953	TP27 EAST	None Supplied	None Supplied	Brown sand with gravel and vegetation.
2503954	TP27 SOUTH	None Supplied	None Supplied	Brown sandy clay with gravel.
2503955	TP27 WEST	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2503956	TP27 BASE	None Supplied	None Supplied	Brown sandy clay with gravel and vegetation.
2503957	TP27 ARISINGS	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2503958	TP41 NORTH	None Supplied	None Supplied	Brown loam and sand with gravel and stones.
2503959	TP41 EAST	None Supplied	None Supplied	Brown loam and sand with gravel and stones.
2503960	TP41 SOUTH	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2503961	TP41 WEST	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2503962	TP41 BASE	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2503963	TP41 ARISINGS	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2503964	TP11 NORTH	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2503965	TP11 EAST	None Supplied	None Supplied	Brown loam and sand with gravel and brick.
2503966	TP11 SOUTH	None Supplied	None Supplied	Brown loam and sand with gravel and brick.
2503967	TP11 WEST	None Supplied	None Supplied	Brown loam and sand with brick and stones.
2503968	TP11 BASE	None Supplied	None Supplied	Brown loam and sand with stones.
2503969	TP11 ARISINGS	None Supplied	None Supplied	Brown loam and sand with gravel and stones.
2503975	TP305 ARISINGS	None Supplied	None Supplied	Brown clay and sand with gravel.

Analytical Report Number : 22-97516
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	NONE
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	NONE
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	NONE
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS

Analytical Report Number : 22-97516
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 22-98397

Project / Site name:	Don Street	**Samples received on:**	22/11/2022
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	22/11/2022
Your order number:	003524	**Analysis completed by:**	05/12/2022
Report Issue Number:	1	**Report issued on:**	05/12/2022
Samples Analysed:	6 soil samples		

Signed:

Dominika Warjan
Junior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report relate only to the sample(s) submitted for testing

Analytical Report Number: 22-98397
Project / Site name: Don Street
Your Order No: 003524

Lab Sample Number				2508899	2508900	2508901	2508902	2508903
Sample Reference				TP48 North	TP48 East	TP48 South	TP48 West	TP48 Base
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	-	-	-	-	-
Moisture Content	%	0.01	NONE	-	-	-	-	-
Total mass of sample received	kg	0.001	NONE	-	-	-	-	-
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	Chrysotile & Amosite	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	< 0.001	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	< 0.001	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	KSZ	KSZ	KSZ	KSZ	KSZ
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	-	-	-	-	-
Total Sulphate as SO4	mg/kg	50	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	-	-	-	-
Sulphide	mg/kg	1	NONE	-	-	-	-	-
Total Sulphur	mg/kg	50	MCERTS	-	-	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	-	-	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	NONE	-	-	-	-	-
Acenaphthylene	mg/kg	0.05	NONE	-	-	-	-	-
Acenaphthene	mg/kg	0.05	NONE	-	-	-	-	-
Fluorene	mg/kg	0.05	NONE	-	-	-	-	-
Phenanthrene	mg/kg	0.05	NONE	-	-	-	-	-
Anthracene	mg/kg	0.05	NONE	-	-	-	-	-
Fluoranthene	mg/kg	0.05	NONE	-	-	-	-	-
Pyrene	mg/kg	0.05	NONE	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	NONE	-	-	-	-	-
Chrysene	mg/kg	0.05	NONE	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	NONE	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	NONE	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	NONE	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	NONE	-	-	-	-	-
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	-	-	-	-	-

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Analytical Report Number: 22-98397
Project / Site name: Don Street
Your Order No: 003524

Lab Sample Number				2508899	2508900	2508901	2508902	2508903
Sample Reference				TP48 North	TP48 East	TP48 South	TP48 West	TP48 Base
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	-	-	-	-
Chromium (hexavalent)	mg/kg	1.8	MCERTS	-	-	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	-	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	NONE	-	-	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	NONE	-	-	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 22-98397
Project / Site name: Don Street
Your Order No: 003524

Lab Sample Number				2508904
Sample Reference				TP48 Arisings
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				21/11/2022
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	13
Total mass of sample received	kg	0.001	NONE	0.3

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-
Asbestos Quantification Total	%	0.001	ISO 17025	-
Asbestos Analyst ID	N/A	N/A	N/A	KSZ

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.3
Total Cyanide	mg/kg	1	MCERTS	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	790
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.06
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	120
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	59.8
Sulphide	mg/kg	1	NONE	180
Total Sulphur	mg/kg	50	MCERTS	1600
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	2.3

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0

Speciated PAHs

Naphthalene	mg/kg	0.05	NONE	1.8
Acenaphthylene	mg/kg	0.05	NONE	< 0.05
Acenaphthene	mg/kg	0.05	NONE	2.7
Fluorene	mg/kg	0.05	NONE	1.7
Phenanthrene	mg/kg	0.05	NONE	12
Anthracene	mg/kg	0.05	NONE	2.3
Fluoranthene	mg/kg	0.05	NONE	13
Pyrene	mg/kg	0.05	NONE	12
Benzo(a)anthracene	mg/kg	0.05	NONE	6.1
Chrysene	mg/kg	0.05	NONE	5.2
Benzo(b)fluoranthene	mg/kg	0.05	NONE	6.9
Benzo(k)fluoranthene	mg/kg	0.05	NONE	1.9
Benzo(a)pyrene	mg/kg	0.05	NONE	5.5
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	2.8
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	0.61
Benzo(ghi)perylene	mg/kg	0.05	NONE	3.3

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	77.7

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Analytical Report Number: 22-98397
Project / Site name: Don Street
Your Order No: 003524

Lab Sample Number				2508904
Sample Reference				TP48 Arisings
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				21/11/2022
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Heavy Metals / Metalloids				
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	19
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	32
Copper (aqua regia extractable)	mg/kg	1	MCERTS	57
Lead (aqua regia extractable)	mg/kg	1	MCERTS	150
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	27
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	390

Petroleum Hydrocarbons

TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	NONE	< 2.0
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	NONE	8.1
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	57
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	320
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	97
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	480

U/S = Unsuitable Sample I/S = Insufficient Sample

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The results included within the report relate only to the sample(s) submitted for testing.

UKAS TESTING
4041

Analytical i2 Environmental Science

Analytical Report Number: 22-98397
Project / Site name: Don Street
Your Order No: 003524

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2508900	TP48 East		134	Loose Fibres	**Chrysotile & Amosite**	< 0.001	**< 0.001**

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 22-98397
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2508904	TP48 Arisings	None Supplied	None Supplied	Brown loam and sand with gravel and brick.

Analytical Report Number : 22-98397
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	NONE
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	NONE
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	NONE
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

Analytical Report Number : 22-98397
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-11122

Replaces Analytical Report Number: 23-11122, issue no. 2
Client references/information amended.
Sample IDs changed as per clients request
The report has been updated to the current Schedule of Accreditation issue No: 118 Issue date: 22 August 2023

Project / Site name:	Don Street	**Samples received on:**	09/01/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	10/01/2023
Your order number:	003830	**Analysis completed by:**	18/01/2023
Report Issue Number:	3	**Report issued on:**	14/12/2023
Samples Analysed:	2 leachate samples - 2 soil samples		

Signed:

Anna Goc
PL Head of Reporting Team
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-11122
Project / Site name: Don Street
Your Order No: 003830

Lab Sample Number				2550278	2550279
Sample Reference				WS402 South	WS402 West
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				06/01/2023	06/01/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	15	29
Total mass of sample received	kg	0.001	NONE	0.8	0.8

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile & Amosite & Crocidolite	-
Asbestos in Soil	Type	N/A	ISO 17025	Detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	< 0.001	-
Asbestos Quantification Total	%	0.001	ISO 17025	< 0.001	-
Asbestos Analyst ID	N/A	N/A	N/A	LFT	LFT

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	10.7	8.2
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	3200	1200
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.38	0.1
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	760	200
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	380	100
Sulphide	mg/kg	1	MCERTS	17	7.4
Total Sulphur	mg/kg	50	MCERTS	1200	740
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.2	4.6

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.34	0.15
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	0.39	0.17
Fluorene	mg/kg	0.05	MCERTS	0.31	0.15
Phenanthrene	mg/kg	0.05	MCERTS	3.8	1.6
Anthracene	mg/kg	0.05	MCERTS	0.9	0.31
Fluoranthene	mg/kg	0.05	MCERTS	4.8	2.4
Pyrene	mg/kg	0.05	MCERTS	4.5	2.4
Benzo(a)anthracene	mg/kg	0.05	MCERTS	2.3	1.1
Chrysene	mg/kg	0.05	MCERTS	2	1.3
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	2.1	1.2
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.94	0.61
Benzo(a)pyrene	mg/kg	0.05	MCERTS	2	1.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	1.1	0.68
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.25	0.17
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	1.3	0.76

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	26.9	14.1

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Analytical Report Number: 23-11122
Project / Site name: Don Street
Your Order No: 003830

Lab Sample Number				2550278	2550279
Sample Reference				WS402 South	WS402 West
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				06/01/2023	06/01/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Heavy Metals / Metalloids					
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	13	21
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.8	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	16	18
Copper (aqua regia extractable)	mg/kg	1	MCERTS	110	100
Lead (aqua regia extractable)	mg/kg	1	MCERTS	88	120
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	22	19
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	220	180
Petroleum Hydrocarbons					
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	< 2.0	< 2.0
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	14	7.7
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	41	16
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	170	88
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	47	29
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	270	140

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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The results included within the report relate only to the sample(s) submitted for testing.

UKAS TESTING
4041

Analytical i2 Environmental Science

Analytical Report Number: 23-11122
Project / Site name: Don Street
Your Order No: 003830

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2550278	WS402 South		142	Loose Fibres	**Chrysotile & Amosite & Crocidolite**	< 0.001	**< 0.001**

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number: 23-11122
Project / Site name: Don Street

Your Order No: 003830

Lab Sample Number				2550280	2550281
Sample Reference				WS402 South	WS402 West
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				06/01/2023	06/01/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Leachate Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
General Inorganics					
pH (automated)	pH Units	N/A	ISO 17025	10.3	7.7
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	1.5	< 1.0
Total Phenols					
Total Phenols (monohydric)	µg/l	1	ISO 17025	2.9	2.2
Speciated PAHs					
Naphthalene	µg/l	0.01	NONE	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	NONE	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	NONE	< 0.01	< 0.01
Fluorene	µg/l	0.01	NONE	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	NONE	< 0.01	< 0.01
Anthracene	µg/l	0.01	NONE	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01
Pyrene	µg/l	0.01	NONE	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01
Chrysene	µg/l	0.01	NONE	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	NONE	< 0.01	< 0.01
Total PAH					
Total EPA-16 PAHs	µg/l	0.2	NONE	< 0.2	< 0.2
Heavy Metals / Metalloids					
Arsenic (dissolved)	µg/l	1	ISO 17025	11	1.2
Cadmium (dissolved)	µg/l	0.08	ISO 17025	< 0.08	< 0.08
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0
Chromium (dissolved)	µg/l	0.4	ISO 17025	2	< 0.4
Copper (dissolved)	µg/l	0.7	ISO 17025	39	21
Lead (dissolved)	µg/l	1	ISO 17025	2.4	1.8
Mercury (dissolved)	µg/l	0.5	ISO 17025	< 0.5	< 0.5
Nickel (dissolved)	µg/l	0.3	ISO 17025	4.9	2.4
Selenium (dissolved)	µg/l	4	ISO 17025	< 4.0	< 4.0
Zinc (dissolved)	µg/l	0.4	ISO 17025	6.4	6.3
Monoaromatics & Oxygenates					
Benzene	µg/l	3	NONE	< 1.0	< 1.0
Toluene	µg/l	3	NONE	< 1.0	< 1.0
Ethylbenzene	µg/l	3	NONE	< 1.0	< 1.0
p & m-xylene	µg/l	3	NONE	< 1.0	< 1.0
o-xylene	µg/l	3	NONE	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	10	NONE	< 10	< 10
Petroleum Hydrocarbons					
TPH1 (C10 - C40) EH_1D_TOTAL_MS	µg/l	10	NONE	< 10	< 10

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Analytical Report Number: 23-11122
Project / Site name: Don Street

Your Order No: 003830

Lab Sample Number				2550280	2550281
Sample Reference				WS402 South	WS402 West
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				06/01/2023	06/01/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Leachate Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
TPH-CWG - Aliphatic >C5 - C6 $_{HS\_1D\_AL}$	µg/l	1	NONE	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8 $_{HS\_1D\_AL}$	µg/l	1	NONE	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10 $_{HS\_1D\_AL}$	µg/l	1	NONE	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) $_{HS+EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aromatic >C5 - C7 $_{HS\_1D\_AR}$	µg/l	1	NONE	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 $_{HS\_1D\_AR}$	µg/l	1	NONE	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 $_{HS\_1D\_AR}$	µg/l	1	NONE	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aromatic >C21 - C35 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aromatic (C5 - C35) $_{HS+EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-11122
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2550278	WS402 South	None Supplied	None Supplied	Brown clay and sand with gravel and vegetation.
2550279	WS402 West	None Supplied	None Supplied	Brown clay and loam with gravel and vegetation.

Analytical Report Number : 23-11122
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
BS EN 12457-1 (2:1) Leachate Prep	2:1 (as recieved, moisture adjusted) end over end extraction with water for 24 hours. Eluate filtered prior to analysis.	In-house method based on BSEN12457-1.	L043-PL	W	NONE
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Metals by ICP-OES in leachate	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Hexavalent chromium in leachate	Determination of hexavalent chromium in leachate by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in leachate - LOW LEVEL 1 ug/l	Determination of phenols in leachate by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in leachate	Determination of PAH compounds in leachate by extraction in dichloromethane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L102B-PL	W	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards. Refer to CoA for analyte specific accreditation.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
pH at 20oC in leachate (automated)	Determination of pH in leachate by electrometric measurement.	In house method.	L099B	W	ISO 17025
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE

Analytical Report Number : 23-11122
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
TPH1 (Leachates)	Determination of dichloromethane extractable hydrocarbons in leachate by GC-MS.	In-house method	L070-PL	W	NONE
TPHCWG (Leachates)	Determination of dichloromethane extractable hydrocarbons in leachate by GC-MS.	In-house method	L070-PL	W	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
BTEX and MTBE in leachates (Monoaromatics)	Determination of BTEX and MTBE in leachates by headspace GC-MS.	In-house method based on USEPA8260. Refer to CoA for analyte specific accreditation	L073B-PL	W	NONE
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Total cyanide in leachate - 1µg/l	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Analytical Report Number : 23-11122
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-22839

Project / Site name:	Don Street	**Samples received on:**	14/03/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	14/03/2023
Your order number:	004336	**Analysis completed by:**	21/03/2023
Report Issue Number:	1	**Report issued on:**	22/03/2023
Samples Analysed:	11 soil samples		

Signed:

Dominika Warjan
Junior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-22839
Project / Site name: Don Street
Your Order No: 004336

Lab Sample Number				2616357	2616358	2616359	2616360	2616361
Sample Reference				WS203 North	WS203 East	WS203 West	WS203 South	WS203 North A
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				13/03/2023	13/03/2023	13/03/2023	13/03/2023	13/03/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	-	-	-	-	-
Moisture Content	%	0.01	NONE	-	-	-	-	-
Total mass of sample received	kg	0.001	NONE	-	-	-	-	-
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile	-	-	-	Chrysotile
Asbestos in Soil	Type	N/A	ISO 17025	Detected	Not-detected	Not-detected	Not-detected	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	0.01	-	-	-	0.002
Asbestos Quantification Total	%	0.001	ISO 17025	0.01	-	-	-	0.002
Asbestos Analyst ID	N/A	N/A	N/A	LFT	LFT	LFT	LFT	LFT
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	-	-	-	-	-
Total Sulphate as SO4	mg/kg	50	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	-	-	-	-
Sulphide	mg/kg	1	MCERTS	-	-	-	-	-
Total Sulphur	mg/kg	50	MCERTS	-	-	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	-	-	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.05	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	-	-	-	-	-

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Analytical Report Number: 23-22839
Project / Site name: Don Street
Your Order No: 004336

Lab Sample Number				2616357	2616358	2616359	2616360	2616361
Sample Reference				WS203 North	WS203 East	WS203 West	WS203 South	WS203 North A
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				13/03/2023	13/03/2023	13/03/2023	13/03/2023	13/03/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	-	-	-	-
Chromium (hexavalent)	mg/kg	1.8	MCERTS	-	-	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	-	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	-	-	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	-	-	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	-	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	-	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	-	-	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 23-22839
Project / Site name: Don Street
Your Order No: 004336

Lab Sample Number				2616362	2616363	2616364	2616365	2616366
Sample Reference				WS203 East A	WS203 West A	WS203 South A	WS203 Arsings	WS203 BASE
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				13/03/2023	13/03/2023	13/03/2023	13/03/2023	13/03/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	-	-	-	< 0.1	-
Moisture Content	%	0.01	NONE	-	-	-	16	-
Total mass of sample received	kg	0.001	NONE	-	-	-	0.3	-
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	Chrysotile & Amosite	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	< 0.001	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	< 0.001	-	-
Asbestos Analyst ID	N/A	N/A	N/A	LFT	LFT	LFT	LFT	LFT
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	-	-	9.2	-
Total Cyanide	mg/kg	1	MCERTS	-	-	-	< 1.0	-
Total Sulphate as SO4	mg/kg	50	MCERTS	-	-	-	630	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	-	-	0.058	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	-	-	120	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	-	-	58.3	-
Sulphide	mg/kg	1	MCERTS	-	-	-	46	-
Total Sulphur	mg/kg	50	MCERTS	-	-	-	950	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	-	-	1	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-	< 1.0	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	0.79	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	< 0.05	-
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	0.86	-
Fluorene	mg/kg	0.05	MCERTS	-	-	-	0.64	-
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	7.6	-
Anthracene	mg/kg	0.05	MCERTS	-	-	-	1.9	-
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	9.7	-
Pyrene	mg/kg	0.05	MCERTS	-	-	-	9.3	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-	4.4	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	3.8	-
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	-	-	-	4.3	-
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	-	-	-	1.8	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-	4	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	-	2.1	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-	0.48	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	2.2	-
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	-	-	-	53.7	-

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Analytical Report Number: 23-22839
Project / Site name: Don Street
Your Order No: 004336

Lab Sample Number				2616362	2616363	2616364	2616365	2616366
Sample Reference				WS203 East A	WS203 West A	WS203 South A	WS203 Arsings	WS203 BASE
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				13/03/2023	13/03/2023	13/03/2023	13/03/2023	13/03/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	16	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	-	-	0.8	-
Chromium (hexavalent)	mg/kg	1.8	MCERTS	-	-	-	< 1.8	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	9.8	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	34	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	88	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	-	-	< 0.3	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	14	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	< 1.0	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	120	-
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	< 1.0	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	< 0.1	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	< 0.1	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	-	-	-	3.2	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	-	-	-	5.6	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	-	-	17	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	-	-	25	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	-	-	-	< 10	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	51	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 23-22839
Project / Site name: Don Street
Your Order No: 004336

Lab Sample Number				2616367
Sample Reference				WS203 Base a
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				13/03/2023
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Stone Content	%	0.1	NONE	-
Moisture Content	%	0.01	NONE	-
Total mass of sample received	kg	0.001	NONE	-

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-
Asbestos Quantification Total	%	0.001	ISO 17025	-
Asbestos Analyst ID	N/A	N/A	N/A	LFT

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	-
Total Cyanide	mg/kg	1	MCERTS	-
Total Sulphate as SO4	mg/kg	50	MCERTS	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-
Sulphide	mg/kg	1	MCERTS	-
Total Sulphur	mg/kg	50	MCERTS	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	-

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	-
Acenaphthylene	mg/kg	0.05	MCERTS	-
Acenaphthene	mg/kg	0.05	MCERTS	-
Fluorene	mg/kg	0.05	MCERTS	-
Phenanthrene	mg/kg	0.05	MCERTS	-
Anthracene	mg/kg	0.05	MCERTS	-
Fluoranthene	mg/kg	0.05	MCERTS	-
Pyrene	mg/kg	0.05	MCERTS	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-
Chrysene	mg/kg	0.05	MCERTS	-
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	-
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	-

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Analytical Report Number: 23-22839
Project / Site name: Don Street
Your Order No: 004336

Lab Sample Number				2616367
Sample Reference				WS203 Base a
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				13/03/2023
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Heavy Metals / Metalloids				
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-
Chromium (hexavalent)	mg/kg	1.8	MCERTS	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-
Petroleum Hydrocarbons				
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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The results included within the report relate only to the sample(s) submitted for testing.

UKAS TESTING
4041

Analytical i2 Environmental Science

Analytical Report Number: 23-22839
Project / Site name: Don Street
Your Order No: 004336

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2616357	WS203 North		151	Loose Fibrous Debris	**Chrysotile**	0.010	**0.010**
2616361	WS203 North A		156	Loose Fibrous Debris	**Chrysotile**	0.002	**0.002**
2616364	WS203 South A		161	Loose Fibres	**Chrysotile & Amosite**	< 0.001	**< 0.001**

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 23-22839
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2616365	WS203 Arsings	None Supplied	None Supplied	Brown clay and sand with gravel.

Analytical Report Number : 23-22839
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

Analytical Report Number : 23-22839
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 22-95879

Project / Site name:	Don Street	**Samples received on:**	09/11/2022
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	10/11/2022
Your order number:	003453	**Analysis completed by:**	28/11/2022
Report Issue Number:	1	**Report issued on:**	28/11/2022
Samples Analysed:	6 soil samples		

Signed:

Anna Goc
Junior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report relate only to the sample(s) submitted for testing

Analytical Report Number: 22-95879
Project / Site name: Don Street
Your Order No: 003453

Lab Sample Number				2495036	2495037	2495038	2495039	2495040
Sample Reference				WS402 North	WS402 East	WS402 South	WS402 West	WS402 Base
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	2.40
Date Sampled				08/11/2022	08/11/2022	08/11/2022	08/11/2022	08/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	-	-	-	-	-
Moisture Content	%	0.01	NONE	-	-	-	-	-
Total mass of sample received	kg	0.001	NONE	-	-	-	-	-
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	Chrysotile & Amosite	Amosite	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Detected	Detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	0.127	< 0.001	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	0.127	< 0.001	-
Asbestos Analyst ID	N/A	N/A	N/A	MLO	MLO	MLO	MLO	MLO
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	-	-	-	-	-
Total Sulphate as SO4	mg/kg	50	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	-	-	-	-
Sulphide	mg/kg	1	NONE	-	-	-	-	-
Total Sulphur	mg/kg	50	MCERTS	-	-	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	-	-	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	NONE	-	-	-	-	-
Acenaphthylene	mg/kg	0.05	NONE	-	-	-	-	-
Acenaphthene	mg/kg	0.05	NONE	-	-	-	-	-
Fluorene	mg/kg	0.05	NONE	-	-	-	-	-
Phenanthrene	mg/kg	0.05	NONE	-	-	-	-	-
Anthracene	mg/kg	0.05	NONE	-	-	-	-	-
Fluoranthene	mg/kg	0.05	NONE	-	-	-	-	-
Pyrene	mg/kg	0.05	NONE	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	NONE	-	-	-	-	-
Chrysene	mg/kg	0.05	NONE	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	NONE	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	NONE	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	NONE	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	NONE	-	-	-	-	-
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	-	-	-	-	-

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Analytical Report Number: 22-95879
Project / Site name: Don Street
Your Order No: 003453

Lab Sample Number				2495036	2495037	2495038	2495039	2495040
Sample Reference				WS402 North	WS402 East	WS402 South	WS402 West	WS402 Base
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	2.40
Date Sampled				08/11/2022	08/11/2022	08/11/2022	08/11/2022	08/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	-	-	-	-
Chromium (hexavalent)	mg/kg	1.8	MCERTS	-	-	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	-	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	NONE	-	-	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	NONE	-	-	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample

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Analytical Report Number: 22-95879
Project / Site name: Don Street
Your Order No: 003453

Lab Sample Number				2495041
Sample Reference				WS402 Arising
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				08/11/2022
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	13
Total mass of sample received	kg	0.001	NONE	0.5

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-
Asbestos Quantification Total	%	0.001	ISO 17025	-
Asbestos Analyst ID	N/A	N/A	N/A	SZS

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.1
Total Cyanide	mg/kg	1	MCERTS	12
Total Sulphate as SO4	mg/kg	50	MCERTS	570
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.04
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	80
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	39.8
Sulphide	mg/kg	1	NONE	20
Total Sulphur	mg/kg	50	MCERTS	590
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.5

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0

Speciated PAHs

Naphthalene	mg/kg	0.05	NONE	0.16
Acenaphthylene	mg/kg	0.05	NONE	0.11
Acenaphthene	mg/kg	0.05	NONE	0.48
Fluorene	mg/kg	0.05	NONE	0.32
Phenanthrene	mg/kg	0.05	NONE	2.8
Anthracene	mg/kg	0.05	NONE	0.74
Fluoranthene	mg/kg	0.05	NONE	4.3
Pyrene	mg/kg	0.05	NONE	4
Benzo(a)anthracene	mg/kg	0.05	NONE	2.3
Chrysene	mg/kg	0.05	NONE	2.2
Benzo(b)fluoranthene	mg/kg	0.05	NONE	2.6
Benzo(k)fluoranthene	mg/kg	0.05	NONE	1.3
Benzo(a)pyrene	mg/kg	0.05	NONE	2.5
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	1.4
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	0.33
Benzo(ghi)perylene	mg/kg	0.05	NONE	1.8

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	27.4

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Analytical Report Number: 22-95879
Project / Site name: Don Street
Your Order No: 003453

Lab Sample Number				2495041
Sample Reference				WS402 Arising
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				08/11/2022
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Heavy Metals / Metalloids				
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	21
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	18
Copper (aqua regia extractable)	mg/kg	1	MCERTS	91
Lead (aqua regia extractable)	mg/kg	1	MCERTS	310
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	29
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	740

Petroleum Hydrocarbons

TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	NONE	< 2.0
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	NONE	< 4.0
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	24
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	72
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	11
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	110

U/S = Unsuitable Sample I/S = Insufficient Sample

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Analytical Report Number: 22-95879
Project / Site name: Don Street
Your Order No: 003453

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2495038	WS402 South		154	Sheeting/Board Debris & Loose Fibres	**Chrysotile & Amosite**	0.127	**0.127**
2495039	WS402 West		169	Loose Fibres	**Amosite**	< 0.001	**< 0.001**

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

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Analytical Report Number : 22-95879
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2495041	WS402 Arising	None Supplied	None Supplied	Brown clay and sand with gravel.

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Analytical Report Number : 22-95879
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	NONE
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	NONE
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	NONE
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

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Analytical Report Number : 22-95879
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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The results included within the report relate only to the sample(s) submitted for testing.

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Analytical Report Number : 22-97517-2

Replaces Analytical Report Number: 22-97517, issue no. 1
Additional analysis undertaken.
Analysis for Speciated Mercury undertaken for samples 2503992 and 2504003 as per client's request

Project / Site name:	Don Street	**Samples received on:**	17/11/2022
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	17/11/2022
Your order number:	003508	**Analysis completed by:**	29/03/2023
Report Issue Number:	2	**Report issued on:**	18/04/2023
Samples Analysed:	30 soil samples		

Signed:

Dominika Warjan
Junior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 22-97517
Project / Site name: Don Street
Your Order No: 003508

Lab Sample Number				2503976	2503977	2503978	2503979	2503980
Sample Reference				TP8 NORTH	TP8 EAST	TP8 SOUTH	TP8 WEST	TP8 BASE
Sample Number				MERCURY	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				15/11/2022	15/11/2022	15/11/2022	15/11/2022	15/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	19	9.5	19	24	21
Total mass of sample received	kg	0.001	NONE	0.5	0.5	0.5	0.5	0.5
Asbestos in Soil	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	-	-	-	-
Sulphide	mg/kg	1	MCERTS	-	-	-	-	-
Total Sulphur	mg/kg	50	MCERTS	-	-	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	-	-	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	NONE	-	-	-	-	-
Acenaphthylene	mg/kg	0.05	NONE	-	-	-	-	-
Acenaphthene	mg/kg	0.05	NONE	-	-	-	-	-
Fluorene	mg/kg	0.05	NONE	-	-	-	-	-
Phenanthrene	mg/kg	0.05	NONE	-	-	-	-	-
Anthracene	mg/kg	0.05	NONE	-	-	-	-	-
Fluoranthene	mg/kg	0.05	NONE	-	-	-	-	-
Pyrene	mg/kg	0.05	NONE	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	NONE	-	-	-	-	-
Chrysene	mg/kg	0.05	NONE	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	NONE	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	NONE	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	NONE	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	NONE	-	-	-	-	-
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	-	-	-	-	-

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Analytical Report Number: 22-97517
Project / Site name: Don Street
Your Order No: 003508

Lab Sample Number				2503976	2503977	2503978	2503979	2503980
Sample Reference				TP8 NORTH	TP8 EAST	TP8 SOUTH	TP8 WEST	TP8 BASE
Sample Number				MERCURY	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				15/11/2022	15/11/2022	15/11/2022	15/11/2022	15/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	21	9.8	17	16	11
Barium (aqua regia extractable)	mg/kg	1	MCERTS	730	310	590	160	130
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	1.5	0.64	1.1	0.82	0.57
Boron (water soluble)	mg/kg	0.2	MCERTS	1.5	1.2	3.9	1.3	0.8
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	1.6	0.6	1.3	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	350	85	230	36	27
Lead (aqua regia extractable)	mg/kg	1	MCERTS	390	81	1900	41	20
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.7	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	31	15	26	17	14
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	38	24	31	23	16
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	940	250	930	97	76
Speciated Mercury (Dry Weight)								
Inorganic Mercury	mg/kg	0.005	NONE	-	-	-	-	-
Organo-Mercury Species (including Methyl Hg)	mg/kg	0.005	NONE	-	-	-	-	-
Elemental Mercury	mg/kg	0.005	NONE	-	-	-	-	-
Speciated Mercury (Dry Weight)								
F1 - Water soluble	mg/kg	0.005	NONE	-	-	-	-	-
F2 - Weak acid	mg/kg	0.005	NONE	-	-	-	-	-
F3 - Organo- complexed	mg/kg	0.005	NONE	-	-	-	-	-
F4 - Strongly complexed	mg/kg	0.005	NONE	-	-	-	-	-
F5 - Mineral bound	mg/kg	0.005	NONE	-	-	-	-	-
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	NONE	-	-	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	NONE	-	-	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 22-97517
Project / Site name: Don Street
Your Order No: 003508

Lab Sample Number				2503981	2503982	2503983	2503984	2503985
Sample Reference				TP8 ARISINGS	BH4 NORTH	BH4 EAST	BH4 SOUTH	BH4 WEST
Sample Number				None Supplied	VOLATILE	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				15/11/2022	15/11/2022	15/11/2022	15/11/2022	15/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	19	18	17	22	22
Total mass of sample received	kg	0.001	NONE	0.5	0.5	0.5	0.5	0.5
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	SSZ	N/A	N/A	N/A	N/A

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	9.2	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1.0	-	-	-	-
Total Sulphate as SO4	mg/kg	50	MCERTS	2400	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.23	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	460	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	232	-	-	-	-
Sulphide	mg/kg	1	MCERTS	180	-	-	-	-
Total Sulphur	mg/kg	50	MCERTS	1800	-	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.7	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	-	-	-	-

Speciated PAHs

Naphthalene	mg/kg	0.05	NONE	4	3.5	0.9	0.87	0.7
Acenaphthylene	mg/kg	0.05	NONE	0.21	< 0.05	< 0.05	0.11	0.1
Acenaphthene	mg/kg	0.05	NONE	2.5	2.9	0.6	0.75	0.98
Fluorene	mg/kg	0.05	NONE	2.6	3.1	0.59	0.71	0.94
Phenanthrene	mg/kg	0.05	NONE	15	25	6.5	8	10
Anthracene	mg/kg	0.05	NONE	4.7	6.7	1.7	2.1	2.7
Fluoranthene	mg/kg	0.05	NONE	18	25	8.6	12	14
Pyrene	mg/kg	0.05	NONE	16	25	8.7	12	14
Benzo(a)anthracene	mg/kg	0.05	NONE	7.2	14	4.7	7.1	7.6
Chrysene	mg/kg	0.05	NONE	6.2	12	3.9	6	6.8
Benzo(b)fluoranthene	mg/kg	0.05	NONE	6.3	13	4.6	8.5	8.7
Benzo(k)fluoranthene	mg/kg	0.05	NONE	2.3	5.3	2	1.9	2.7
Benzo(a)pyrene	mg/kg	0.05	NONE	5.9	12	4.3	6.7	7.5
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	3	5.2	2.1	3.6	3.9
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	0.66	1	0.41	0.63	0.75
Benzo(ghi)perylene	mg/kg	0.05	NONE	3.2	6.1	2.4	4.2	4.5

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	97.7	160	51.9	75.1	86.3

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Analytical Report Number: 22-97517
Project / Site name: Don Street
Your Order No: 003508

Lab Sample Number				2503981	2503982	2503983	2503984	2503985
Sample Reference				TP8 ARISINGS	BH4 NORTH	BH4 EAST	BH4 SOUTH	BH4 WEST
Sample Number				None Supplied	VOLATILE	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				15/11/2022	15/11/2022	15/11/2022	15/11/2022	15/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	17	-	-	-	-
Barium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	-	-	-	-	-
Boron (water soluble)	mg/kg	0.2	MCERTS	-	-	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	1.1	-	-	-	-
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	-	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	20	-	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	190	-	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	180	-	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	22	-	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	-	-	-	-
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	610	-	-	-	-
Speciated Mercury (Dry Weight)								
Inorganic Mercury	mg/kg	0.005	NONE	-	-	-	-	-
Organo-Mercury Species (including Methyl Hg)	mg/kg	0.005	NONE	-	-	-	-	-
Elemental Mercury	mg/kg	0.005	NONE	-	-	-	-	-
Speciated Mercury (Dry Weight)								
F1 - Water soluble	mg/kg	0.005	NONE	-	-	-	-	-
F2 - Weak acid	mg/kg	0.005	NONE	-	-	-	-	-
F3 - Organo- complexed	mg/kg	0.005	NONE	-	-	-	-	-
F4 - Strongly complexed	mg/kg	0.005	NONE	-	-	-	-	-
F5 - Mineral bound	mg/kg	0.005	NONE	-	-	-	-	-
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	-	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	-	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	-	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	NONE	< 2.0	-	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	NONE	6.4	-	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	41	-	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	170	-	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	23	-	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	240	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 22-97517
Project / Site name: Don Street
Your Order No: 003508

Lab Sample Number				2503986	2503987	2503988	2503989	2503990
Sample Reference				BH4 BASE	BH4 ARISINGS	BH3 NORTH	BH3 EAST	BH3 SOUTH
Sample Number				None Supplied	None Supplied	VOLATILE+MERCURY	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				15/11/2022	15/11/2022	15/11/2022	15/11/2022	15/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	19	16	24	31	28
Total mass of sample received	kg	0.001	NONE	0.5	0.5	0.5	0.5	0.5
Asbestos in Soil	Type	N/A	ISO 17025	-	Not-detected	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A	SSZ	N/A	N/A	N/A
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	8.6	-	-	-
Total Cyanide	mg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	-	2100	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	0.15	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	300	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	150	-	-	-
Sulphide	mg/kg	1	MCERTS	-	55	-	-	-
Total Sulphur	mg/kg	50	MCERTS	-	1300	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	2.2	-	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	< 1.0	-	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	NONE	0.16	1.7	< 0.05	0.09	0.1
Acenaphthylene	mg/kg	0.05	NONE	< 0.05	0.26	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	NONE	0.11	4.4	< 0.05	0.08	0.09
Fluorene	mg/kg	0.05	NONE	0.14	4.7	< 0.05	< 0.05	0.08
Phenanthrene	mg/kg	0.05	NONE	1.5	35	0.1	0.74	0.83
Anthracene	mg/kg	0.05	NONE	0.42	12	< 0.05	0.15	0.17
Fluoranthene	mg/kg	0.05	NONE	2.1	40	0.16	0.82	0.91
Pyrene	mg/kg	0.05	NONE	2.2	33	0.15	0.81	0.93
Benzo(a)anthracene	mg/kg	0.05	NONE	1.2	16	0.11	0.53	0.52
Chrysene	mg/kg	0.05	NONE	0.99	16	0.08	0.4	0.52
Benzo(b)fluoranthene	mg/kg	0.05	NONE	1.1	13	< 0.05	0.44	0.63
Benzo(k)fluoranthene	mg/kg	0.05	NONE	0.35	8.3	< 0.05	0.2	0.21
Benzo(a)pyrene	mg/kg	0.05	NONE	0.89	13	< 0.05	0.42	0.52
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	0.44	6.6	< 0.05	0.21	0.23
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	< 0.05	1.6	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	NONE	0.51	7.2	< 0.05	0.28	0.31
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	12.1	212	< 0.80	5.17	6.05

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Analytical Report Number: 22-97517
Project / Site name: Don Street
Your Order No: 003508

Lab Sample Number				2503986	2503987	2503988	2503989	2503990
Sample Reference				BH4 BASE	BH4 ARISINGS	BH3 NORTH	BH3 EAST	BH3 SOUTH
Sample Number				None Supplied	None Supplied	VOLATILE+MERCURY	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				15/11/2022	15/11/2022	15/11/2022	15/11/2022	15/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	20	8.1	24	16
Barium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	160	140	140
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	-	-	0.43	0.38	0.34
Boron (water soluble)	mg/kg	0.2	MCERTS	-	-	1.7	3.4	2.4
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	1.3	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	-	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	22	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	290	16	19	19
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	300	13	24	23
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	0.6	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	30	12	13	11
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	10	7.6	8
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	720	48	73	64
Speciated Mercury (Dry Weight)								
Inorganic Mercury	mg/kg	0.005	NONE	-	-	-	-	-
Organo-Mercury Species (including Methyl Hg)	mg/kg	0.005	NONE	-	-	-	-	-
Elemental Mercury	mg/kg	0.005	NONE	-	-	-	-	-
Speciated Mercury (Dry Weight)								
F1 - Water soluble	mg/kg	0.005	NONE	-	-	-	-	-
F2 - Weak acid	mg/kg	0.005	NONE	-	-	-	-	-
F3 - Organo- complexed	mg/kg	0.005	NONE	-	-	-	-	-
F4 - Strongly complexed	mg/kg	0.005	NONE	-	-	-	-	-
F5 - Mineral bound	mg/kg	0.005	NONE	-	-	-	-	-
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	< 1.0	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	< 0.1	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	< 0.1	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	NONE	-	2.1	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	NONE	-	20	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	110	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	290	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	-	52	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	480	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 22-97517
Project / Site name: Don Street
Your Order No: 003508

Lab Sample Number				2503991	2503992	2503993	2503994	2503995
Sample Reference				BH3 WEST	BH3 BASE	BH3 ARISINGS	BH1 NORTH	BH1 EAST
Sample Number				None Supplied	None Supplied	None Supplied	VOLATILE+MERCURY	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				15/11/2022	15/11/2022	15/11/2022	15/11/2022	15/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	29	18	24	21	23
Total mass of sample received	kg	0.001	NONE	0.5	0.5	0.5	0.5	0.5
Asbestos in Soil	Type	N/A	ISO 17025	-	-	Not-detected	-	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A	N/A	SSZ	N/A	N/A
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	-	8.2	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	-	-	1300	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	-	0.33	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	-	670	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	-	333	-	-
Sulphide	mg/kg	1	MCERTS	-	-	30	-	-
Total Sulphur	mg/kg	50	MCERTS	-	-	1900	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	-	4.8	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	< 1.0	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	NONE	0.09	0.31	0.34	0.95	0.46
Acenaphthylene	mg/kg	0.05	NONE	< 0.05	0.24	0.07	0.18	0.16
Acenaphthene	mg/kg	0.05	NONE	0.06	0.28	0.21	1.3	0.83
Fluorene	mg/kg	0.05	NONE	0.05	0.27	0.21	1.1	0.63
Phenanthrene	mg/kg	0.05	NONE	0.5	4.3	2.2	10	5.8
Anthracene	mg/kg	0.05	NONE	0.13	1	0.65	2.3	1.3
Fluoranthene	mg/kg	0.05	NONE	0.72	6.7	3.7	11	8.3
Pyrene	mg/kg	0.05	NONE	0.74	6.3	3.4	11	7.7
Benzo(a)anthracene	mg/kg	0.05	NONE	0.43	3.7	1.4	6.3	4.3
Chrysene	mg/kg	0.05	NONE	0.4	3.1	1.5	4.8	3.8
Benzo(b)fluoranthene	mg/kg	0.05	NONE	0.46	4.2	1.5	5.7	4.5
Benzo(k)fluoranthene	mg/kg	0.05	NONE	0.17	1.2	0.96	2.2	1.6
Benzo(a)pyrene	mg/kg	0.05	NONE	0.36	3.2	1.5	5	3.7
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	0.18	1.7	0.88	2.4	1.7
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	< 0.05	0.31	0.16	0.5	0.44
Benzo(ghi)perylene	mg/kg	0.05	NONE	0.32	1.9	0.93	2.7	2.1
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	4.61	38.8	19.5	68.3	47.3

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Analytical Report Number: 22-97517
Project / Site name: Don Street
Your Order No: 003508

Lab Sample Number				2503991	2503992	2503993	2503994	2503995
Sample Reference				BH3 WEST	BH3 BASE	BH3 ARISINGS	BH1 NORTH	BH1 EAST
Sample Number				None Supplied	None Supplied	None Supplied	VOLATILE+MERCURY	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				15/11/2022	15/11/2022	15/11/2022	15/11/2022	15/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	13	34	12	47	40
Barium (aqua regia extractable)	mg/kg	1	MCERTS	200	300	-	380	280
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.52	2.6	-	1.9	2.1
Boron (water soluble)	mg/kg	0.2	MCERTS	2.5	2.6	-	1.4	1.1
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	2.4
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	12	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	36	1100	56	98	95
Lead (aqua regia extractable)	mg/kg	1	MCERTS	50	470	80	280	350
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	7.1	< 0.3	< 0.3	0.5
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	14	33	14	29	32
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	13	53	-	39	43
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	130	230	220	740	580
Speciated Mercury (Dry Weight)								
Inorganic Mercury	mg/kg	0.005	NONE	-	4.672	-	-	-
Organo-Mercury Species (including Methyl Hg)	mg/kg	0.005	NONE	-	0.154	-	-	-
Elemental Mercury	mg/kg	0.005	NONE	-	1.164	-	-	-
Speciated Mercury (Dry Weight)								
F1 - Water soluble	mg/kg	0.005	NONE	-	0.092	-	-	-
F2 - Weak acid	mg/kg	0.005	NONE	-	0.217	-	-	-
F3 - Organo- complexed	mg/kg	0.005	NONE	-	0.154	-	-	-
F4 - Strongly complexed	mg/kg	0.005	NONE	-	1.164	-	-	-
F5 - Mineral bound	mg/kg	0.005	NONE	-	4.363	-	-	-
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	< 1.0	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	< 0.1	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	< 0.1	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	NONE	-	-	< 2.0	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	NONE	-	-	< 4.0	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	7.5	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	19	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	< 10	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	27	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 22-97517
Project / Site name: Don Street
Your Order No: 003508

Lab Sample Number				2503996	2503997	2503998	2503999	2504000
Sample Reference				BH1 SOUTH	BH1 WEST	BH1 BASE	BH1 ARISINGS	TP342 NORTH
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	MERCURY
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				15/11/2022	15/11/2022	15/11/2022	15/11/2022	15/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	23	13	25	17	18
Total mass of sample received	kg	0.001	NONE	0.5	0.5	0.5	0.5	0.5
Asbestos in Soil	Type	N/A	ISO 17025	-	-	-	Not-detected	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A	N/A	N/A	SSZ	N/A
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	-	-	9.3	-
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	-	-	-	1000	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	-	-	0.25	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	-	-	500	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	-	-	252	-
Sulphide	mg/kg	1	MCERTS	-	-	-	92	-
Total Sulphur	mg/kg	50	MCERTS	-	-	-	1200	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	-	-	1.7	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-	< 1.0	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	NONE	0.94	0.25	0.13	0.34	-
Acenaphthylene	mg/kg	0.05	NONE	0.13	< 0.05	< 0.05	0.09	-
Acenaphthene	mg/kg	0.05	NONE	0.88	0.32	0.12	0.38	-
Fluorene	mg/kg	0.05	NONE	0.72	0.28	0.09	0.45	-
Phenanthrene	mg/kg	0.05	NONE	7	2	1.2	2.8	-
Anthracene	mg/kg	0.05	NONE	1.8	0.43	0.28	0.85	-
Fluoranthene	mg/kg	0.05	NONE	9.2	2.4	2.1	4.2	-
Pyrene	mg/kg	0.05	NONE	8.6	2.3	2.2	3.7	-
Benzo(a)anthracene	mg/kg	0.05	NONE	4.8	1.2	1.3	1.5	-
Chrysene	mg/kg	0.05	NONE	3.8	1.2	1	1.4	-
Benzo(b)fluoranthene	mg/kg	0.05	NONE	5.2	1.3	1.3	1.4	-
Benzo(k)fluoranthene	mg/kg	0.05	NONE	1.3	0.51	0.55	0.66	-
Benzo(a)pyrene	mg/kg	0.05	NONE	3.9	1	1.1	1.3	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	1.9	0.49	0.56	0.62	-
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	0.36	0.11	0.1	0.1	-
Benzo(ghi)perylene	mg/kg	0.05	NONE	2.1	0.5	0.62	0.72	-
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	52.5	14.2	12.6	20.5	-

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Analytical Report Number: 22-97517
Project / Site name: Don Street
Your Order No: 003508

Lab Sample Number				2503996	2503997	2503998	2503999	2504000
Sample Reference				BH1 SOUTH	BH1 WEST	BH1 BASE	BH1 ARISINGS	TP342 NORTH
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	MERCURY
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				15/11/2022	15/11/2022	15/11/2022	15/11/2022	15/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	31	21	25	23	9.4
Barium (aqua regia extractable)	mg/kg	1	MCERTS	330	190	110	-	48
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	1.7	0.89	0.74	-	0.51
Boron (water soluble)	mg/kg	0.2	MCERTS	2	1.9	1.4	-	0.5
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	1.9
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	22	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	71	48	48	58	25
Lead (aqua regia extractable)	mg/kg	1	MCERTS	150	120	91	180	41
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	4.5
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	29	21	17	19	12
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	42	29	25	-	20
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	210	210	130	190	48
Speciated Mercury (Dry Weight)								
Inorganic Mercury	mg/kg	0.005	NONE	-	-	-	-	-
Organo-Mercury Species (including Methyl Hg)	mg/kg	0.005	NONE	-	-	-	-	-
Elemental Mercury	mg/kg	0.005	NONE	-	-	-	-	-
Speciated Mercury (Dry Weight)								
F1 - Water soluble	mg/kg	0.005	NONE	-	-	-	-	-
F2 - Weak acid	mg/kg	0.005	NONE	-	-	-	-	-
F3 - Organo- complexed	mg/kg	0.005	NONE	-	-	-	-	-
F4 - Strongly complexed	mg/kg	0.005	NONE	-	-	-	-	-
F5 - Mineral bound	mg/kg	0.005	NONE	-	-	-	-	-
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	< 1.0	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	< 0.1	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	< 0.1	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	NONE	-	-	-	< 2.0	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	NONE	-	-	-	< 4.0	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	16	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	32	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	< 10	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	48	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 22-97517
Project / Site name: Don Street
Your Order No: 003508

Lab Sample Number				2504001	2504002	2504003	2504004	2504005
Sample Reference				TP342 EAST	TP342 SOUTH	TP342 WEST	TP342 BASE	TP342 ARISINGS
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				15/11/2022	15/11/2022	15/11/2022	15/11/2022	15/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	18	21	27	10	18
Total mass of sample received	kg	0.001	NONE	0.5	0.5	0.5	0.5	0.5
Asbestos in Soil	Type	N/A	ISO 17025	-	-	-	-	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	N/A	N/A	N/A	N/A	SSZ
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	-	-	-	7
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	-	-	-	-	430
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	-	-	-	0.013
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	-	-	-	25
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	-	-	-	12.5
Sulphide	mg/kg	1	MCERTS	-	-	-	-	1.5
Total Sulphur	mg/kg	50	MCERTS	-	-	-	-	320
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	-	-	-	2.5
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-	-	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	NONE	-	-	-	-	< 0.05
Acenaphthylene	mg/kg	0.05	NONE	-	-	-	-	< 0.05
Acenaphthene	mg/kg	0.05	NONE	-	-	-	-	0.11
Fluorene	mg/kg	0.05	NONE	-	-	-	-	0.09
Phenanthrene	mg/kg	0.05	NONE	-	-	-	-	0.68
Anthracene	mg/kg	0.05	NONE	-	-	-	-	0.16
Fluoranthene	mg/kg	0.05	NONE	-	-	-	-	1.3
Pyrene	mg/kg	0.05	NONE	-	-	-	-	1.1
Benzo(a)anthracene	mg/kg	0.05	NONE	-	-	-	-	0.43
Chrysene	mg/kg	0.05	NONE	-	-	-	-	0.45
Benzo(b)fluoranthene	mg/kg	0.05	NONE	-	-	-	-	0.4
Benzo(k)fluoranthene	mg/kg	0.05	NONE	-	-	-	-	0.31
Benzo(a)pyrene	mg/kg	0.05	NONE	-	-	-	-	0.4
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	-	-	-	-	0.19
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	-	-	-	-	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	NONE	-	-	-	-	0.22
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	-	-	-	-	5.76

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 22-97517
Project / Site name: Don Street
Your Order No: 003508

Lab Sample Number				2504001	2504002	2504003	2504004	2504005
Sample Reference				TP342 EAST	TP342 SOUTH	TP342 WEST	TP342 BASE	TP342 ARISINGS
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				15/11/2022	15/11/2022	15/11/2022	15/11/2022	15/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	10	9.3	10	6.2	9.8
Barium (aqua regia extractable)	mg/kg	1	MCERTS	50	45	52	31	-
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.55	0.49	0.53	0.45	-
Boron (water soluble)	mg/kg	0.2	MCERTS	0.4	0.4	0.6	0.2	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	1.8	2.7	2.3	< 1.8	2.3
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	13
Copper (aqua regia extractable)	mg/kg	1	MCERTS	20	23	21	15	25
Lead (aqua regia extractable)	mg/kg	1	MCERTS	41	42	48	11	43
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	5	6	6.5	< 0.3	4.5
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	13	12	13	14	12
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	21	19	20	17	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	48	43	47	34	46
Speciated Mercury (Dry Weight)								
Inorganic Mercury	mg/kg	0.005	NONE	-	-	2.316	-	-
Organo-Mercury Species (including Methyl Hg)	mg/kg	0.005	NONE	-	-	2.169	-	-
Elemental Mercury	mg/kg	0.005	NONE	-	-	0.887	-	-
Speciated Mercury (Dry Weight)								
F1 - Water soluble	mg/kg	0.005	NONE	-	-	0.123	-	-
F2 - Weak acid	mg/kg	0.005	NONE	-	-	0.075	-	-
F3 - Organo- complexed	mg/kg	0.005	NONE	-	-	2.169	-	-
F4 - Strongly complexed	mg/kg	0.005	NONE	-	-	0.887	-	-
F5 - Mineral bound	mg/kg	0.005	NONE	-	-	2.118	-	-
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	NONE	-	-	-	-	< 2.0
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	NONE	-	-	-	-	< 4.0
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	2.3
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	3.2
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	-	< 10
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	-	< 10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 22-97517
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2503976	TP8 NORTH	MERCURY	None Supplied	Brown loam and sand with gravel and vegetation.
2503977	TP8 EAST	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2503978	TP8 SOUTH	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2503979	TP8 WEST	None Supplied	None Supplied	Brown clay and loam with gravel and vegetation.
2503980	TP8 BASE	None Supplied	None Supplied	Brown clay and loam with gravel and vegetation.
2503981	TP8 ARISINGS	None Supplied	None Supplied	Brown clay and loam with gravel and vegetation.
2503982	BH4 NORTH	VOLATILE	None Supplied	Brown loam and sand with gravel and vegetation.
2503983	BH4 EAST	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2503984	BH4 SOUTH	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2503985	BH4 WEST	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2503986	BH4 BASE	None Supplied	None Supplied	Light brown clay and sand with gravel.
2503987	BH4 ARISINGS	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2503988	BH3 NORTH	LATILE+MERCU	None Supplied	Brown clay and loam with gravel and vegetation.
2503989	BH3 EAST	None Supplied	None Supplied	Brown clay and loam with gravel and vegetation.
2503990	BH3 SOUTH	None Supplied	None Supplied	Brown clay and loam with gravel and vegetation.
2503991	BH3 WEST	None Supplied	None Supplied	Brown clay and loam with gravel and vegetation.
2503992	BH3 BASE	None Supplied	None Supplied	Brown clay and loam with gravel and vegetation.
2503993	BH3 ARISINGS	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2503994	BH1 NORTH	LATILE+MERCU	None Supplied	Brown loam and sand with gravel and vegetation.
2503995	BH1 EAST	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2503996	BH1 SOUTH	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2503997	BH1 WEST	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2503998	BH1 BASE	None Supplied	None Supplied	Brown clay and loam with gravel and vegetation.
2503999	BH1 ARISINGS	None Supplied	None Supplied	Brown clay and loam with gravel and vegetation.
2504000	TP342 NORTH	MERCURY	None Supplied	Brown loam and clay with gravel and vegetation.
2504001	TP342 EAST	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2504002	TP342 SOUTH	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2504003	TP342 WEST	None Supplied	None Supplied	Brown clay and loam with gravel and vegetation.
2504004	TP342 BASE	None Supplied	None Supplied	Brown clay and loam with gravel and vegetation.
2504005	TP342 ARISINGS	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.

Analytical Report Number : 22-97517
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Speciated Mercury in soil by Millennium Merlin Ana	Determination of Speciated Mercury in soil by Millennium Merlin Analyzer	In-house method	L085-PL	Dry	NONE
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS

Analytical Report Number : 22-97517
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 22-98397

Project / Site name:	Don Street	**Samples received on:**	22/11/2022
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	22/11/2022
Your order number:	003524	**Analysis completed by:**	05/12/2022
Report Issue Number:	1	**Report issued on:**	05/12/2022
Samples Analysed:	6 soil samples		

Signed:

Dominika Warjan
Junior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Analytical Report Number: 22-98397
Project / Site name: Don Street
Your Order No: 003524

Lab Sample Number				2508899	2508900	2508901	2508902	2508903
Sample Reference				TP48 North	TP48 East	TP48 South	TP48 West	TP48 Base
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	-	-	-	-	-
Moisture Content	%	0.01	NONE	-	-	-	-	-
Total mass of sample received	kg	0.001	NONE	-	-	-	-	-
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	Chrysotile & Amosite	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	< 0.001	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	< 0.001	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	KSZ	KSZ	KSZ	KSZ	KSZ
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	-	-	-	-	-
Total Sulphate as SO4	mg/kg	50	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	-	-	-	-
Sulphide	mg/kg	1	NONE	-	-	-	-	-
Total Sulphur	mg/kg	50	MCERTS	-	-	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	-	-	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	NONE	-	-	-	-	-
Acenaphthylene	mg/kg	0.05	NONE	-	-	-	-	-
Acenaphthene	mg/kg	0.05	NONE	-	-	-	-	-
Fluorene	mg/kg	0.05	NONE	-	-	-	-	-
Phenanthrene	mg/kg	0.05	NONE	-	-	-	-	-
Anthracene	mg/kg	0.05	NONE	-	-	-	-	-
Fluoranthene	mg/kg	0.05	NONE	-	-	-	-	-
Pyrene	mg/kg	0.05	NONE	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	NONE	-	-	-	-	-
Chrysene	mg/kg	0.05	NONE	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	NONE	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	NONE	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	NONE	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	NONE	-	-	-	-	-
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	-	-	-	-	-

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Analytical Report Number: 22-98397
Project / Site name: Don Street
Your Order No: 003524

Lab Sample Number				2508899	2508900	2508901	2508902	2508903
Sample Reference				TP48 North	TP48 East	TP48 South	TP48 West	TP48 Base
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	-	-	-	-
Chromium (hexavalent)	mg/kg	1.8	MCERTS	-	-	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	-	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	NONE	-	-	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	NONE	-	-	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample

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Analytical Report Number: 22-98397
Project / Site name: Don Street
Your Order No: 003524

Lab Sample Number				2508904
Sample Reference				TP48 Arisings
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				21/11/2022
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	13
Total mass of sample received	kg	0.001	NONE	0.3

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-
Asbestos Quantification Total	%	0.001	ISO 17025	-
Asbestos Analyst ID	N/A	N/A	N/A	KSZ

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.3
Total Cyanide	mg/kg	1	MCERTS	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	790
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.06
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	120
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	59.8
Sulphide	mg/kg	1	NONE	180
Total Sulphur	mg/kg	50	MCERTS	1600
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	2.3

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0

Speciated PAHs

Naphthalene	mg/kg	0.05	NONE	1.8
Acenaphthylene	mg/kg	0.05	NONE	< 0.05
Acenaphthene	mg/kg	0.05	NONE	2.7
Fluorene	mg/kg	0.05	NONE	1.7
Phenanthrene	mg/kg	0.05	NONE	12
Anthracene	mg/kg	0.05	NONE	2.3
Fluoranthene	mg/kg	0.05	NONE	13
Pyrene	mg/kg	0.05	NONE	12
Benzo(a)anthracene	mg/kg	0.05	NONE	6.1
Chrysene	mg/kg	0.05	NONE	5.2
Benzo(b)fluoranthene	mg/kg	0.05	NONE	6.9
Benzo(k)fluoranthene	mg/kg	0.05	NONE	1.9
Benzo(a)pyrene	mg/kg	0.05	NONE	5.5
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	2.8
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	0.61
Benzo(ghi)perylene	mg/kg	0.05	NONE	3.3

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	77.7

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 22-98397
Project / Site name: Don Street
Your Order No: 003524

Lab Sample Number				2508904
Sample Reference				TP48 Arisings
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				21/11/2022
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Heavy Metals / Metalloids				
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	19
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	32
Copper (aqua regia extractable)	mg/kg	1	MCERTS	57
Lead (aqua regia extractable)	mg/kg	1	MCERTS	150
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	27
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	390

Petroleum Hydrocarbons

TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	NONE	< 2.0
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	NONE	8.1
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	57
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	320
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	97
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	480

U/S = Unsuitable Sample I/S = Insufficient Sample

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The results included within the report relate only to the sample(s) submitted for testing.

UKAS TESTING
4041

Analytical i2 Environmental Science

Analytical Report Number: 22-98397
Project / Site name: Don Street
Your Order No: 003524

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2508900	TP48 East		134	Loose Fibres	**Chrysotile & Amosite**	< 0.001	**< 0.001**

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 22-98397
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2508904	TP48 Arisings	None Supplied	None Supplied	Brown loam and sand with gravel and brick.

Analytical Report Number : 22-98397
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	NONE
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	NONE
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	NONE
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

Analytical Report Number : 22-98397
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-21616

Project / Site name:	Don Street	**Samples received on:**	07/03/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	07/03/2023
Your order number:	004287	**Analysis completed by:**	14/03/2023
Report Issue Number:	1	**Report issued on:**	14/03/2023
Samples Analysed:	11 soil samples		

Izabela Wójcik

Signed:

Izabela Wójcik
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-21616
Project / Site name: Don Street
Your Order No: 004287

Lab Sample Number				2609032	2609033	2609034	2609035	2609036
Sample Reference				TP1 North	TP1 East	TP1 South	TP1 West	TP1 Base
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				07/03/2023	07/03/2023	07/03/2023	07/03/2023	07/03/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	16	16	16	16	13
Total mass of sample received	kg	0.001	NONE	0.8	0.4	0.4	0.4	0.4
Asbestos in Soil	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	-	-	-	-	-
Total Sulphate as SO4	mg/kg	50	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	-	-	-	-
Sulphide	mg/kg	1	MCERTS	-	-	-	-	-
Total Sulphur	mg/kg	50	MCERTS	-	-	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-	-	-

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	0.28	0.29	0.15	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	0.14	0.2	0.09	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	2.2	1.9	1.4	0.5	< 0.05
Anthracene	mg/kg	0.05	MCERTS	0.34	0.39	0.27	0.1	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	2.4	2	2.2	0.78	0.21
Pyrene	mg/kg	0.05	MCERTS	2.3	1.9	2	0.71	0.16
Benzo(a)anthracene	mg/kg	0.05	MCERTS	1	1	1.1	0.43	< 0.05
Chrysene	mg/kg	0.05	MCERTS	0.99	0.81	0.94	0.35	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.84	0.84	0.98	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.43	0.59	0.36	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.84	0.84	0.94	0.34	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.37	0.39	0.46	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.59	0.52	0.59	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	12.8	11.7	11.4	3.21	< 0.80

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-21616
Project / Site name: Don Street
Your Order No: 004287

Lab Sample Number				2609032	2609033	2609034	2609035	2609036
Sample Reference				TP1 North	TP1 East	TP1 South	TP1 West	TP1 Base
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				07/03/2023	07/03/2023	07/03/2023	07/03/2023	07/03/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	-	-	-	-
Chromium (hexavalent)	mg/kg	1.8	MCERTS	-	-	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	-	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	-	-	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	-	-	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	-	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	-	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	-	-	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-21616
Project / Site name: Don Street
Your Order No: 004287

Lab Sample Number				2609037	2609038	2609039	2609040	2609041
Sample Reference				TP1 Arisings	TP1 North A	TP1 East A	TP1 South A	TP1 West A
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				07/03/2023	07/03/2023	07/03/2023	07/03/2023	07/03/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	48	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	7.2	17	15	17	15
Total mass of sample received	kg	0.001	NONE	0.4	0.4	0.4	0.4	0.4
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	SFS	N/A	N/A	N/A	N/A

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.9	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1.0	-	-	-	-
Total Sulphate as SO4	mg/kg	50	MCERTS	990	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.28	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	560	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	280	-	-	-	-
Sulphide	mg/kg	1	MCERTS	3.3	-	-	-	-
Total Sulphur	mg/kg	50	MCERTS	560	-	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.3	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	-	-	-	-

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.17	< 0.05	< 0.05	< 0.05	0.19
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	0.23	0.7	0.12	0.27	0.28
Fluorene	mg/kg	0.05	MCERTS	0.16	0.36	0.08	0.14	0.17
Phenanthrene	mg/kg	0.05	MCERTS	1.7	4.6	1	1.9	2
Anthracene	mg/kg	0.05	MCERTS	0.37	0.96	0.21	0.36	0.43
Fluoranthene	mg/kg	0.05	MCERTS	2.5	4.7	1.5	2.2	2.2
Pyrene	mg/kg	0.05	MCERTS	2.5	4.5	1.4	1.9	2
Benzo(a)anthracene	mg/kg	0.05	MCERTS	1.2	2.4	0.77	1	0.96
Chrysene	mg/kg	0.05	MCERTS	1.4	1.8	0.65	0.88	0.98
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	1.7	1.7	0.67	0.71	0.71
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.39	0.76	0.33	0.4	0.44
Benzo(a)pyrene	mg/kg	0.05	MCERTS	1.2	1.7	0.65	0.75	0.67
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.64	0.72	0.34	0.35	0.29
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.06
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.84	0.96	0.4	0.41	0.32

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	15	26	8.13	11.2	11.6

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Analytical Report Number: 23-21616
Project / Site name: Don Street
Your Order No: 004287

Lab Sample Number				2609037	2609038	2609039	2609040	2609041
Sample Reference				TP1 Arisings	TP1 North A	TP1 East A	TP1 South A	TP1 West A
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				07/03/2023	07/03/2023	07/03/2023	07/03/2023	07/03/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	15	-	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	-	-	-	-
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	-	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	15	-	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	84	-	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	94	-	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	18	-	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	-	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	120	-	-	-	-
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	-	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	-	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	-	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	< 2.0	-	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	< 4.0	-	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	8.6	-	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	24	-	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	< 10	-	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	35	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-21616
Project / Site name: Don Street
Your Order No: 004287

Lab Sample Number				2609042
Sample Reference				TP1 Base A
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				07/03/2023
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	13
Total mass of sample received	kg	0.001	NONE	0.4

Asbestos in Soil	Type	N/A	ISO 17025	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	-
Total Cyanide	mg/kg	1	MCERTS	-
Total Sulphate as SO4	mg/kg	50	MCERTS	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-
Sulphide	mg/kg	1	MCERTS	-
Total Sulphur	mg/kg	50	MCERTS	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	-

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.19
Anthracene	mg/kg	0.05	MCERTS	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.22
Pyrene	mg/kg	0.05	MCERTS	0.21
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.1
Chrysene	mg/kg	0.05	MCERTS	0.16
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.07
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.08
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.06
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	1.09

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Analytical Report Number: 23-21616
Project / Site name: Don Street
Your Order No: 004287

Lab Sample Number				2609042
Sample Reference				TP1 Base A
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				07/03/2023
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Heavy Metals / Metalloids				
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-
Chromium (hexavalent)	mg/kg	1.8	MCERTS	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-
Petroleum Hydrocarbons				
TPH (C5 - C6) HS_1D_TOTAL	mg/kg	1	NONE	-
TPH (C6 - C8) HS_1D_TOTAL	mg/kg	0.1	NONE	-
TPH (C8 - C10) HS_1D_TOTAL	mg/kg	0.1	NONE	-
TPH (C10 - C12) EH_CU_1D_TOTAL	mg/kg	2	MCERTS	-
TPH (C12 - C16) EH_CU_1D_TOTAL	mg/kg	4	MCERTS	-
TPH (C16 - C21) EH_CU_1D_TOTAL	mg/kg	1	MCERTS	-
TPH (C21 - C35) EH_CU_1D_TOTAL	mg/kg	1	MCERTS	-
TPH (C35 - C40) EH_CU_1D_TOTAL	mg/kg	10	MCERTS	-
TPH Total C5 - C40 EH_CU+HS_1D_TOTAL	mg/kg	10	NONE	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-21616
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2609032	TP1 North	None Supplied	None Supplied	Brown clay and sand with vegetation.
2609033	TP1 East	None Supplied	None Supplied	Brown clay with vegetation.
2609034	TP1 South	None Supplied	None Supplied	Brown clay and sand with vegetation and gravel
2609035	TP1 West	None Supplied	None Supplied	Brown clay and sand with vegetation and gravel
2609036	TP1 Base	None Supplied	None Supplied	Brown sand with gravel.
2609037	TP1 Arisings	None Supplied	None Supplied	Brown loam and clay with stones and gravel
2609038	TP1 North A	None Supplied	None Supplied	Brown clay and sand with gravel.
2609039	TP1 East A	None Supplied	None Supplied	Brown clay and sand with gravel.
2609040	TP1 South A	None Supplied	None Supplied	Brown clay and sand with gravel.
2609041	TP1 West A	None Supplied	None Supplied	Brown clay and sand with vegetation and gravel
2609042	TP1 Base A	None Supplied	None Supplied	Brown loam and sand with gravel.

Analytical Report Number : 23-21616
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

Analytical Report Number : 23-21616
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-22451

Project / Site name:	Don Street	**Samples received on:**	10/03/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	10/03/2023
Your order number:	004311	**Analysis completed by:**	20/03/2023
Report Issue Number:	1	**Report issued on:**	20/03/2023
Samples Analysed:	22 soil samples		

Signed:

Dominika Warjan
Junior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-22451
Project / Site name: Don Street
Your Order No: 004311

Lab Sample Number				2613381	2613382	2613383	2613384	2613385
Sample Reference				BH 2 North	BH2 EAST	BH2 SOUTH	BH2 WEST	BH2 BASE
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				09/03/2023	09/03/2023	09/03/2023	09/03/2023	09/03/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	19	20	15	15	11
Total mass of sample received	kg	0.001	NONE	0.4	0.4	0.4	0.4	0.4
Asbestos in Soil	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	-	-	-	-	-
Total Sulphate as SO4	mg/kg	50	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	-	-	-	-
Sulphide	mg/kg	1	MCERTS	-	-	-	-	-
Total Sulphur	mg/kg	50	MCERTS	-	-	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	-	-	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	0.46	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	0.08	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	0.68	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	0.74	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	5.5	< 0.05	0.06	0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	1.2	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	5.5	< 0.05	0.07	0.07	< 0.05
Pyrene	mg/kg	0.05	MCERTS	4.9	< 0.05	0.07	0.06	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	2.2	< 0.05	< 0.05	0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	1.9	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	1.8	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.9	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	1.8	< 0.05	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.7	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.17	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.87	< 0.05	< 0.05	< 0.05	< 0.05
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	29.4	< 0.80	< 0.80	< 0.80	< 0.80

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Analytical Report Number: 23-22451
Project / Site name: Don Street
Your Order No: 004311

Lab Sample Number				2613381	2613382	2613383	2613384	2613385
Sample Reference				BH 2 North	BH2 EAST	BH2 SOUTH	BH2 WEST	BH2 BASE
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				09/03/2023	09/03/2023	09/03/2023	09/03/2023	09/03/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	-	-	-	-
Chromium (hexavalent)	mg/kg	1.8	MCERTS	-	-	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	-	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	-	-	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	-	-	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	-	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	-	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	-	-	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 23-22451
Project / Site name: Don Street
Your Order No: 004311

Lab Sample Number				2613386	2613387	2613388	2613389	2613390
Sample Reference				BH2 ARISINGS	BH2 North A	BH2 EAST A	BH2 SOUTH 2	BH2 WEST A
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				09/03/2023	09/03/2023	09/03/2023	09/03/2023	09/03/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	16	17	19	17	16
Total mass of sample received	kg	0.001	NONE	0.3	0.4	0.4	0.4	0.4
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	DSO	N/A	N/A	N/A	N/A
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	7.9	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1.0	-	-	-	-
Total Sulphate as SO4	mg/kg	50	MCERTS	240	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.071	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	140	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	70.6	-	-	-	-
Sulphide	mg/kg	1	MCERTS	85	-	-	-	-
Total Sulphur	mg/kg	50	MCERTS	1200	-	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	0.6	-	-	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	-	-	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	0.08	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	0.05	0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.2	0.33	< 0.05	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	0.06	0.06	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.2	0.35	< 0.05	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	0.21	0.31	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.09	0.16	< 0.05	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	0.08	0.17	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.07	0.12	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.05	0.07	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.07	0.11	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	0.06	< 0.05	< 0.05	< 0.05
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	1.08	1.92	< 0.80	< 0.80	< 0.80

Analytical Report Number: 23-22451
Project / Site name: Don Street
Your Order No: 004311

Lab Sample Number				2613386	2613387	2613388	2613389	2613390
Sample Reference				BH2 ARISINGS	BH2 North A	BH2 EAST A	BH2 SOUTH 2	BH2 WEST A
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				09/03/2023	09/03/2023	09/03/2023	09/03/2023	09/03/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	7.5	-	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	-	-	-	-
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	-	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	8.2	-	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	13	-	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	14	-	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	11	-	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	-	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	30	-	-	-	-
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	-	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	-	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	-	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	< 2.0	-	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	< 4.0	-	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	< 1.0	-	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	< 1.0	-	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	< 10	-	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	< 10	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-22451
Project / Site name: Don Street
Your Order No: 004311

Lab Sample Number				2613391	2613392	2613393	2613394	2613395
Sample Reference				BH2 BASE A	TP204 North	TP 204 EAST	TP204 SOUTH	TP204 WEST
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				09/03/2023	09/03/2023	09/03/2023	09/03/2023	09/03/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	10	15	13	17	19
Total mass of sample received	kg	0.001	NONE	0.4	0.4	0.4	0.4	0.4
Asbestos in Soil	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	-	-	-	-	-
Total Sulphate as SO4	mg/kg	50	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	-	-	-	-
Sulphide	mg/kg	1	MCERTS	-	-	-	-	-
Total Sulphur	mg/kg	50	MCERTS	-	-	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	-	-	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.1
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.11
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.1
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.38	< 0.05	1.3
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.08	< 0.05	0.25
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	0.14	0.4	< 0.05	1.4
Pyrene	mg/kg	0.05	MCERTS	< 0.05	0.13	0.36	< 0.05	1.4
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.24	< 0.05	0.69
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.24	< 0.05	0.66
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	0.46
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	0.32
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.55
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	< 0.80	< 0.80	1.7	< 0.80	7.31

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Analytical Report Number: 23-22451
Project / Site name: Don Street
Your Order No: 004311

Lab Sample Number				2613391	2613392	2613393	2613394	2613395
Sample Reference				BH2 BASE A	TP204 North	TP 204 EAST	TP204 SOUTH	TP204 WEST
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				09/03/2023	09/03/2023	09/03/2023	09/03/2023	09/03/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	-	-	-	-
Chromium (hexavalent)	mg/kg	1.8	MCERTS	-	-	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	-	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	-	-	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	-	-	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	-	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	-	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	-	-	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 23-22451
Project / Site name: Don Street
Your Order No: 004311

Lab Sample Number				2613396	2613397	2613398	2613399	2613400
Sample Reference				TP204 BASE	TP204 ARISINGS	TP204 North A	TP204 EAST A	TP204 SOUTH A
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				09/03/2023	09/03/2023	09/03/2023	09/03/2023	09/03/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	15	14	14	15	21
Total mass of sample received	kg	0.001	NONE	0.4	0.3	0.4	0.4	0.4
Asbestos in Soil	Type	N/A	ISO 17025	-	Not-detected	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A	DSO	N/A	N/A	N/A
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	7.5	-	-	-
Total Cyanide	mg/kg	1	MCERTS	-	< 1.0	-	-	-
Total Sulphate as SO4	mg/kg	50	MCERTS	-	240	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	0.058	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	120	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	58.4	-	-	-
Sulphide	mg/kg	1	MCERTS	-	73	-	-	-
Total Sulphur	mg/kg	50	MCERTS	-	500	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	0.7	-	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	< 1.0	-	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	0.24	0.08	< 0.05	0.06
Anthracene	mg/kg	0.05	MCERTS	< 0.05	0.06	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	0.19	0.07	0.06	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05	0.16	0.06	0.06	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	0.08	< 0.05	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	0.07	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	0.07	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	0.07	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	< 0.80	1.04	< 0.80	< 0.80	< 0.80

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Analytical Report Number: 23-22451
Project / Site name: Don Street
Your Order No: 004311

Lab Sample Number				2613396	2613397	2613398	2613399	2613400
Sample Reference				TP204 BASE	TP204 ARISINGS	TP204 North A	TP204 EAST A	TP204 SOUTH A
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				09/03/2023	09/03/2023	09/03/2023	09/03/2023	09/03/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	7.9	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	< 0.2	-	-	-
Chromium (hexavalent)	mg/kg	1.8	MCERTS	-	< 1.8	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	8.8	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	16	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	18	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	< 0.3	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	9.5	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	< 1.0	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	28	-	-	-
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	< 1.0	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	< 0.1	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	< 0.1	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	-	< 2.0	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	-	< 4.0	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	< 1.0	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	< 1.0	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	-	< 10	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	< 10	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 23-22451
Project / Site name: Don Street
Your Order No: 004311

Lab Sample Number				2613401	2613402
Sample Reference				TP204 WEST A	TP204 BASE A
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				09/03/2023	09/03/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	19	16
Total mass of sample received	kg	0.001	NONE	0.4	0.4
Asbestos in Soil	Type	N/A	ISO 17025	-	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A	N/A
General Inorganics					
pH - Automated	pH Units	N/A	MCERTS	-	-
Total Cyanide	mg/kg	1	MCERTS	-	-
Total Sulphate as SO4	mg/kg	50	MCERTS	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	-
Sulphide	mg/kg	1	MCERTS	-	-
Total Sulphur	mg/kg	50	MCERTS	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	-
Total Phenols					
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-
Speciated PAHs					
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.55	< 0.05
Anthracene	mg/kg	0.05	MCERTS	0.11	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.67	< 0.05
Pyrene	mg/kg	0.05	MCERTS	0.63	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.29	< 0.05
Chrysene	mg/kg	0.05	MCERTS	0.35	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.22	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.17	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.21	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Total PAH					
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	3.2	< 0.80

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Analytical Report Number: 23-22451
Project / Site name: Don Street
Your Order No: 004311

Lab Sample Number				2613401	2613402
Sample Reference				TP204 WEST A	TP204 BASE A
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				09/03/2023	09/03/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Heavy Metals / Metalloids					
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	-
Chromium (hexavalent)	mg/kg	1.8	MCERTS	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	-
Petroleum Hydrocarbons					
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number : 23-22451
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2613381	BH 2 North	None Supplied	None Supplied	Brown sand with gravel.
2613382	BH2 EAST	None Supplied	None Supplied	Brown sand.
2613383	BH2 SOUTH	None Supplied	None Supplied	Brown sand with gravel.
2613384	BH2 WEST	None Supplied	None Supplied	Brown sand with gravel.
2613385	BH2 BASE	None Supplied	None Supplied	Brown sand with gravel.
2613386	BH2 ARISINGS	None Supplied	None Supplied	Brown sand with gravel.
2613387	BH2 North A	None Supplied	None Supplied	Brown sand with gravel.
2613388	BH2 EAST A	None Supplied	None Supplied	Brown sand.
2613389	BH2 SOUTH 2	None Supplied	None Supplied	Brown sand.
2613390	BH2 WEST A	None Supplied	None Supplied	Brown sand with gravel.
2613391	BH2 BASE A	None Supplied	None Supplied	Brown sand with gravel.
2613392	TP204 North	None Supplied	None Supplied	Brown sand with gravel.
2613393	TP 204 EAST	None Supplied	None Supplied	Brown sand with gravel.
2613394	TP204 SOUTH	None Supplied	None Supplied	Brown sand with gravel.
2613395	TP204 WEST	None Supplied	None Supplied	Brown sand with gravel and brick.
2613396	TP204 BASE	None Supplied	None Supplied	Brown sand with gravel.
2613397	TP204 ARISINGS	None Supplied	None Supplied	Brown sand with gravel.
2613398	TP204 North A	None Supplied	None Supplied	Brown sand with gravel.
2613399	TP204 EAST A	None Supplied	None Supplied	Brown clay and sand with gravel.
2613400	TP204 SOUTH A	None Supplied	None Supplied	Brown clay and sand with gravel.
2613401	TP204 WEST A	None Supplied	None Supplied	Brown clay and sand with gravel and brick.
2613402	TP204 BASE A	None Supplied	None Supplied	Brown sand with gravel.

Analytical Report Number : 23-22451
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

Analytical Report Number : 23-22451
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-28075

Project / Site name:	Don Street	**Samples received on:**	12/04/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	13/04/2023
Your order number:	004574	**Analysis completed by:**	20/04/2023
Report Issue Number:	1	**Report issued on:**	20/04/2023
Samples Analysed:	48 soil samples		

Signed:

Elżbieta Suchy
Junior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-28075
Project / Site name: Don Street
Your Order No: 004574

Lab Sample Number				2646332	2646333	2646334	2646335	2646336
Sample Reference				TP501 North	TP501 North	TP501 East	TP501 East	TP501 South
Sample Number				1	2	1	2	1
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	61	23	< 0.1
Moisture Content	%	0.01	NONE	11	12	8.7	11	11
Total mass of sample received	kg	0.001	NONE	0.4	0.4	0.4	0.4	0.4
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	-	-	-	-
Sulphide	mg/kg	1	MCERTS	-	-	-	-	-
Total Sulphur	mg/kg	50	MCERTS	-	-	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	-	-	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.05	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	-	-	-	-	-

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Analytical Report Number: 23-28075
Project / Site name: Don Street
Your Order No: 004574

Lab Sample Number				2646332	2646333	2646334	2646335	2646336
Sample Reference				TP501 North	TP501 North	TP501 East	TP501 East	TP501 South
Sample Number				1	2	1	2	1
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	10	13	19	14	12
Barium (aqua regia extractable)	mg/kg	1	MCERTS	97	120	170	200	150
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.8	0.85	1.1	1.8	1
Boron (water soluble)	mg/kg	0.2	MCERTS	0.5	0.9	1.1	0.5	0.8
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	28	35	33	32	35
Lead (aqua regia extractable)	mg/kg	1	MCERTS	41	77	27	28	52
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	20	19	26	17	20
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	22	24	39	27	26
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	58	57	48	32	61
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	-	-	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	-	-	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	-	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	-	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	-	-	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 23-28075
Project / Site name: Don Street
Your Order No: 004574

Lab Sample Number				2646337	2646338	2646339	2646340	2646341
Sample Reference				TP501 South	TP501 West	TP501 West	TP501 Base	TP501 Base
Sample Number				2	1	2	1	2
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	59	< 0.1	< 0.1	30	< 0.1
Moisture Content	%	0.01	NONE	8.2	12	15	16	16
Total mass of sample received	kg	0.001	NONE	0.4	0.4	0.4	0.4	0.3
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	-	-	-	-
Sulphide	mg/kg	1	MCERTS	-	-	-	-	-
Total Sulphur	mg/kg	50	MCERTS	-	-	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	-	-	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.05	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	-	-	-	-	-

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Analytical Report Number: 23-28075
Project / Site name: Don Street
Your Order No: 004574

Lab Sample Number				2646337	2646338	2646339	2646340	2646341
Sample Reference				TP501 South	TP501 West	TP501 West	TP501 Base	TP501 Base
Sample Number				2	1	2	1	2
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	8.9	21	28	24	19
Barium (aqua regia extractable)	mg/kg	1	MCERTS	86	250	370	270	220
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.66	1.1	1.6	1.6	1.4
Boron (water soluble)	mg/kg	0.2	MCERTS	0.5	0.4	0.5	0.6	0.9
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	27	79	120	120	110
Lead (aqua regia extractable)	mg/kg	1	MCERTS	31	240	300	170	200
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	0.7	0.8	0.5	0.4
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	16	19	26	27	25
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	19	38	44	37	33
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	38	190	220	230	170
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	-	-	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	-	-	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	-	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	-	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	-	-	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 23-28075
Project / Site name: Don Street
Your Order No: 004574

Lab Sample Number				2646342	2646343	2646344	2646345	2646346
Sample Reference				TP501 Arisings	TP505 + TP25 North	TP505 + TP25 North	TP505 + TP25 East	TP505 + TP25 East
Sample Number				None Supplied	1	2	1	2
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	25	31	29	< 0.1
Moisture Content	%	0.01	NONE	13	11	9.6	12	14
Total mass of sample received	kg	0.001	NONE	0.3	0.4	0.4	0.4	0.4
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Detected	-	-	-	-
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	0.002	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	0.002	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	LFT	N/A	N/A	N/A	N/A
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	8.1	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1.0	33	110	130	54
Total Sulphate as SO4	mg/kg	50	MCERTS	480	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.053	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	110	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	53.4	-	-	-	-
Sulphide	mg/kg	1	MCERTS	5.5	-	-	-	-
Total Sulphur	mg/kg	50	MCERTS	400	-	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.8	-	-	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	-	-	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	2.5	-	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	0.22	-	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	4.9	-	-	-	-
Fluorene	mg/kg	0.05	MCERTS	4.1	-	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	25	-	-	-	-
Anthracene	mg/kg	0.05	MCERTS	7.7	-	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	34	-	-	-	-
Pyrene	mg/kg	0.05	MCERTS	31	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	15	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	13	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	15	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	6.5	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	13	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	6.5	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.91	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	7.2	-	-	-	-
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	187	-	-	-	-

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Analytical Report Number: 23-28075
Project / Site name: Don Street
Your Order No: 004574

Lab Sample Number				2646342	2646343	2646344	2646345	2646346
Sample Reference				TP501 Arisings	TP505 + TP25 North	TP505 + TP25 North	TP505 + TP25 East	TP505 + TP25 East
Sample Number				None Supplied	1	2	1	2
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	16	7	7.4	17	13
Barium (aqua regia extractable)	mg/kg	1	MCERTS	-	39	52	100	130
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	-	0.39	0.49	0.8	0.74
Boron (water soluble)	mg/kg	0.2	MCERTS	-	0.2	< 0.2	0.2	0.9
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	16	-	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	55	18	20	44	34
Lead (aqua regia extractable)	mg/kg	1	MCERTS	94	16	28	420	110
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.3	< 0.3	< 0.3	0.5	0.4
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	19	9.2	10	17	16
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	-	12	12	22	20
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	78	31	33	86	100
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	-	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	-	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	-	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	< 2.0	-	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	13	-	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	81	-	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	170	-	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	23	-	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	290	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 23-28075
Project / Site name: Don Street
Your Order No: 004574

Lab Sample Number				2646347	2646348	2646349	2646350	2646351
Sample Reference				TP505 + TP25 South	TP505 + TP25 South	TP505 + TP25 West	TP505 + TP25 West	TP505 + TP25 Base
Sample Number				1	2	1	2	1
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	15	15	15	13	18
Total mass of sample received	kg	0.001	NONE	0.4	0.4	0.4	0.4	0.4
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	2.4	24	1.2	8.3	110
Total Sulphate as SO4	mg/kg	50	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	-	-	-	-
Sulphide	mg/kg	1	MCERTS	-	-	-	-	-
Total Sulphur	mg/kg	50	MCERTS	-	-	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	-	-	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.05	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	-	-	-	-	-

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Analytical Report Number: 23-28075
Project / Site name: Don Street
Your Order No: 004574

Lab Sample Number				2646347	2646348	2646349	2646350	2646351
Sample Reference				TP505 + TP25 South	TP505 + TP25 South	TP505 + TP25 West	TP505 + TP25 West	TP505 + TP25 Base
Sample Number				1	2	1	2	1
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	27	48	17	31	42
Barium (aqua regia extractable)	mg/kg	1	MCERTS	88	150	74	84	110
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.87	1	0.72	0.72	1
Boron (water soluble)	mg/kg	0.2	MCERTS	< 0.2	0.3	< 0.2	0.2	0.3
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	53	110	70	72	77
Lead (aqua regia extractable)	mg/kg	1	MCERTS	86	240	77	110	150
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	2.2	4.5	1.3	1.6	2.4
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	21	25	17	15	29
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	22	26	20	18	27
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	110	230	110	190	180
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	-	-	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	-	-	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	-	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	-	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	-	-	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 23-28075
Project / Site name: Don Street
Your Order No: 004574

Lab Sample Number				2646352	2646353	2646354	2646355	2646356
Sample Reference				TP505 + TP25 Base	TP505 + TP25 Arisings	TP507 North	TP507 East	TP507 South
Sample Number				2	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	54	< 0.1
Moisture Content	%	0.01	NONE	18	11	10	10	14
Total mass of sample received	kg	0.001	NONE	0.4	0.3	0.4	0.4	0.4
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	Chrysotile	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	-	Detected	-	-	-
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	< 0.001	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	< 0.001	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A	LFT	N/A	N/A	N/A
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	7.9	-	-	-
Total Cyanide	mg/kg	1	MCERTS	4.3	67	3.3	2.3	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	-	1800	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	0.19	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	380	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	188	-	-	-
Sulphide	mg/kg	1	MCERTS	-	32	-	-	-
Total Sulphur	mg/kg	50	MCERTS	-	890	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	1.1	-	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	< 1.0	-	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	-	0.88	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	0.5	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	-	0.36	-	-	-
Fluorene	mg/kg	0.05	MCERTS	-	0.8	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	-	2.8	-	-	-
Anthracene	mg/kg	0.05	MCERTS	-	1.3	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	-	5.6	-	-	-
Pyrene	mg/kg	0.05	MCERTS	-	5.4	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	3.1	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	3	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	-	4.2	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	-	1	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	3.1	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	1.7	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	2.2	-	-	-
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	-	36	-	-	-

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Analytical Report Number: 23-28075
Project / Site name: Don Street
Your Order No: 004574

Lab Sample Number				2646352	2646353	2646354	2646355	2646356
Sample Reference				TP505 + TP25 Base	TP505 + TP25 Arisings	TP507 North	TP507 East	TP507 South
Sample Number				2	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	23	51	12	16	17
Barium (aqua regia extractable)	mg/kg	1	MCERTS	66	-	160	94	110
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.77	-	0.99	0.93	1.3
Boron (water soluble)	mg/kg	0.2	MCERTS	0.2	-	< 0.2	< 0.2	0.8
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	150	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	51	190	43	49	56
Lead (aqua regia extractable)	mg/kg	1	MCERTS	120	380	47	91	86
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	2.2	7.2	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	25	19	18	21	23
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	21	-	24	21	28
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	150	340	61	100	84
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	< 1.0	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	< 0.1	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	< 0.1	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	-	4.6	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	-	17	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	42	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	110	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	-	19	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	200	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 23-28075
Project / Site name: Don Street
Your Order No: 004574

Lab Sample Number				2646357	2646358	2646359	2646360	2646361
Sample Reference				TP507 West	TP507 Base	TP507 Arisings	WS2 North	WS2 North
Sample Number				None Supplied	None Supplied	None Supplied	1	2
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	12	13	21	11	11
Total mass of sample received	kg	0.001	NONE	0.4	0.4	0.4	0.4	0.4
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	Chrysotile & Amosite	-	-
Asbestos in Soil	Type	N/A	ISO 17025	-	-	Detected	-	-
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	< 0.001	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	< 0.001	-	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A	N/A	LFT	N/A	N/A
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	-	7.6	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1.0	3.7	1.4	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	-	-	910	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	-	0.13	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	-	270	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	-	134	-	-
Sulphide	mg/kg	1	MCERTS	-	-	22	-	-
Total Sulphur	mg/kg	50	MCERTS	-	-	1600	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	-	2.6	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	< 1.0	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	-	-	< 0.05	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	< 0.05	-	-
Acenaphthene	mg/kg	0.05	MCERTS	-	-	0.22	-	-
Fluorene	mg/kg	0.05	MCERTS	-	-	0.26	-	-
Phenanthrene	mg/kg	0.05	MCERTS	-	-	1.7	-	-
Anthracene	mg/kg	0.05	MCERTS	-	-	0.55	-	-
Fluoranthene	mg/kg	0.05	MCERTS	-	-	3.6	-	-
Pyrene	mg/kg	0.05	MCERTS	-	-	3.2	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	1.6	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	1.4	-	-
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	-	-	1.5	-	-
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	-	-	0.7	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	1.2	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	0.64	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	0.1	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	0.81	-	-
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	-	-	17.4	-	-

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Analytical Report Number: 23-28075
Project / Site name: Don Street
Your Order No: 004574

Lab Sample Number				2646357	2646358	2646359	2646360	2646361
Sample Reference				TP507 West	TP507 Base	TP507 Arisings	WS2 North	WS2 North
Sample Number				None Supplied	None Supplied	None Supplied	1	2
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	20	19	24	9.7	11
Barium (aqua regia extractable)	mg/kg	1	MCERTS	110	110	-	110	140
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	1.3	1.1	-	0.75	0.82
Boron (water soluble)	mg/kg	0.2	MCERTS	0.4	0.7	-	< 0.2	< 0.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	1.3	< 0.2	< 0.2	0.6	0.6
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	60	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	75	54	94	50	54
Lead (aqua regia extractable)	mg/kg	1	MCERTS	140	160	140	68	120
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	31	25	28	17	19
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	29	28	-	21	23
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	100	96	150	87	92
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	< 1.0	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	< 0.1	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	< 0.1	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	-	-	3.1	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	-	-	20	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	-	39	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	-	87	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	-	-	16	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	160	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 23-28075
Project / Site name: Don Street
Your Order No: 004574

Lab Sample Number				2646362	2646363	2646364	2646365	2646366
Sample Reference				WS2 East	WS2 East	WS2 South	WS2 West	WS2 West
Sample Number				1	2	None Supplied	1	2
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	11	11	11	9.4	12
Total mass of sample received	kg	0.001	NONE	0.4	0.4	0.4	0.4	0.4
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1.0	1.1	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	-	-	-	-
Sulphide	mg/kg	1	MCERTS	-	-	-	-	-
Total Sulphur	mg/kg	50	MCERTS	-	-	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	-	-	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.05	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	-	-	-	-	-

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Analytical Report Number: 23-28075
Project / Site name: Don Street
Your Order No: 004574

Lab Sample Number				2646362	2646363	2646364	2646365	2646366
Sample Reference				WS2 East	WS2 East	WS2 South	WS2 West	WS2 West
Sample Number				1	2	None Supplied	1	2
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	12	12	10	8.3	11
Barium (aqua regia extractable)	mg/kg	1	MCERTS	150	140	150	100	140
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	1.1	0.86	0.88	0.75	0.91
Boron (water soluble)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	0.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	1.6	0.7	0.5	0.4	0.5
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	110	66	48	41	49
Lead (aqua regia extractable)	mg/kg	1	MCERTS	81	100	62	61	72
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.5	0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	24	19	21	23	21
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	27	23	24	26	25
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	93	110	90	91	85
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	-	-	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	-	-	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	-	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	-	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	-	-	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	-	-

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Analytical Report Number: 23-28075
Project / Site name: Don Street
Your Order No: 004574

Lab Sample Number				2646367	2646368	2646369	2646370	2646371
Sample Reference				WS2 Base	WS2 Base	TP351 North	TP351 North	TP351 East
Sample Number				1	2	1	2	1
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	39	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	27	23	9	13	12
Total mass of sample received	kg	0.001	NONE	0.4	0.4	0.4	0.4	0.4
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	-	-	-
Total Sulphate as SO4	mg/kg	50	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	-	-	-	-
Sulphide	mg/kg	1	MCERTS	-	-	-	-	-
Total Sulphur	mg/kg	50	MCERTS	-	-	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	-	-	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	-	-	1.1	0.24	1.8
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	0.13	< 0.05	0.09
Acenaphthene	mg/kg	0.05	MCERTS	-	-	3.6	0.57	5.9
Fluorene	mg/kg	0.05	MCERTS	-	-	3	0.51	4.3
Phenanthrene	mg/kg	0.05	MCERTS	-	-	21	4	29
Anthracene	mg/kg	0.05	MCERTS	-	-	6.2	1.2	8.9
Fluoranthene	mg/kg	0.05	MCERTS	-	-	27	7.8	42
Pyrene	mg/kg	0.05	MCERTS	-	-	24	7.3	37
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	11	3.4	15
Chrysene	mg/kg	0.05	MCERTS	-	-	9.6	3.5	13
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	-	-	12	4.1	14
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	-	-	4.2	1.5	6
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	9.8	3.3	12
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	5	1.9	6.1
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	0.69	< 0.05	0.95
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	5.7	2	6.7
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	-	-	144	41.2	203

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Analytical Report Number: 23-28075
Project / Site name: Don Street
Your Order No: 004574

Lab Sample Number				2646367	2646368	2646369	2646370	2646371
Sample Reference				WS2 Base	WS2 Base	TP351 North	TP351 North	TP351 East
Sample Number				1	2	1	2	1
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	29	22	-	-	-
Barium (aqua regia extractable)	mg/kg	1	MCERTS	100	93	-	-	-
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.69	0.81	-	-	-
Boron (water soluble)	mg/kg	0.2	MCERTS	1.2	0.4	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	-	-	-
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	61	51	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	110	78	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.3	0.3	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	13	15	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	-	-	-
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	35	29	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	41	43	-	-	-
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	-	-	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	-	-	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	-	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	-	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	-	-	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 23-28075
Project / Site name: Don Street
Your Order No: 004574

Lab Sample Number				2646372	2646373	2646374	2646375	2646376
Sample Reference				TP351 East	TP351 South	TP351 South	TP351 West	TP351 West
Sample Number				2	1	2	1	2
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	45	< 0.1	33	38
Moisture Content	%	0.01	NONE	14	5.8	9.2	10	10
Total mass of sample received	kg	0.001	NONE	0.4	0.4	0.4	0.4	0.4
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	-	-	-	-	-
Total Sulphate as SO4	mg/kg	50	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	-	-	-	-
Sulphide	mg/kg	1	MCERTS	-	-	-	-	-
Total Sulphur	mg/kg	50	MCERTS	-	-	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	-	-	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	0.46	0.55	< 0.05	0.58	0.43
Acenaphthylene	mg/kg	0.05	MCERTS	0.13	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	2.8	1.1	0.11	1.2	0.68
Fluorene	mg/kg	0.05	MCERTS	3.1	0.75	0.07	1.1	0.62
Phenanthrene	mg/kg	0.05	MCERTS	21	4.7	0.64	7.2	3.9
Anthracene	mg/kg	0.05	MCERTS	6.7	1.3	0.2	2.4	1.4
Fluoranthene	mg/kg	0.05	MCERTS	29	7.3	1.3	13	7.2
Pyrene	mg/kg	0.05	MCERTS	24	6.4	1.2	11	6.6
Benzo(a)anthracene	mg/kg	0.05	MCERTS	11	3	0.58	4.8	3
Chrysene	mg/kg	0.05	MCERTS	10	2.8	0.53	4.5	3
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	11	3.7	0.75	5.3	3.4
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	4.5	1.2	0.24	1.6	1.3
Benzo(a)pyrene	mg/kg	0.05	MCERTS	9.5	2.9	0.55	4.1	2.7
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	4.7	1.4	0.33	2	1.4
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.63	0.19	< 0.05	0.26	0.25
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	4.9	1.7	0.44	2.2	1.5
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	144	39	6.96	60.9	37.3

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Analytical Report Number: 23-28075
Project / Site name: Don Street
Your Order No: 004574

Lab Sample Number				2646372	2646373	2646374	2646375	2646376
Sample Reference				TP351 East	TP351 South	TP351 South	TP351 West	TP351 West
Sample Number				2	1	2	1	2
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Barium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	-	-	-	-	-
Boron (water soluble)	mg/kg	0.2	MCERTS	-	-	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	-	-	-	-
Chromium (hexavalent)	mg/kg	1.8	MCERTS	-	-	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	-	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	-	-	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	-	-	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	-	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	-	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	-	-	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 23-28075
Project / Site name: Don Street
Your Order No: 004574

Lab Sample Number				2646377	2646378	2646379
Sample Reference				TP351 Base	TP351 Base	TP351 Arisings
Sample Number				1	2	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				11/04/2023	11/04/2023	11/04/2023
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Stone Content	%	0.1	NONE	< 0.1	24	< 0.1
Moisture Content	%	0.01	NONE	6.6	5.5	12
Total mass of sample received	kg	0.001	NONE	0.4	0.4	0.4
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	-	-	-
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A	N/A	N/A
General Inorganics						
pH - Automated	pH Units	N/A	MCERTS	-	-	-
Total Cyanide	mg/kg	1	MCERTS	-	-	-
Total Sulphate as SO4	mg/kg	50	MCERTS	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	-	-
Sulphide	mg/kg	1	MCERTS	-	-	-
Total Sulphur	mg/kg	50	MCERTS	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	-	-
Total Phenols						
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-
Speciated PAHs						
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.59
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.21
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	1.5
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	1.3
Phenanthrene	mg/kg	0.05	MCERTS	0.13	0.08	8.5
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	2.7
Fluoranthene	mg/kg	0.05	MCERTS	0.17	0.16	12
Pyrene	mg/kg	0.05	MCERTS	0.14	0.14	11
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.09	0.08	5.3
Chrysene	mg/kg	0.05	MCERTS	0.05	0.08	4.9
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	6.5
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	2.2
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	5.3
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	2.8
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.44
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	3.1
Total PAH						
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	< 0.80	< 0.80	68.7

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Analytical Report Number: 23-28075
Project / Site name: Don Street
Your Order No: 004574

Lab Sample Number				2646377	2646378	2646379
Sample Reference				TP351 Base	TP351 Base	TP351 Arisings
Sample Number				1	2	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				11/04/2023	11/04/2023	11/04/2023
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Heavy Metals / Metalloids						
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-
Barium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	-	-	-
Boron (water soluble)	mg/kg	0.2	MCERTS	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	-	-
Chromium (hexavalent)	mg/kg	1.8	MCERTS	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-
Petroleum Hydrocarbons						
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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UKAS TESTING
4041

Analytical i2 Environmental Science

Analytical Report Number: 23-28075
Project / Site name: Don Street
Your Order No: 004574

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2646342	TP501 Arisings		167	Loose Fibrous Debris	**Chrysotile**	0.002	**0.002**
2646353	TP505 + TP25 Arisings		153	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**
2646359	TP507 Arisings		157	Loose Fibres	**Chrysotile & Amosite**	< 0.001	**< 0.001**

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 23-28075
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2646332	TP501 North	1	None Supplied	Brown clay and sand with gravel.
2646333	TP501 North	2	None Supplied	Brown clay and sand with gravel.
2646334	TP501 East	1	None Supplied	Brown sand with stones.
2646335	TP501 East	2	None Supplied	Brown sand with stones.
2646336	TP501 South	1	None Supplied	Brown clay and sand with gravel.
2646337	TP501 South	2	None Supplied	Brown sand with stones.
2646338	TP501 West	1	None Supplied	Brown sand with gravel and plastic.
2646339	TP501 West	2	None Supplied	Brown sand with gravel and vegetation.
2646340	TP501 Base	1	None Supplied	Brown clay and sand with vegetation and stones.
2646341	TP501 Base	2	None Supplied	Brown clay and sand with gravel and vegetation.
2646342	TP501 Arisings	None Supplied	None Supplied	Brown sand with gravel and vegetation.
2646343	P505 + TP25 No	1	None Supplied	Brown sand with gravel and stones.
2646344	P505 + TP25 No	2	None Supplied	Brown sand with gravel and stones.
2646345	P505 + TP25 Ea	1	None Supplied	Brown sand with gravel and stones.
2646346	P505 + TP25 Ea	2	None Supplied	Brown sand with gravel.
2646347	P505 + TP25 So	1	None Supplied	Brown clay and sand with gravel.
2646348	P505 + TP25 So	2	None Supplied	Brown sandy clay with gravel.
2646349	P505 + TP25 We	1	None Supplied	Brown sandy clay with gravel.
2646350	P505 + TP25 We	2	None Supplied	Brown sandy clay with gravel.
2646351	P505 + TP25 Ba	1	None Supplied	Brown clay and loam with gravel.
2646352	P505 + TP25 Ba	2	None Supplied	Brown clay and loam with gravel.
2646353	505 + TP25 Aris	None Supplied	None Supplied	Brown loam and sand with gravel.
2646354	TP507 North	None Supplied	None Supplied	Brown loam and sand with gravel.
2646355	TP507 East	None Supplied	None Supplied	Brown loam with stones.
2646356	TP507 South	None Supplied	None Supplied	Brown loam with gravel.
2646357	TP507 West	None Supplied	None Supplied	Brown loam with gravel.
2646358	TP507 Base	None Supplied	None Supplied	Brown loam with gravel.
2646359	TP507 Arisings	None Supplied	None Supplied	Brown loam and gravel with vegetation.
2646360	WS2 North	1	None Supplied	Brown clay and loam with gravel.
2646361	WS2 North	2	None Supplied	Brown loam and clay with gravel.
2646362	WS2 East	1	None Supplied	Brown loam and clay with gravel.
2646363	WS2 East	2	None Supplied	Brown loam and clay with gravel.
2646364	WS2 South	None Supplied	None Supplied	Brown loam and clay with gravel.
2646365	WS2 West	1	None Supplied	Brown loam and clay with gravel and vegetation.
2646366	WS2 West	2	None Supplied	Brown loam and clay with gravel and vegetation.
2646367	WS2 Base	1	None Supplied	Brown loam with gravel and vegetation.
2646368	WS2 Base	2	None Supplied	Brown clay and loam with gravel and vegetation.
2646369	TP351 North	1	None Supplied	Brown loam and sand with stones.
2646370	TP351 North	2	None Supplied	Brown clay and loam with gravel.
2646371	TP351 East	1	None Supplied	Brown clay and loam with gravel.
2646372	TP351 East	2	None Supplied	Brown clay and loam with gravel.
2646373	TP351 South	1	None Supplied	Brown sand with stones.
2646374	TP351 South	2	None Supplied	Brown sand with gravel and brick.
2646375	TP351 West	1	None Supplied	Brown clay and sand with vegetation and stones.
2646376	TP351 West	2	None Supplied	Brown clay and sand with stones.
2646377	TP351 Base	1	None Supplied	Brown sand with gravel.
2646378	TP351 Base	2	None Supplied	Brown sand with stones.
2646379	TP351 Arisings	None Supplied	None Supplied	Brown clay and sand with brick and gravel

Analytical Report Number : 23-28075
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS

Analytical Report Number : 23-28075
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-40134

Project / Site name:	Don Street	**Samples received on:**	19/06/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	19/06/2023
Your order number:	005244	**Analysis completed by:**	26/06/2023
Report Issue Number:	1	**Report issued on:**	26/06/2023
Samples Analysed:	4 soil samples		

Signed:

Joanna Wawrzeczko
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-40134
Project / Site name: Don Street
Your Order No: 005244

Lab Sample Number				2719183	2719184	2719185	2719186
Sample Reference				Stockpile 14 A	Stockpile 14 B	Stockpile 15 A	Stockpile 15 B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				16/06/2023	16/06/2023	16/06/2023	16/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	6.5	6.3	5.1	5.6
Total mass of sample received	kg	0.001	NONE	0.3	0.3	0.3	0.3
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	< 0.001	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	< 0.001	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	SPU	SPU	SPU	SPU
General Inorganics							
pH - Automated	pH Units	N/A	MCERTS	7.5	8.2	8.3	8.1
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	1.4	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	330	650	600	610
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.0052	0.15	0.15	0.16
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	10	300	290	320
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	5.2	152	145	162
Sulphide	mg/kg	1	MCERTS	< 1.0	1.7	5.5	< 1.0
Total Sulphur	mg/kg	50	MCERTS	190	390	520	410
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1	1.3	1.4	1.5
Total Phenols							
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Heavy Metals / Metalloids							
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	12	11	17	11
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	17	14	18	14
Copper (aqua regia extractable)	mg/kg	1	MCERTS	13	31	52	32
Lead (aqua regia extractable)	mg/kg	1	MCERTS	21	54	45	54
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	12	15	25	15
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	46	83	70	76
Monoaromatics & Oxygenates							
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
o-xylene#	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0

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Analytical Report Number: 23-40134
Project / Site name: Don Street
Your Order No: 005244

Lab Sample Number				2719183	2719184	2719185	2719186
Sample Reference				Stockpile 14 A	Stockpile 14 B	Stockpile 15 A	Stockpile 15 B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				16/06/2023	16/06/2023	16/06/2023	16/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Petroleum Hydrocarbons							
TPH-CWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	< 1.0	< 1.0	1.4	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	< 2.0	< 2.0	7.2	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	< 8.0	8.2	13	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	< 8.0	26	48	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	< 10	36	69	< 10
TPH-CWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	< 2.0	2.4	2	< 2.0
TPH-CWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	< 10	10	15	< 10
TPH-CWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	< 10	26	67	20
TPH-CWG - Aromatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	< 10	38	84	28
VOCs							
Chloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Chloroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Bromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Vinyl Chloride	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Trichlorofluoromethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1-Dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Cis-1,2-dichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1-Dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
2,2-Dichloropropane#	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Trichloromethane	µg/kg	5	NONE	7.2	< 5.0	8.4	7.8
1,1,1-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dichloroethane##	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,1-Dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Trans-1,2-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloromethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Trichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Dibromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Bromodichloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Cis-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Trans-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
1,1,2-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,3-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Dibromochloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dibromoethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Chlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,1,1,2-Tetrachloroethane##	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0

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Analytical Report Number: 23-40134
Project / Site name: Don Street
Your Order No: 005244

Lab Sample Number				2719183	2719184	2719185	2719186
Sample Reference				Stockpile 14 A	Stockpile 14 B	Stockpile 15 A	Stockpile 15 B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				16/06/2023	16/06/2023	16/06/2023	16/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Styrene#	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Tribromomethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene#	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1,2,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Isopropylbenzene#	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Bromobenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
n-Propylbenzene#	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
2-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
4-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,3,5-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
tert-Butylbenzene#	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2,4-Trimethylbenzene#	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
sec-Butylbenzene#	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,3-Dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
p-Isopropyltoluene#	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,4-Dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dibromo-3-chloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Hexachlorobutadiene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2,3-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0

SVOCs

Aniline	mg/kg	0.1	NONE	3.4	3.3	4.2	4.6
Phenol	mg/kg	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Hexachloroethane	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Isophorone	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
2-Nitrophenol	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	0.32	0.57	0.3
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	< 0.1	0.2	0.2	0.2
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1

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Analytical Report Number: 23-40134
Project / Site name: Don Street
Your Order No: 005244

Lab Sample Number				2719183	2719184	2719185	2719186
Sample Reference				Stockpile 14 A	Stockpile 14 B	Stockpile 15 A	Stockpile 15 B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				16/06/2023	16/06/2023	16/06/2023	16/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.08	0.12
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	0.44	1.1	0.49
2,4-Dinitrotoluene	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	< 0.2	0.2	0.5	0.3
4-Chlorophenyl phenyl ether	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
4-Nitroaniline	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Fluorene	mg/kg	0.05	MCERTS	< 0.05	0.37	0.74	0.49
Azobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	0.16	2.7	5	3.5
Anthracene	mg/kg	0.05	MCERTS	< 0.05	0.76	1.6	0.84
Carbazole	mg/kg	0.3	MCERTS	< 0.3	< 0.3	0.4	< 0.3
Dibutyl phthalate	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Anthraquinone	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Fluoranthene	mg/kg	0.05	MCERTS	0.4	4.2	7.7	4.9
Pyrene	mg/kg	0.05	MCERTS	0.3	3.9	7.1	4.5
Butyl benzyl phthalate	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.13	1.8	2.9	2
Chrysene	mg/kg	0.05	MCERTS	0.15	1.6	3.1	1.9
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.2	2	3.6	2.2
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.08	0.82	1.5	0.97
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.14	1.5	2.9	1.8
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.09	0.95	1.8	1
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	0.2	0.36	0.26
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.11	1.1	2.2	1.2

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report relate only to the sample(s) submitted for testing.

UKAS TESTING
4041

Analytical i2 Environmental Science

Analytical Report Number: 23-40134
Project / Site name: Don Street
Your Order No: 005244

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2719183	Stockpile 14 A		177	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 23-40134
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2719183	Stockpile 14 A	None Supplied	None Supplied	Brown loam and sand with gravel.
2719184	Stockpile 14 B	None Supplied	None Supplied	Brown loam and sand with gravel.
2719185	Stockpile 15 A	None Supplied	None Supplied	Brown loam and sand with gravel.
2719186	Stockpile 15 B	None Supplied	None Supplied	Brown loam and sand with gravel.

Analytical Report Number : 23-40134
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025

Analytical Report Number : 23-40134
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

- Data reported unaccredited due to quality control parameter failure associated with this result; other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.
- Quality control parameter has a high recovery (outside of limit); however the associated result is below the reporting limit, other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.

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Analytical Report Number : 22-11549

Replaces Analytical Report Number: 22-11549, issue no. 1
Report format change.

Project / Site name:	Don Street	**Samples received on:**	05/12/2022
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	06/12/2022
Your order number:	003645	**Analysis completed by:**	13/12/2022
Report Issue Number:	2	**Report issued on:**	14/12/2022
Samples Analysed:	2 soil samples		

Izabela Wójcik
Signed:

Izabela Wójcik
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report relate only to the sample(s) submitted for testing

Analytical Report Number: 22-11549
Project / Site name: Don Street
Your Order No: 003645

Lab Sample Number				2522823	2522824
Sample Reference				TP409 North	TP41 North
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				01/12/2022	01/12/2022
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	17	12
Total mass of sample received	kg	0.001	NONE	0.4	0.4

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.35*	< 0.05
Anthracene	mg/kg	0.05	MCERTS	0.07*	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.5*	< 0.05
Pyrene	mg/kg	0.05	MCERTS	0.48*	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.26	< 0.05
Chrysene	mg/kg	0.05	MCERTS	0.22*	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.2*	< 0.05*
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.07*	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.19	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05*	< 0.05*
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	2.34*	< 0.80*

U/S = Unsuitable Sample I/S = Insufficient Sample

*Data reported unaccredited due to quality control parameter failure associated with this result; other checks applied prior to reporting the data have been accepted and the failure justified as having no significant impact on sample data reported.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number : 22-11549
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2522823	TP409 North	None Supplied	None Supplied	Brown clay and sand.
2522824	TP41 North	None Supplied	None Supplied	Brown clay and sand with gravel and vegetation.

Analytical Report Number : 22-11549
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

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Analytical Report Number : 22-14305

Project / Site name:	Don Street	**Samples received on:**	20/12/2022
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	20/12/2022
Your order number:	003752	**Analysis completed by:**	03/01/2023
Report Issue Number:	1	**Report issued on:**	03/01/2023
Samples Analysed:	20 soil samples		

Signed:

Dominika Warjan
Junior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 22-14305
Project / Site name: Don Street
Your Order No: 003752

Lab Sample Number				2539975	2539976	2539977	2539978	2539979
Sample Reference				TP5 North	TP5 East	TP5 South	TP5 West	TP5 Base
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				19/12/2022	19/12/2022	19/12/2022	19/12/2022	19/12/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	17	19	20	18	19
Total mass of sample received	kg	0.001	NONE	0.4	0.4	0.4	0.4	0.4
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	1.5	1.3	4.8*	1.3	1.6
Acenaphthylene	mg/kg	0.05	MCERTS	0.07	0.19	< 0.05*	0.11	0.14
Acenaphthene	mg/kg	0.05	MCERTS	1.5	1.3	10*	1.3	3
Fluorene	mg/kg	0.05	MCERTS	1.5	1.5	12*	1.3	3.2
Phenanthrene	mg/kg	0.05	MCERTS	12	11	90*	12	26
Anthracene	mg/kg	0.05	MCERTS	3.4	3.2	26*	3.6	7.7
Fluoranthene	mg/kg	0.05	MCERTS	14	12	98*	16	29
Pyrene	mg/kg	0.05	MCERTS	14	12	90*	15	27
Benzo(a)anthracene	mg/kg	0.05	MCERTS	7.7	5.9	40*	9.4	15
Chrysene	mg/kg	0.05	MCERTS	5.2	5.3	33*	6.1	11
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	7.2	5.7	39*	9.6	14
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	2.4	2.6	13*	2.4	4.5
Benzo(a)pyrene	mg/kg	0.05	MCERTS	6.2	5.4	32*	7.5	12
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	3.2	2.5	14*	4	5.9
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.84	0.72	3.7*	0.98	1.6
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	3.4	3.1	16*	4.4	6.5
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	84.1	73.9	521*	95	169

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 22-14305
Project / Site name: Don Street
Your Order No: 003752

Lab Sample Number				2539980	2539981	2539982	2539983	2539984
Sample Reference				TP6 North	TP6 East	TP6 South	TP6 West	TP6 Base
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				19/12/2022	19/12/2022	19/12/2022	19/12/2022	19/12/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	33	21	22	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	9.3	21	20	19	22
Total mass of sample received	kg	0.001	NONE	0.4	0.4	0.4	0.4	0.4

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	3.2	1.3	4.8	3.9	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	0.14	0.14	0.19	0.15	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	3.7	2.1	6.6	3.4	< 0.05
Fluorene	mg/kg	0.05	MCERTS	4.1	2.1	7	3.5	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	29	18	43	26	0.08
Anthracene	mg/kg	0.05	MCERTS	8.7	5.2	14	7.4	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	30	22	42	27	0.12
Pyrene	mg/kg	0.05	MCERTS	28	21	39	26	0.11
Benzo(a)anthracene	mg/kg	0.05	MCERTS	15	13	21	14	0.07
Chrysene	mg/kg	0.05	MCERTS	13	8.6	17	11	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	16	12	23	14	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	3.3	4	4.7	4.1	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	13	10	18	12	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	5.7	5.3	8.7	5.5	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	1.9	1.3	2.3	1.5	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	6.8	5.6	9.3	6.5	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	181	132	260	166	< 0.80

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 22-14305
Project / Site name: Don Street
Your Order No: 003752

Lab Sample Number				2539985	2539986	2539987	2539988	2539989
Sample Reference				BH4 North	BH4 East	BH4 South	BH4 West	BH4 Base
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				19/12/2022	19/12/2022	19/12/2022	19/12/2022	19/12/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	19	18	18	19	12
Total mass of sample received	kg	0.001	NONE	0.4	0.4	0.4	0.4	0.4

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	1.6*	2.6*	0.64*	2.7*	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05*	< 0.05*	< 0.05*	0.18*	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	1.8*	2.2*	0.64*	3.8*	< 0.05
Fluorene	mg/kg	0.05	MCERTS	1.8*	2.2*	0.64*	2.9*	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	17*	21*	6.5*	21*	0.07
Anthracene	mg/kg	0.05	MCERTS	4.8*	5.9*	1.8*	5.8*	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	18*	25*	8.4*	24*	0.06
Pyrene	mg/kg	0.05	MCERTS	17*	23*	8*	21*	0.07
Benzo(a)anthracene	mg/kg	0.05	MCERTS	8.5*	12*	4.2*	11*	< 0.05
Chrysene	mg/kg	0.05	MCERTS	8.2*	12*	4.2*	11*	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	8.1*	11*	4.3*	10*	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	3.7*	5.6*	1.8*	5.3*	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	8*	11*	4.3*	9.9*	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	4.5*	6.2*	2.2*	5.2*	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	1.1*	1.6*	0.55*	1.4*	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	5.2*	7.3*	2.6*	6*	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	110*	149*	50.9*	141*	< 0.80

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

*Data reported unaccredited due to quality control parameter failure associated with this result; other checks applied prior to reporting the data have been accepted and the failure justified as having no significant impact on sample data reported.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 22-14305
Project / Site name: Don Street
Your Order No: 003752

Lab Sample Number				2539990	2539991	2539992	2539993	2539994
Sample Reference				BH1 North	BH1 East	BH1 South	BH1 West	BH1 Base
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				19/12/2022	19/12/2022	19/12/2022	19/12/2022	19/12/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	21	22	25	23	11
Total mass of sample received	kg	0.001	NONE	0.4	0.4	0.4	0.4	0.4
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	0.71	0.98	0.95	0.67	0.13
Acenaphthylene	mg/kg	0.05	MCERTS	0.16	0.16	0.11	0.12	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	0.65	2.7	1.5	0.81	< 0.05
Fluorene	mg/kg	0.05	MCERTS	0.68	2.2	1.4	0.77	0.05
Phenanthrene	mg/kg	0.05	MCERTS	5.8	17	12	6	0.22
Anthracene	mg/kg	0.05	MCERTS	1.6	4.1	3.2	1.5	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	7.8	19	14	8.2	0.11
Pyrene	mg/kg	0.05	MCERTS	7.6	18	13	7.8	0.1
Benzo(a)anthracene	mg/kg	0.05	MCERTS	4.3	9.1	7.2	4.2	< 0.05
Chrysene	mg/kg	0.05	MCERTS	3.7	8	5.9	3.7	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	4.4	10	6.9	4.1	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	1.9	2.1	2.4	1.9	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	4	7.7	5.7	3.8	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	2.1	3.7	2.9	1.9	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.53	0.85	0.78	0.53	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	2.3	3.8	3	2	< 0.05
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	48	110	81.2	48	< 0.80

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

*Data reported unaccredited due to quality control parameter failure associated with this result; other checks applied prior to reporting the data have been accepted and the failure justified as having no significant impact on sample data reported.

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Analytical Report Number : 22-14305
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2539975	TP5 North	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2539976	TP5 East	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2539977	TP5 South	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2539978	TP5 West	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2539979	TP5 Base	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2539980	TP6 North	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2539981	TP6 East	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2539982	TP6 South	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2539983	TP6 West	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2539984	TP6 Base	None Supplied	None Supplied	Light brown clay and sand with gravel.
2539985	BH4 North	None Supplied	None Supplied	Brown gravelly sand.
2539986	BH4 East	None Supplied	None Supplied	Brown gravelly sand.
2539987	BH4 South	None Supplied	None Supplied	Brown gravelly sand.
2539988	BH4 West	None Supplied	None Supplied	Brown gravelly sand.
2539989	BH4 Base	None Supplied	None Supplied	Light brown clay and sand with gravel.
2539990	BH1 North	None Supplied	None Supplied	Brown gravelly sand.
2539991	BH1 East	None Supplied	None Supplied	Brown clay and sand with gravel.
2539992	BH1 South	None Supplied	None Supplied	Brown clay and sand with gravel.
2539993	BH1 West	None Supplied	None Supplied	Brown clay and sand with gravel.
2539994	BH1 Base	None Supplied	None Supplied	Brown clay and sand with gravel.

Analytical Report Number : 22-14305
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

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Analytical Report Number : 22-14428

Project / Site name:	Don Street	**Samples received on:**	20/12/2022
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	21/12/2022
Your order number:	003752	**Analysis completed by:**	03/01/2023
Report Issue Number:	1	**Report issued on:**	03/01/2023
Samples Analysed:	5 soil samples		

Signed:

Joanna Wawrzeczko
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 22-14428
Project / Site name: Don Street
Your Order No: 003752

Lab Sample Number				2540860	2540861	2540862	2540863	2540864
Sample Reference				BH3 North	BH3 East	BH3 South	BH3 West	BH3 Base
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				19/12/2022	19/12/2022	19/12/2022	19/12/2022	19/12/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	33	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	17	16	17	20	13
Total mass of sample received	kg	0.001	NONE	0.5	0.5	0.5	0.5	0.5

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	1.3	0.82	1.4	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	0.09	0.08	0.19	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	1.7	1.2	0.75	2.2	< 0.05
Fluorene	mg/kg	0.05	MCERTS	1.8	1.2	0.65	2	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	17	9.3	7.1	20	< 0.05
Anthracene	mg/kg	0.05	MCERTS	4.8	2.9	2.2	6.1	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	22	14	12	33	< 0.05
Pyrene	mg/kg	0.05	MCERTS	21	14	11	31	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	9.4	7.9	6.4	17	< 0.05
Chrysene	mg/kg	0.05	MCERTS	8.6	5.4	5.6	12	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	9.8	8	6.2	14	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	3.2*	2.3*	3.5*	6.8*	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	9.3	7.4	6.8	14	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	4.1	3.8	3.3	6.3	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	1.2	1.1	0.87	1.9	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	5.4	4.6	4.2	8	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	120	84.3	71.5	176	< 0.80

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

*Data reported unaccredited due to quality control parameter failure associated with this result; other checks applied prior to reporting the data have been accepted and the failure justified as having no significant impact on sample data reported.

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Analytical Report Number : 22-14428
Project / Site name: Don Street

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Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2540860	BH3 North	None Supplied	None Supplied	Brown sand with stones and vegetation.
2540861	BH3 East	None Supplied	None Supplied	Brown sand with gravel and paper.
2540862	BH3 South	None Supplied	None Supplied	Brown clay and sand with gravel and vegetation.
2540863	BH3 West	None Supplied	None Supplied	Brown clay and sand with gravel and vegetation.
2540864	BH3 Base	None Supplied	None Supplied	Brown clay and sand with gravel.

Analytical Report Number : 22-14428
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

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Analytical Report Number : 22-95809

Project / Site name:	Don Street	**Samples received on:**	07/11/2022
Your job number:	14 554	**Samples instructed on/ Analysis started on:**	10/11/2022
Your order number:	003452	**Analysis completed by:**	28/11/2022
Report Issue Number:	1	**Report issued on:**	28/11/2022
Samples Analysed:	4 soil samples		

Signed:

Anna Goc
Junior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing

Analytical Report Number: 22-95809
Project / Site name: Don Street
Your Order No: 003452

Lab Sample Number				2494577	2494578	2494579	2494580
Sample Reference				WS17 Sample A	WS17 Sample B	WS17 Sample C	WS17 Base
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				03/11/2022	03/11/2022	03/11/2022	03/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	12	18	21	18
Total mass of sample received	kg	0.001	NONE	0.5	0.5	0.5	0.5
Speciated PAHs							
Naphthalene	mg/kg	0.05	NONE	1.7	37	0.98	< 0.05
Acenaphthylene	mg/kg	0.05	NONE	0.64	3.1	0.33	0.25
Acenaphthene	mg/kg	0.05	NONE	1.7	18	2.1	0.19
Fluorene	mg/kg	0.05	NONE	1.4	19	1.6	0.21
Phenanthrene	mg/kg	0.05	NONE	11	90	19	2.2
Anthracene	mg/kg	0.05	NONE	3.8	28	4.9	1.2
Fluoranthene	mg/kg	0.05	NONE	15	85	25	6
Pyrene	mg/kg	0.05	NONE	14	78	25	6
Benzo(a)anthracene	mg/kg	0.05	NONE	7.1	44	12	3.7
Chrysene	mg/kg	0.05	NONE	6.4	45	12	3.5
Benzo(b)fluoranthene	mg/kg	0.05	NONE	8.2	45	9.7	4.3
Benzo(k)fluoranthene	mg/kg	0.05	NONE	2.8	15	7.2	1.8
Benzo(a)pyrene	mg/kg	0.05	NONE	7.1	40	11	3.9
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	3.1	16	6.4	1.7
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	0.83	4.6	1.3	0.47
Benzo(ghi)perylene	mg/kg	0.05	NONE	3.5	17	6.7	1.8
Total PAH							
Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	87.1	586	146	37.2
Petroleum Hydrocarbons							
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	NONE	< 2.0	34	< 2.0	< 2.0
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	NONE	14	93	10	< 4.0
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	95	400	110	120
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	210	620	310	410
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	32	11	55	24
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	350	1200	480	550

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Analytical Report Number: 22-95809
Project / Site name: Don Street
Your Order No: 003452

Lab Sample Number				2494577	2494578	2494579	2494580
Sample Reference				WS17 Sample A	WS17 Sample B	WS17 Sample C	WS17 Base
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				03/11/2022	03/11/2022	03/11/2022	03/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
VOCs							
Chloromethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Bromomethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl Chloride	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Trichlorofluoromethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Cis-1,2-dichloroethene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
2,2-Dichloropropane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Trichloromethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloropropene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Trans-1,2-dichloroethene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Benzene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloromethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Dibromomethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Cis-1,3-dichloropropene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Trans-1,3-dichloropropene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichloropropane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Dibromochloromethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1,2-Tetrachloroethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
p & m-Xylene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Tribromomethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Bromobenzene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
n-Propylbenzene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
2-Chlorotoluene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
4-Chlorotoluene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
tert-Butylbenzene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
sec-Butylbenzene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
p-Isopropyltoluene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Butylbenzene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0

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Analytical Report Number: 22-95809
Project / Site name: Don Street
Your Order No: 003452

Lab Sample Number				2494577	2494578	2494579	2494580
Sample Reference				WS17 Sample A	WS17 Sample B	WS17 Sample C	WS17 Base
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				03/11/2022	03/11/2022	03/11/2022	03/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
1,2-Dibromo-3-chloropropane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Hexachlorobutadiene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0

SVOCs

Aniline	mg/kg	0.1	NONE	< 0.1	< 0.1	0.4	< 0.1
Phenol	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
2-Chlorophenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylphenol	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Hexachloroethane	mg/kg	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	4.3	< 0.2	< 0.2
Isophorone	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
2-Nitrophenol	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	NONE	< 0.3	2.3	< 0.3	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Naphthalene	mg/kg	0.05	NONE	1.7	37	0.98	< 0.05
2,4-Dichlorophenol	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorobutadiene	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	1.4	21	0.8	< 0.1
2-Chloronaphthalene	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Dimethylphthalate	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthylene	mg/kg	0.05	NONE	0.64	3.1	0.33	0.25
Acenaphthene	mg/kg	0.05	NONE	1.7	18	2.1	0.19
2,4-Dinitrotoluene	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Dibenzofuran	mg/kg	0.2	NONE	0.9	13	1.1	< 0.2
4-Chlorophenyl phenyl ether	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Diethyl phthalate	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
4-Nitroaniline	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Fluorene	mg/kg	0.05	NONE	1.4	19	1.6	0.21
Azobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Hexachlorobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Phenanthrene	mg/kg	0.05	NONE	11	90	19	2.2
Anthracene	mg/kg	0.05	NONE	3.8	28	4.9	1.2
Carbazole	mg/kg	0.3	NONE	1	11	1	< 0.3
Dibutyl phthalate	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Anthraquinone	mg/kg	0.3	NONE	1	7.5	1.5	< 0.3
Fluoranthene	mg/kg	0.05	NONE	15	85	25	6
Pyrene	mg/kg	0.05	NONE	14	78	25	6
Butyl benzyl phthalate	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3

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Analytical Report Number: 22-95809
Project / Site name: Don Street
Your Order No: 003452

Lab Sample Number				2494577	2494578	2494579	2494580
Sample Reference				WS17 Sample A	WS17 Sample B	WS17 Sample C	WS17 Base
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				03/11/2022	03/11/2022	03/11/2022	03/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Benzo(a)anthracene	mg/kg	0.05	NONE	7.1	44	12	3.7
Chrysene	mg/kg	0.05	NONE	6.4	45	12	3.5
Benzo(b)fluoranthene	mg/kg	0.05	NONE	8.2	45	9.7	4.3
Benzo(k)fluoranthene	mg/kg	0.05	NONE	2.8	15	7.2	1.8
Benzo(a)pyrene	mg/kg	0.05	NONE	7.1	40	11	3.9
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	3.1	16	6.4	1.7
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	0.83	4.6	1.3	0.47
Benzo(ghi)perylene	mg/kg	0.05	NONE	3.5	17	6.7	1.8

U/S = Unsuitable Sample I/S = Insufficient Sample

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Analytical Report Number : 22-95809
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2494577	WS17 Sample A	None Supplied	None Supplied	Brown clay and sand with gravel.
2494578	WS17 Sample B	None Supplied	None Supplied	Brown clay and sand with gravel.
2494579	WS17 Sample C	None Supplied	None Supplied	Brown clay and sand with gravel.
2494580	WS17 Base	None Supplied	None Supplied	Brown clay and sand.

Analytical Report Number : 22-95809
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-PL	D	NONE
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	NONE
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	NONE

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 22-95884

Project / Site name:	Don Street	**Samples received on:**	09/11/2022
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	10/11/2022
Your order number:	003451	**Analysis completed by:**	28/11/2022
Report Issue Number:	1	**Report issued on:**	28/11/2022
Samples Analysed:	12 soil samples		

Signed:

Anna Goc
Junior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Analytical Report Number: 22-95884
Project / Site name: Don Street
Your Order No: 003451

Lab Sample Number				2495052	2495053	2495054	2495055	2495056
Sample Reference				WS5 North	WS5 East	WS5 South	WS5 West	WS5 Base
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	2.30
Date Sampled				08/11/2022	08/11/2022	08/11/2022	08/11/2022	08/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	32	29	20
Moisture Content	%	0.01	NONE	13	11	11	12	23
Total mass of sample received	kg	0.001	NONE	0.5	0.5	0.5	0.5	0.5
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	-	-	-	-	-
Total Sulphate as SO4	mg/kg	50	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	-	-	-	-
Sulphide	mg/kg	1	NONE	-	-	-	-	-
Total Sulphur	mg/kg	50	MCERTS	-	-	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	-	-	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	NONE	3.8	4.8	11	5.6	86
Acenaphthylene	mg/kg	0.05	NONE	1.6	1.3	3.1	2.5	21
Acenaphthene	mg/kg	0.05	NONE	5.4	5.5	9.4	6.1	97
Fluorene	mg/kg	0.05	NONE	5.2	6	10	6.5	100
Phenanthrene	mg/kg	0.05	NONE	44	39	69	48	590
Anthracene	mg/kg	0.05	NONE	13	11	22	16	210
Fluoranthene	mg/kg	0.05	NONE	52	44	72	52	520
Pyrene	mg/kg	0.05	NONE	50	42	66	49	480
Benzo(a)anthracene	mg/kg	0.05	NONE	26	21	40	29	240
Chrysene	mg/kg	0.05	NONE	22	19	33	25	200
Benzo(b)fluoranthene	mg/kg	0.05	NONE	18	18	44	35	210
Benzo(k)fluoranthene	mg/kg	0.05	NONE	15	9.5	10	6.2	67
Benzo(a)pyrene	mg/kg	0.05	NONE	24	20	36	26	180
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	9.8	8.5	15	11	76
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	2.5	1.6	4.1	3.6	18
Benzo(ghi)perylene	mg/kg	0.05	NONE	11	10	15	12	77
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	304	262	459	334	3170

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Analytical Report Number: 22-95884
Project / Site name: Don Street
Your Order No: 003451

Lab Sample Number				2495052	2495053	2495054	2495055	2495056
Sample Reference				WS5 North	WS5 East	WS5 South	WS5 West	WS5 Base
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	2.30
Date Sampled				08/11/2022	08/11/2022	08/11/2022	08/11/2022	08/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	-	-	-	-
Chromium (hexavalent)	mg/kg	1.8	MCERTS	-	-	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	-	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	NONE	-	-	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	NONE	-	-	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample

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Analytical Report Number: 22-95884
Project / Site name: Don Street
Your Order No: 003451

Lab Sample Number				2495057	2495058	2495059	2495060	2495061
Sample Reference				WS5 Arisings	W409 North	TP409 East	TP409 South	TP409 West
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				08/11/2022	08/11/2022	08/11/2022	08/11/2022	08/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	13	15	12	13	12
Total mass of sample received	kg	0.001	NONE	0.5	0.5	0.5	0.5	0.5
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Amosite	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Detected	-	-	-	-
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	< 0.001	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	< 0.001	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	MJN	N/A	N/A	N/A	N/A
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	8.3	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1.0	-	-	-	-
Total Sulphate as SO4	mg/kg	50	MCERTS	1300	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.074	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	150	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	73.9	-	-	-	-
Sulphide	mg/kg	1	NONE	39	-	-	-	-
Total Sulphur	mg/kg	50	MCERTS	1200	-	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	2.6	-	-	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	-	-	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	NONE	4.6	8.8	1.2	2	3.9
Acenaphthylene	mg/kg	0.05	NONE	2.2	0.2	0.07	0.12	0.19
Acenaphthene	mg/kg	0.05	NONE	6	10	2.4	4	9.3
Fluorene	mg/kg	0.05	NONE	6.9	7.3	2	2.9	7.1
Phenanthrene	mg/kg	0.05	NONE	49	47	15	22	50
Anthracene	mg/kg	0.05	NONE	14	13	3.6	5.3	14
Fluoranthene	mg/kg	0.05	NONE	58	64	20	34	68
Pyrene	mg/kg	0.05	NONE	56	60	19	32	64
Benzo(a)anthracene	mg/kg	0.05	NONE	29	31	9	14	34
Chrysene	mg/kg	0.05	NONE	31	26	7.7	15	29
Benzo(b)fluoranthene	mg/kg	0.05	NONE	27	27	7.2	15	30
Benzo(k)fluoranthene	mg/kg	0.05	NONE	13	18	5.3	8.6	20
Benzo(a)pyrene	mg/kg	0.05	NONE	29	29	8.2	15	32
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	13	14	4.1	7.6	15
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	3.6	3.6	1	1.6	3.3
Benzo(ghi)perylene	mg/kg	0.05	NONE	14	16	4.8	9.2	17
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	358	378	110	188	395

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Analytical Report Number: 22-95884
Project / Site name: Don Street
Your Order No: 003451

Lab Sample Number				2495057	2495058	2495059	2495060	2495061
Sample Reference				WS5 Arisings	W409 North	TP409 East	TP409 South	TP409 West
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				08/11/2022	08/11/2022	08/11/2022	08/11/2022	08/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	21	-	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.8	-	-	-	-
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	-	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	15	-	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	82	-	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	150	-	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	29	-	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	-	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	690	-	-	-	-
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	-	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	-	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	-	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	NONE	3.7	-	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	NONE	29	-	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	130	-	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	310	-	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	20	-	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	490	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample

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Analytical Report Number: 22-95884
Project / Site name: Don Street
Your Order No: 003451

Lab Sample Number				2495062	2495063
Sample Reference				TP409 Base	TP409 Arisings
Sample Number				None Supplied	None Supplied
Depth (m)				2.70	None Supplied
Date Sampled				08/11/2022	08/11/2022
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	15	14
Total mass of sample received	kg	0.001	NONE	0.5	0.5

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-
Asbestos in Soil	Type	N/A	ISO 17025	-	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A	MJN

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	-	8.3
Total Cyanide	mg/kg	1	MCERTS	-	1.2
Total Sulphate as SO4	mg/kg	50	MCERTS	-	540
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	0.093
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	190
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	93.4
Sulphide	mg/kg	1	NONE	-	47
Total Sulphur	mg/kg	50	MCERTS	-	1100
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	2.5

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	-	< 1.0

Speciated PAHs

Naphthalene	mg/kg	0.05	NONE	3.6	7.2
Acenaphthylene	mg/kg	0.05	NONE	0.12	0.41
Acenaphthene	mg/kg	0.05	NONE	3.4	13
Fluorene	mg/kg	0.05	NONE	2.5	15
Phenanthrene	mg/kg	0.05	NONE	16	82
Anthracene	mg/kg	0.05	NONE	4.1	25
Fluoranthene	mg/kg	0.05	NONE	24	77
Pyrene	mg/kg	0.05	NONE	22	68
Benzo(a)anthracene	mg/kg	0.05	NONE	9.9	32
Chrysene	mg/kg	0.05	NONE	10	39
Benzo(b)fluoranthene	mg/kg	0.05	NONE	11	33
Benzo(k)fluoranthene	mg/kg	0.05	NONE	4.9	13
Benzo(a)pyrene	mg/kg	0.05	NONE	11	30
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	5.5	14
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	1.3	3.8
Benzo(ghi)perylene	mg/kg	0.05	NONE	6.1	16

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	136	469

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Analytical Report Number: 22-95884
Project / Site name: Don Street
Your Order No: 003451

Lab Sample Number				2495062	2495063
Sample Reference				TP409 Base	TP409 Arisings
Sample Number				None Supplied	None Supplied
Depth (m)				2.70	None Supplied
Date Sampled				08/11/2022	08/11/2022
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Heavy Metals / Metalloids					
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	27
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	-	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	22
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	79
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	130
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	33
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	150
Petroleum Hydrocarbons					
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	NONE	-	5.3
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	NONE	-	45
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	230
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	470
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	-	17
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	770

U/S = Unsuitable Sample I/S = Insufficient Sample

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Analytical Report Number: 22-95884
Project / Site name: Don Street
Your Order No: 003451

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2495057	WS5 Arisings		162	Loose Fibres	**Amosite**	< 0.001	**< 0.001**

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

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Analytical Report Number : 22-95884
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2495052	WS5 North	None Supplied	None Supplied	Brown loam and sand with gravel and brick.
2495053	WS5 East	None Supplied	None Supplied	Brown loam and sand with gravel and brick.
2495054	WS5 South	None Supplied	None Supplied	3.23.1.18
2495055	WS5 West	None Supplied	None Supplied	Brown loam and sand with stones and brick.
2495056	WS5 Base	None Supplied	2.3	Brown gravelly sand with stones.
2495057	WS5 Arisings	None Supplied	None Supplied	Brown loam and sand with gravel and brick.
2495058	W409 North	None Supplied	None Supplied	Brown clay and sand with gravel.
2495059	TP409 East	None Supplied	None Supplied	Brown sandy clay.
2495060	TP409 South	None Supplied	None Supplied	Brown clay and sand with gravel and vegetation.
2495061	TP409 West	None Supplied	None Supplied	Brown clay and sand with gravel and vegetation.
2495062	TP409 Base	None Supplied	2.7	Brown clay and sand with gravel.
2495063	TP409 Arisings	None Supplied	None Supplied	Brown clay and sand with gravel.

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Analytical Report Number : 22-95884
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	NONE
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	NONE
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	NONE
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

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Analytical Report Number : 22-95884
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 22-97516

Project / Site name:	Don Street	**Samples received on:**	17/11/2022
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	17/11/2022
Your order number:	003509	**Analysis completed by:**	29/11/2022
Report Issue Number:	1	**Report issued on:**	29/11/2022
Samples Analysed:	42 soil samples		

Signed:

Joanna Wawrzeczko
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Analytical Report Number: 22-97516
Project / Site name: Don Street
Your Order No: 003509

Lab Sample Number				2503934	2503935	2503936	2503937	2503938
Sample Reference				TP519 NORTH	TP519 EAST	TP519 SOUTH	TP519 WEST	TP519 BASE
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				16/11/2022	16/11/2022	16/11/2022	16/11/2022	16/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	16	< 0.1	13	< 0.1
Moisture Content	%	0.01	NONE	19	16	18	14	15
Total mass of sample received	kg	0.001	NONE	0.7	0.7	0.4	0.4	0.4
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	-	-	-	-
Sulphide	mg/kg	1	NONE	-	-	-	-	-
Total Sulphur	mg/kg	50	MCERTS	-	-	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	-	-	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	NONE	-	-	-	-	-
Acenaphthylene	mg/kg	0.05	NONE	-	-	-	-	-
Acenaphthene	mg/kg	0.05	NONE	-	-	-	-	-
Fluorene	mg/kg	0.05	NONE	-	-	-	-	-
Phenanthrene	mg/kg	0.05	NONE	-	-	-	-	-
Anthracene	mg/kg	0.05	NONE	-	-	-	-	-
Fluoranthene	mg/kg	0.05	NONE	-	-	-	-	-
Pyrene	mg/kg	0.05	NONE	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	NONE	-	-	-	-	-
Chrysene	mg/kg	0.05	NONE	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	NONE	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	NONE	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	NONE	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	NONE	-	-	-	-	-
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	-	-	-	-	-

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Analytical Report Number: 22-97516
Project / Site name: Don Street
Your Order No: 003509

Lab Sample Number				2503934	2503935	2503936	2503937	2503938
Sample Reference				TP519 NORTH	TP519 EAST	TP519 SOUTH	TP519 WEST	TP519 BASE
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				16/11/2022	16/11/2022	16/11/2022	16/11/2022	16/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	22	21	21	17	21
Barium (aqua regia extractable)	mg/kg	1	MCERTS	740	720	870	630	700
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	1.5	1.5	1.5	1.2	1.2
Boron (water soluble)	mg/kg	0.2	MCERTS	1.8	3.2	2.4	4	2.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	1.3	1.3	3.3	1.2	1.4
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	590	260	420	280	460
Lead (aqua regia extractable)	mg/kg	1	MCERTS	280	230	300	260	360
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	1.5	0.8	1.1	0.6	0.6
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	35	29	28	24	27
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	40	39	38	33	34
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	1100	810	1200	770	760
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	NONE	-	-	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	NONE	-	-	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample

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Analytical Report Number: 22-97516
Project / Site name: Don Street
Your Order No: 003509

Lab Sample Number				2503939	2503940	2503941	2503942	2503943
Sample Reference				TP519 ARISINGS	TP516 NORTH	TP516 EAST	TP516 SOUTH	TP516 WEST
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				16/11/2022	16/11/2022	16/11/2022	16/11/2022	16/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	-	-	-	-
Moisture Content	%	0.01	NONE	10	-	-	-	-
Total mass of sample received	kg	0.001	NONE	0.3	-	-	-	-
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	Chrysotile	-	Amosite	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Detected	Not-detected	Detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	< 0.001	-	< 0.001	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	< 0.001	-	< 0.001	-
Asbestos Analyst ID	N/A	N/A	N/A	SFS	SFS	SFS	SFS	SFS
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	9.2	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1.0	-	-	-	-
Total Sulphate as SO4	mg/kg	50	MCERTS	2500	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.24	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	480	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	240	-	-	-	-
Sulphide	mg/kg	1	NONE	140	-	-	-	-
Total Sulphur	mg/kg	50	MCERTS	1800	-	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.7	-	-	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	-	-	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	NONE	1	-	-	-	-
Acenaphthylene	mg/kg	0.05	NONE	0.14	-	-	-	-
Acenaphthene	mg/kg	0.05	NONE	1.1	-	-	-	-
Fluorene	mg/kg	0.05	NONE	1.2	-	-	-	-
Phenanthrene	mg/kg	0.05	NONE	8.8	-	-	-	-
Anthracene	mg/kg	0.05	NONE	2.4	-	-	-	-
Fluoranthene	mg/kg	0.05	NONE	11	-	-	-	-
Pyrene	mg/kg	0.05	NONE	11	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	NONE	5.4	-	-	-	-
Chrysene	mg/kg	0.05	NONE	5.8	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	NONE	6.4	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	NONE	1.8	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	NONE	5.8	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	2.9	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	0.68	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	NONE	3.2	-	-	-	-
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	69	-	-	-	-

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Analytical Report Number: 22-97516
Project / Site name: Don Street
Your Order No: 003509

Lab Sample Number				2503939	2503940	2503941	2503942	2503943
Sample Reference				TP519 ARISINGS	TP516 NORTH	TP516 EAST	TP516 SOUTH	TP516 WEST
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				16/11/2022	16/11/2022	16/11/2022	16/11/2022	16/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	17	-	-	-	-
Barium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	-	-	-	-	-
Boron (water soluble)	mg/kg	0.2	MCERTS	-	-	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	1.2	-	-	-	-
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	-	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	17	-	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	220	-	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	220	-	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.5	-	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	20	-	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	-	-	-	-
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	790	-	-	-	-
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	-	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	-	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	-	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	NONE	2	-	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	NONE	11	-	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	76	-	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	350	-	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	65	-	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	510	-	-	-	-

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Analytical Report Number: 22-97516
Project / Site name: Don Street
Your Order No: 003509

Lab Sample Number				2503944	2503945	2503946	2503947	2503948
Sample Reference				TP516 BASE	TP516 ARISINGS	TP6 NORTH	TP6 EAST	TP6 SOUTH
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				16/11/2022	16/11/2022	16/11/2022	16/11/2022	16/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	-	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	-	14	18	18	20
Total mass of sample received	kg	0.001	NONE	-	0.3	0.4	0.4	0.4
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	-	-	-
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	SFS	SFS	N/A	N/A	N/A
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	8.4	-	-	-
Total Cyanide	mg/kg	1	MCERTS	-	< 1.0	-	-	-
Total Sulphate as SO4	mg/kg	50	MCERTS	-	630	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	0.041	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	82	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	41	-	-	-
Sulphide	mg/kg	1	NONE	-	27	-	-	-
Total Sulphur	mg/kg	50	MCERTS	-	610	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	3	-	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	< 1.0	-	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	NONE	-	0.72	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	NONE	-	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	NONE	-	1	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	NONE	-	0.75	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	NONE	-	4.8	< 0.05	< 0.05	< 0.05
Anthracene	mg/kg	0.05	NONE	-	1.5	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	NONE	-	9.7	< 0.05	< 0.05	0.12
Pyrene	mg/kg	0.05	NONE	-	9.1	< 0.05	< 0.05	0.12
Benzo(a)anthracene	mg/kg	0.05	NONE	-	4.3	< 0.05	< 0.05	< 0.05
Chrysene	mg/kg	0.05	NONE	-	4.8	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	NONE	-	4.7	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	NONE	-	2.5	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	NONE	-	4.3	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	-	2.4	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	-	0.56	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	NONE	-	2.6	< 0.05	< 0.05	< 0.05
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	-	53.5	< 0.80	< 0.80	< 0.80

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Analytical Report Number: 22-97516
Project / Site name: Don Street
Your Order No: 003509

Lab Sample Number				2503944	2503945	2503946	2503947	2503948
Sample Reference				TP516 BASE	TP516 ARISINGS	TP6 NORTH	TP6 EAST	TP6 SOUTH
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				16/11/2022	16/11/2022	16/11/2022	16/11/2022	16/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	21	-	-	-
Barium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	-	-	-	-	-
Boron (water soluble)	mg/kg	0.2	MCERTS	-	-	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	0.9	-	-	-
Chromium (hexavalent)	mg/kg	1.8	MCERTS	-	< 1.8	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	33	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	63	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	110	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	0.5	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	24	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	< 1.0	-	-	-
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	210	-	-	-
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	< 1.0	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	< 0.1	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	< 0.1	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	NONE	-	< 2.0	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	NONE	-	< 4.0	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	19	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	59	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	-	17	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	95	-	-	-

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Analytical Report Number: 22-97516
Project / Site name: Don Street
Your Order No: 003509

Lab Sample Number				2503949	2503950	2503951	2503952	2503953
Sample Reference				TP6 WEST	TP6 BASE	TP6 ARISINGS	TP27 NORTH	TP27 EAST
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				16/11/2022	16/11/2022	16/11/2022	16/11/2022	16/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	21	15	12	14	11
Total mass of sample received	kg	0.001	NONE	0.4	0.4	0.3	0.3	0.4
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	-	-	Not-detected	-	-
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A	N/A	SFS	N/A	N/A
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	-	8.1	-	-
Total Cyanide	mg/kg	1	MCERTS	-	-	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	-	-	820	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	-	0.13	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	-	260	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	-	130	-	-
Sulphide	mg/kg	1	NONE	-	-	18	-	-
Total Sulphur	mg/kg	50	MCERTS	-	-	810	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	-	1.9	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	< 1.0	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	NONE	< 0.05	< 0.05	< 0.05	-	-
Acenaphthylene	mg/kg	0.05	NONE	< 0.05	< 0.05	< 0.05	-	-
Acenaphthene	mg/kg	0.05	NONE	< 0.05	< 0.05	0.21	-	-
Fluorene	mg/kg	0.05	NONE	< 0.05	< 0.05	0.13	-	-
Phenanthrene	mg/kg	0.05	NONE	< 0.05	< 0.05	1.1	-	-
Anthracene	mg/kg	0.05	NONE	< 0.05	< 0.05	0.41	-	-
Fluoranthene	mg/kg	0.05	NONE	< 0.05	< 0.05	5.1	-	-
Pyrene	mg/kg	0.05	NONE	< 0.05	< 0.05	5	-	-
Benzo(a)anthracene	mg/kg	0.05	NONE	< 0.05	< 0.05	3.1	-	-
Chrysene	mg/kg	0.05	NONE	< 0.05	< 0.05	2.5	-	-
Benzo(b)fluoranthene	mg/kg	0.05	NONE	< 0.05	< 0.05	3.9	-	-
Benzo(k)fluoranthene	mg/kg	0.05	NONE	< 0.05	< 0.05	0.97	-	-
Benzo(a)pyrene	mg/kg	0.05	NONE	< 0.05	< 0.05	2.9	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	< 0.05	< 0.05	1.5	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	< 0.05	< 0.05	0.37	-	-
Benzo(ghi)perylene	mg/kg	0.05	NONE	< 0.05	< 0.05	1.7	-	-
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	< 0.80	< 0.80	29	-	-

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Analytical Report Number: 22-97516
Project / Site name: Don Street
Your Order No: 003509

Lab Sample Number				2503949	2503950	2503951	2503952	2503953
Sample Reference				TP6 WEST	TP6 BASE	TP6 ARISINGS	TP27 NORTH	TP27 EAST
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				16/11/2022	16/11/2022	16/11/2022	16/11/2022	16/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	-	21	7.3	3.7
Barium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	220	340
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	-	-	-	0.43	0.18
Boron (water soluble)	mg/kg	0.2	MCERTS	-	-	-	0.2	< 0.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	-	< 0.2	2.3	2.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	-	-	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	15	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	-	42	19	5.4
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-	67	40	27
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	-	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	-	18	12	5.8
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	16	8.9
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	-	67	140	92
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	< 1.0	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	< 0.1	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	< 0.1	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	NONE	-	-	< 2.0	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	NONE	-	-	< 4.0	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	13	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	29	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	< 10	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	42	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample

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Analytical Report Number: 22-97516
Project / Site name: Don Street
Your Order No: 003509

Lab Sample Number				2503954	2503955	2503956	2503957	2503958
Sample Reference				TP27 SOUTH	TP27 WEST	TP27 BASE	TP27 ARISINGS	TP41 NORTH
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				16/11/2022	16/11/2022	16/11/2022	16/11/2022	16/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	21
Moisture Content	%	0.01	NONE	6.8	11	12	14	12
Total mass of sample received	kg	0.001	NONE	0.4	0.4	0.4	0.3	0.4
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	-	-	-	Not-detected	-
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A	N/A	N/A	SFS	N/A
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	-	-	7.6	-
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
Total Sulphate as SO4	mg/kg	50	MCERTS	-	-	-	1200	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	-	-	0.04	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	-	-	80	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	-	-	39.9	-
Sulphide	mg/kg	1	NONE	-	-	-	5.3	-
Total Sulphur	mg/kg	50	MCERTS	-	-	-	630	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	-	-	6.8	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-	< 1.0	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	NONE	-	-	-	0.33	9.9
Acenaphthylene	mg/kg	0.05	NONE	-	-	-	0.05	< 0.05
Acenaphthene	mg/kg	0.05	NONE	-	-	-	0.81	8.7
Fluorene	mg/kg	0.05	NONE	-	-	-	0.55	6.5
Phenanthrene	mg/kg	0.05	NONE	-	-	-	6.6	43
Anthracene	mg/kg	0.05	NONE	-	-	-	1.6	10
Fluoranthene	mg/kg	0.05	NONE	-	-	-	9.2	44
Pyrene	mg/kg	0.05	NONE	-	-	-	8.8	39
Benzo(a)anthracene	mg/kg	0.05	NONE	-	-	-	4.5	20
Chrysene	mg/kg	0.05	NONE	-	-	-	4.1	16
Benzo(b)fluoranthene	mg/kg	0.05	NONE	-	-	-	5	18
Benzo(k)fluoranthene	mg/kg	0.05	NONE	-	-	-	1.3	7.8
Benzo(a)pyrene	mg/kg	0.05	NONE	-	-	-	3.8	17
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	-	-	-	1.7	6.5
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	-	-	-	0.44	1.5
Benzo(ghi)perylene	mg/kg	0.05	NONE	-	-	-	2	7
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	-	-	-	50.8	256

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Analytical Report Number: 22-97516
Project / Site name: Don Street
Your Order No: 003509

Lab Sample Number				2503954	2503955	2503956	2503957	2503958
Sample Reference				TP27 SOUTH	TP27 WEST	TP27 BASE	TP27 ARISINGS	TP41 NORTH
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				16/11/2022	16/11/2022	16/11/2022	16/11/2022	16/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	3.4	6.9	5.5	10	-
Barium (aqua regia extractable)	mg/kg	1	MCERTS	1400	420	510	-	-
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.19	0.3	0.27	-	-
Boron (water soluble)	mg/kg	0.2	MCERTS	< 0.2	0.2	< 0.2	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	17	4.2	3.6	2.9	-
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	15	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	11	12	9.7	47	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	110	53	40	130	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	5.7	7.7	8.6	16	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	8.9	12	13	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	430	170	140	420	-
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	< 1.0	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	< 0.1	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	< 0.1	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	NONE	-	-	-	< 2.0	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	NONE	-	-	-	4.1	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	12	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	52	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	12	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	81	-

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Analytical Report Number: 22-97516
Project / Site name: Don Street
Your Order No: 003509

Lab Sample Number				2503959	2503960	2503961	2503962	2503963
Sample Reference				TP41 EAST	TP41 SOUTH	TP41 WEST	TP41 BASE	TP41 ARISINGS
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				16/11/2022	16/11/2022	16/11/2022	16/11/2022	16/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	31	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	13	13	15	13	16
Total mass of sample received	kg	0.001	NONE	0.4	0.4	0.4	0.4	0.3
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	-	-	-	-	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A	N/A	N/A	N/A	SFS
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	-	-	-	7.8
Total Cyanide	mg/kg	1	MCERTS	-	-	-	-	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	-	-	-	-	770
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	-	-	-	0.02
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	-	-	-	40
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	-	-	-	20
Sulphide	mg/kg	1	NONE	-	-	-	-	4.1
Total Sulphur	mg/kg	50	MCERTS	-	-	-	-	490
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	-	-	-	3.2
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-	-	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	NONE	0.54	2	5.6	0.73	1
Acenaphthylene	mg/kg	0.05	NONE	< 0.05	< 0.05	0.36	0.07	< 0.05
Acenaphthene	mg/kg	0.05	NONE	1.3	4.1	12	2.2	3.4
Fluorene	mg/kg	0.05	NONE	0.87	2.8	9.5	1.5	2.1
Phenanthrene	mg/kg	0.05	NONE	8.3	22	84	13	21
Anthracene	mg/kg	0.05	NONE	2	5.3	23	3.2	5.2
Fluoranthene	mg/kg	0.05	NONE	11	26	110	18	32
Pyrene	mg/kg	0.05	NONE	10	24	100	17	31
Benzo(a)anthracene	mg/kg	0.05	NONE	4.4	11	45	7.8	17
Chrysene	mg/kg	0.05	NONE	4.7	11	44	8.3	16
Benzo(b)fluoranthene	mg/kg	0.05	NONE	5.8	12	48	9.7	19
Benzo(k)fluoranthene	mg/kg	0.05	NONE	1.5	4.1	19	2.7	6.4
Benzo(a)pyrene	mg/kg	0.05	NONE	4.6	9.9	43	8.2	16
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	1.9	3.8	19	3.3	6.8
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	0.37	1	5.1	0.78	1.7
Benzo(ghi)perylene	mg/kg	0.05	NONE	2.1	4.7	20	3.7	8
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	59.4	144	582	101	186

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Analytical Report Number: 22-97516
Project / Site name: Don Street
Your Order No: 003509

Lab Sample Number				2503959	2503960	2503961	2503962	2503963
Sample Reference				TP41 EAST	TP41 SOUTH	TP41 WEST	TP41 BASE	TP41 ARISINGS
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				16/11/2022	16/11/2022	16/11/2022	16/11/2022	16/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	17
Barium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	-	-	-	-	-
Boron (water soluble)	mg/kg	0.2	MCERTS	-	-	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	-	-	-	-	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	18
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	67
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	120
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	-	-	-	0.4
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	19
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	240
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	NONE	-	-	-	-	< 2.0
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	NONE	-	-	-	-	9.5
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	61
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	120
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	-	16
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	-	210

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Analytical Report Number: 22-97516
Project / Site name: Don Street
Your Order No: 003509

Lab Sample Number				2503964	2503965	2503966	2503967	2503968
Sample Reference				TP11 NORTH	TP11 EAST	TP11 SOUTH	TP11 WEST	TP11 BASE
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				16/11/2022	16/11/2022	16/11/2022	16/11/2022	16/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	3.3	6.6
Moisture Content	%	0.01	NONE	14	14	12	12	9.2
Total mass of sample received	kg	0.001	NONE	0.4	0.4	0.4	0.4	0.4
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	-	-	-	-	-
Total Sulphate as SO4	mg/kg	50	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	-	-	-	-
Sulphide	mg/kg	1	NONE	-	-	-	-	-
Total Sulphur	mg/kg	50	MCERTS	-	-	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	-	-	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	NONE	0.39	1.6	2.4	0.3	0.28
Acenaphthylene	mg/kg	0.05	NONE	< 0.05	0.43	0.47	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	NONE	0.46	4	4.6	< 0.05	0.83
Fluorene	mg/kg	0.05	NONE	0.27	2.7	4.1	< 0.05	0.5
Phenanthrene	mg/kg	0.05	NONE	2.7	14	34	0.58	7.3
Anthracene	mg/kg	0.05	NONE	1	5.9	9.7	0.13	1.7
Fluoranthene	mg/kg	0.05	NONE	12	53	54	1.2	9.8
Pyrene	mg/kg	0.05	NONE	12	52	52	1.2	9.2
Benzo(a)anthracene	mg/kg	0.05	NONE	5.6	26	27	0.86	4.4
Chrysene	mg/kg	0.05	NONE	4.6	24	26	0.79	4.1
Benzo(b)fluoranthene	mg/kg	0.05	NONE	7.3	35	32	1.2	4.4
Benzo(k)fluoranthene	mg/kg	0.05	NONE	3.2	9.8	10	0.46	1.5
Benzo(a)pyrene	mg/kg	0.05	NONE	7.1	32	29	1.2	4
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	3.8	16	15	0.74	1.9
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	1	3.9	3.3	0.22	0.57
Benzo(ghi)perylene	mg/kg	0.05	NONE	4.5	17	16	0.84	2.3
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	65.5	298	319	9.71	52.6

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Analytical Report Number: 22-97516
Project / Site name: Don Street
Your Order No: 003509

Lab Sample Number				2503964	2503965	2503966	2503967	2503968
Sample Reference				TP11 NORTH	TP11 EAST	TP11 SOUTH	TP11 WEST	TP11 BASE
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				16/11/2022	16/11/2022	16/11/2022	16/11/2022	16/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Barium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	-	-	-	-	-
Boron (water soluble)	mg/kg	0.2	MCERTS	-	-	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	-	-	-	-
Chromium (hexavalent)	mg/kg	1.8	MCERTS	-	-	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	-	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	NONE	-	-	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	NONE	-	-	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 22-97516
Project / Site name: Don Street
Your Order No: 003509

Lab Sample Number				2503969	2503970	2503971	2503972	2503973
Sample Reference				TP11 ARISINGS	TP305 NORTH	TP305 EAST	TP305 SOUTH	TP305 WEST
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				16/11/2022	16/11/2022	16/11/2022	16/11/2022	16/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	14	-	-	-	-
Moisture Content	%	0.01	NONE	4.2	-	-	-	-
Total mass of sample received	kg	0.001	NONE	0.4	-	-	-	-

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	Chrysotile & Amosite	-	Amosite	Amosite
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Detected	Not-detected	Detected	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	0.001	-	< 0.001	< 0.001
Asbestos Quantification Total	%	0.001	ISO 17025	-	0.001	-	< 0.001	< 0.001
Asbestos Analyst ID	N/A	N/A	N/A	MLO	MJN	MJN	MJN	MLO

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.5	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1.0	-	-	-	-
Total Sulphate as SO4	mg/kg	50	MCERTS	370	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.014	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	29	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	14.3	-	-	-	-
Sulphide	mg/kg	1	NONE	27	-	-	-	-
Total Sulphur	mg/kg	50	MCERTS	320	-	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	3.7	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	-	-	-	-

Speciated PAHs

Naphthalene	mg/kg	0.05	NONE	< 0.05	-	-	-	-
Acenaphthylene	mg/kg	0.05	NONE	2.1	-	-	-	-
Acenaphthene	mg/kg	0.05	NONE	8.4	-	-	-	-
Fluorene	mg/kg	0.05	NONE	5.8	-	-	-	-
Phenanthrene	mg/kg	0.05	NONE	48	-	-	-	-
Anthracene	mg/kg	0.05	NONE	25	-	-	-	-
Fluoranthene	mg/kg	0.05	NONE	310	-	-	-	-
Pyrene	mg/kg	0.05	NONE	300	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	NONE	140	-	-	-	-
Chrysene	mg/kg	0.05	NONE	150	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	NONE	180	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	NONE	65	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	NONE	160	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	94	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	29	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	NONE	99	-	-	-	-

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	1630	-	-	-	-

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Analytical Report Number: 22-97516
Project / Site name: Don Street
Your Order No: 003509

Lab Sample Number				2503969	2503970	2503971	2503972	2503973
Sample Reference				TP11 ARISINGS	TP305 NORTH	TP305 EAST	TP305 SOUTH	TP305 WEST
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				16/11/2022	16/11/2022	16/11/2022	16/11/2022	16/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	14	-	-	-	-
Barium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	-	-	-	-	-
Boron (water soluble)	mg/kg	0.2	MCERTS	-	-	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	1.2	-	-	-	-
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	-	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	11	-	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	44	-	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	48	-	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	23	-	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	-	-	-	-
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	320	-	-	-	-
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	-	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	-	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	-	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	NONE	4.8	-	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	NONE	40	-	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	370	-	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	810	-	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	130	-	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	1400	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample

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Analytical Report Number: 22-97516
Project / Site name: Don Street
Your Order No: 003509

Lab Sample Number				2503974	2503975
Sample Reference				TP305 BASE	TP305 ARISINGS
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				16/11/2022	16/11/2022
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	-	< 0.1
Moisture Content	%	0.01	NONE	-	9.1
Total mass of sample received	kg	0.001	NONE	-	0.4
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	Chrysotile
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	0.002
Asbestos Quantification Total	%	0.001	ISO 17025	-	0.002
Asbestos Analyst ID	N/A	N/A	N/A	MLO	MLO

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	-	8.4
Total Cyanide	mg/kg	1	MCERTS	-	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	-	670
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	0.16
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	320
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	162
Sulphide	mg/kg	1	NONE	-	57
Total Sulphur	mg/kg	50	MCERTS	-	1000
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	1.5

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	-	< 1.0

Speciated PAHs

Naphthalene	mg/kg	0.05	NONE	-	0.55
Acenaphthylene	mg/kg	0.05	NONE	-	0.12
Acenaphthene	mg/kg	0.05	NONE	-	0.73
Fluorene	mg/kg	0.05	NONE	-	0.9
Phenanthrene	mg/kg	0.05	NONE	-	7.2
Anthracene	mg/kg	0.05	NONE	-	1.9
Fluoranthene	mg/kg	0.05	NONE	-	6.9
Pyrene	mg/kg	0.05	NONE	-	6.5
Benzo(a)anthracene	mg/kg	0.05	NONE	-	3.2
Chrysene	mg/kg	0.05	NONE	-	2.7
Benzo(b)fluoranthene	mg/kg	0.05	NONE	-	3
Benzo(k)fluoranthene	mg/kg	0.05	NONE	-	1.2
Benzo(a)pyrene	mg/kg	0.05	NONE	-	2.8
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	-	1.4
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	-	0.33
Benzo(ghi)perylene	mg/kg	0.05	NONE	-	1.5

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	-	40.8

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Analytical Report Number: 22-97516
Project / Site name: Don Street
Your Order No: 003509

Lab Sample Number				2503974	2503975
Sample Reference				TP305 BASE	TP305 ARISINGS
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				16/11/2022	16/11/2022
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Heavy Metals / Metalloids					
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	21
Barium (aqua regia extractable)	mg/kg	1	MCERTS	-	-
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	-	-
Boron (water soluble)	mg/kg	0.2	MCERTS	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	-	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	18
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	43
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	97
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	27
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	130
Petroleum Hydrocarbons					
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	NONE	-	2.4
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	NONE	-	5.4
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	15
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	20
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	-	< 10
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	43

U/S = Unsuitable Sample I/S = Insufficient Sample

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UKAS TESTING
4041

Analytical i2 Environmental Science

Analytical Report Number: 22-97516
Project / Site name: Don Street
Your Order No: 003509

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2503940	TP516 NORTH		127	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**
2503942	TP516 SOUTH		148	Loose Fibres	**Amosite**	< 0.001	**< 0.001**
2503970	TP305 NORTH		161	Loose Fibres	**Chrysotile & Amosite**	0.001	**0.001**
2503972	TP305 SOUTH		170	Loose Fibres	**Amosite**	< 0.001	**< 0.001**
2503973	TP305 WEST		143	Loose Fibres	**Amosite**	< 0.001	**< 0.001**
2503975	TP305 ARISINGS		162	Loose Fibrous Debris	**Chrysotile**	0.002	**0.002**

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 22-97516
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2503934	TP519 NORTH	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2503935	TP519 EAST	None Supplied	None Supplied	Brown loam and sand with gravel and stones.
2503936	TP519 SOUTH	None Supplied	None Supplied	Brown clay and loam with gravel and vegetation.
2503937	TP519 WEST	None Supplied	None Supplied	Brown loam and clay with gravel and stones.
2503938	TP519 BASE	None Supplied	None Supplied	Brown loam and clay with gravel and vegetation.
2503939	TP519 ARISINGS	None Supplied	None Supplied	Brown loam and clay with gravel and vegetation.
2503945	TP516 ARISINGS	None Supplied	None Supplied	Brown clay and sand.
2503946	TP6 NORTH	None Supplied	None Supplied	Brown clay and sand.
2503947	TP6 EAST	None Supplied	None Supplied	Brown clay and sand.
2503948	TP6 SOUTH	None Supplied	None Supplied	Brown clay and sand with vegetation.
2503949	TP6 WEST	None Supplied	None Supplied	Brown clay and sand with vegetation.
2503950	TP6 BASE	None Supplied	None Supplied	Brown sand with gravel.
2503951	TP6 ARISINGS	None Supplied	None Supplied	Brown clay and sand with gravel.
2503952	TP27 NORTH	None Supplied	None Supplied	Brown clay and loam with gravel and vegetation.
2503953	TP27 EAST	None Supplied	None Supplied	Brown sand with gravel and vegetation.
2503954	TP27 SOUTH	None Supplied	None Supplied	Brown sandy clay with gravel.
2503955	TP27 WEST	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2503956	TP27 BASE	None Supplied	None Supplied	Brown sandy clay with gravel and vegetation.
2503957	TP27 ARISINGS	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2503958	TP41 NORTH	None Supplied	None Supplied	Brown loam and sand with gravel and stones.
2503959	TP41 EAST	None Supplied	None Supplied	Brown loam and sand with gravel and stones.
2503960	TP41 SOUTH	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2503961	TP41 WEST	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2503962	TP41 BASE	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2503963	TP41 ARISINGS	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2503964	TP11 NORTH	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2503965	TP11 EAST	None Supplied	None Supplied	Brown loam and sand with gravel and brick.
2503966	TP11 SOUTH	None Supplied	None Supplied	Brown loam and sand with gravel and brick.
2503967	TP11 WEST	None Supplied	None Supplied	Brown loam and sand with brick and stones.
2503968	TP11 BASE	None Supplied	None Supplied	Brown loam and sand with stones.
2503969	TP11 ARISINGS	None Supplied	None Supplied	Brown loam and sand with gravel and stones.
2503975	TP305 ARISINGS	None Supplied	None Supplied	Brown clay and sand with gravel.

Analytical Report Number : 22-97516
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	NONE
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	NONE
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	NONE
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS

Analytical Report Number : 22-97516
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 22-97517-2

Replaces Analytical Report Number: 22-97517, issue no. 1
Additional analysis undertaken.
Analysis for Speciated Mercury undertaken for samples 2503992 and 2504003 as per client's request

Project / Site name:	Don Street	**Samples received on:**	17/11/2022
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	17/11/2022
Your order number:	003508	**Analysis completed by:**	29/03/2023
Report Issue Number:	2	**Report issued on:**	18/04/2023
Samples Analysed:	30 soil samples		

Signed:

Dominika Warjan
Junior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 22-97517
Project / Site name: Don Street
Your Order No: 003508

Lab Sample Number				2503976	2503977	2503978	2503979	2503980
Sample Reference				TP8 NORTH	TP8 EAST	TP8 SOUTH	TP8 WEST	TP8 BASE
Sample Number				MERCURY	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				15/11/2022	15/11/2022	15/11/2022	15/11/2022	15/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	19	9.5	19	24	21
Total mass of sample received	kg	0.001	NONE	0.5	0.5	0.5	0.5	0.5
Asbestos in Soil	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	-	-	-	-
Sulphide	mg/kg	1	MCERTS	-	-	-	-	-
Total Sulphur	mg/kg	50	MCERTS	-	-	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	-	-	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	NONE	-	-	-	-	-
Acenaphthylene	mg/kg	0.05	NONE	-	-	-	-	-
Acenaphthene	mg/kg	0.05	NONE	-	-	-	-	-
Fluorene	mg/kg	0.05	NONE	-	-	-	-	-
Phenanthrene	mg/kg	0.05	NONE	-	-	-	-	-
Anthracene	mg/kg	0.05	NONE	-	-	-	-	-
Fluoranthene	mg/kg	0.05	NONE	-	-	-	-	-
Pyrene	mg/kg	0.05	NONE	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	NONE	-	-	-	-	-
Chrysene	mg/kg	0.05	NONE	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	NONE	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	NONE	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	NONE	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	NONE	-	-	-	-	-
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	-	-	-	-	-

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Analytical Report Number: 22-97517
Project / Site name: Don Street
Your Order No: 003508

Lab Sample Number				2503976	2503977	2503978	2503979	2503980
Sample Reference				TP8 NORTH	TP8 EAST	TP8 SOUTH	TP8 WEST	TP8 BASE
Sample Number				MERCURY	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				15/11/2022	15/11/2022	15/11/2022	15/11/2022	15/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	21	9.8	17	16	11
Barium (aqua regia extractable)	mg/kg	1	MCERTS	730	310	590	160	130
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	1.5	0.64	1.1	0.82	0.57
Boron (water soluble)	mg/kg	0.2	MCERTS	1.5	1.2	3.9	1.3	0.8
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	1.6	0.6	1.3	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	350	85	230	36	27
Lead (aqua regia extractable)	mg/kg	1	MCERTS	390	81	1900	41	20
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.7	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	31	15	26	17	14
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	38	24	31	23	16
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	940	250	930	97	76
Speciated Mercury (Dry Weight)								
Inorganic Mercury	mg/kg	0.005	NONE	-	-	-	-	-
Organo-Mercury Species (including Methyl Hg)	mg/kg	0.005	NONE	-	-	-	-	-
Elemental Mercury	mg/kg	0.005	NONE	-	-	-	-	-
Speciated Mercury (Dry Weight)								
F1 - Water soluble	mg/kg	0.005	NONE	-	-	-	-	-
F2 - Weak acid	mg/kg	0.005	NONE	-	-	-	-	-
F3 - Organo- complexed	mg/kg	0.005	NONE	-	-	-	-	-
F4 - Strongly complexed	mg/kg	0.005	NONE	-	-	-	-	-
F5 - Mineral bound	mg/kg	0.005	NONE	-	-	-	-	-
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	NONE	-	-	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	NONE	-	-	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 22-97517
Project / Site name: Don Street
Your Order No: 003508

Lab Sample Number				2503981	2503982	2503983	2503984	2503985
Sample Reference				TP8 ARISINGS	BH4 NORTH	BH4 EAST	BH4 SOUTH	BH4 WEST
Sample Number				None Supplied	VOLATILE	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				15/11/2022	15/11/2022	15/11/2022	15/11/2022	15/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	19	18	17	22	22
Total mass of sample received	kg	0.001	NONE	0.5	0.5	0.5	0.5	0.5
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	SSZ	N/A	N/A	N/A	N/A

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	9.2	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1.0	-	-	-	-
Total Sulphate as SO4	mg/kg	50	MCERTS	2400	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.23	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	460	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	232	-	-	-	-
Sulphide	mg/kg	1	MCERTS	180	-	-	-	-
Total Sulphur	mg/kg	50	MCERTS	1800	-	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.7	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	-	-	-	-

Speciated PAHs

Naphthalene	mg/kg	0.05	NONE	4	3.5	0.9	0.87	0.7
Acenaphthylene	mg/kg	0.05	NONE	0.21	< 0.05	< 0.05	0.11	0.1
Acenaphthene	mg/kg	0.05	NONE	2.5	2.9	0.6	0.75	0.98
Fluorene	mg/kg	0.05	NONE	2.6	3.1	0.59	0.71	0.94
Phenanthrene	mg/kg	0.05	NONE	15	25	6.5	8	10
Anthracene	mg/kg	0.05	NONE	4.7	6.7	1.7	2.1	2.7
Fluoranthene	mg/kg	0.05	NONE	18	25	8.6	12	14
Pyrene	mg/kg	0.05	NONE	16	25	8.7	12	14
Benzo(a)anthracene	mg/kg	0.05	NONE	7.2	14	4.7	7.1	7.6
Chrysene	mg/kg	0.05	NONE	6.2	12	3.9	6	6.8
Benzo(b)fluoranthene	mg/kg	0.05	NONE	6.3	13	4.6	8.5	8.7
Benzo(k)fluoranthene	mg/kg	0.05	NONE	2.3	5.3	2	1.9	2.7
Benzo(a)pyrene	mg/kg	0.05	NONE	5.9	12	4.3	6.7	7.5
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	3	5.2	2.1	3.6	3.9
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	0.66	1	0.41	0.63	0.75
Benzo(ghi)perylene	mg/kg	0.05	NONE	3.2	6.1	2.4	4.2	4.5

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	97.7	160	51.9	75.1	86.3

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Analytical Report Number: 22-97517
Project / Site name: Don Street
Your Order No: 003508

Lab Sample Number				2503981	2503982	2503983	2503984	2503985
Sample Reference				TP8 ARISINGS	BH4 NORTH	BH4 EAST	BH4 SOUTH	BH4 WEST
Sample Number				None Supplied	VOLATILE	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				15/11/2022	15/11/2022	15/11/2022	15/11/2022	15/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	17	-	-	-	-
Barium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	-	-	-	-	-
Boron (water soluble)	mg/kg	0.2	MCERTS	-	-	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	1.1	-	-	-	-
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	-	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	20	-	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	190	-	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	180	-	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	22	-	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	-	-	-	-
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	610	-	-	-	-
Speciated Mercury (Dry Weight)								
Inorganic Mercury	mg/kg	0.005	NONE	-	-	-	-	-
Organo-Mercury Species (including Methyl Hg)	mg/kg	0.005	NONE	-	-	-	-	-
Elemental Mercury	mg/kg	0.005	NONE	-	-	-	-	-
Speciated Mercury (Dry Weight)								
F1 - Water soluble	mg/kg	0.005	NONE	-	-	-	-	-
F2 - Weak acid	mg/kg	0.005	NONE	-	-	-	-	-
F3 - Organo- complexed	mg/kg	0.005	NONE	-	-	-	-	-
F4 - Strongly complexed	mg/kg	0.005	NONE	-	-	-	-	-
F5 - Mineral bound	mg/kg	0.005	NONE	-	-	-	-	-
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	-	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	-	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	-	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	NONE	< 2.0	-	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	NONE	6.4	-	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	41	-	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	170	-	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	23	-	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	240	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 22-97517
Project / Site name: Don Street
Your Order No: 003508

Lab Sample Number				2503986	2503987	2503988	2503989	2503990
Sample Reference				BH4 BASE	BH4 ARISINGS	BH3 NORTH	BH3 EAST	BH3 SOUTH
Sample Number				None Supplied	None Supplied	VOLATILE+MERCURY	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				15/11/2022	15/11/2022	15/11/2022	15/11/2022	15/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	19	16	24	31	28
Total mass of sample received	kg	0.001	NONE	0.5	0.5	0.5	0.5	0.5
Asbestos in Soil	Type	N/A	ISO 17025	-	Not-detected	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A	SSZ	N/A	N/A	N/A
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	8.6	-	-	-
Total Cyanide	mg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	-	2100	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	0.15	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	300	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	150	-	-	-
Sulphide	mg/kg	1	MCERTS	-	55	-	-	-
Total Sulphur	mg/kg	50	MCERTS	-	1300	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	2.2	-	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	< 1.0	-	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	NONE	0.16	1.7	< 0.05	0.09	0.1
Acenaphthylene	mg/kg	0.05	NONE	< 0.05	0.26	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	NONE	0.11	4.4	< 0.05	0.08	0.09
Fluorene	mg/kg	0.05	NONE	0.14	4.7	< 0.05	< 0.05	0.08
Phenanthrene	mg/kg	0.05	NONE	1.5	35	0.1	0.74	0.83
Anthracene	mg/kg	0.05	NONE	0.42	12	< 0.05	0.15	0.17
Fluoranthene	mg/kg	0.05	NONE	2.1	40	0.16	0.82	0.91
Pyrene	mg/kg	0.05	NONE	2.2	33	0.15	0.81	0.93
Benzo(a)anthracene	mg/kg	0.05	NONE	1.2	16	0.11	0.53	0.52
Chrysene	mg/kg	0.05	NONE	0.99	16	0.08	0.4	0.52
Benzo(b)fluoranthene	mg/kg	0.05	NONE	1.1	13	< 0.05	0.44	0.63
Benzo(k)fluoranthene	mg/kg	0.05	NONE	0.35	8.3	< 0.05	0.2	0.21
Benzo(a)pyrene	mg/kg	0.05	NONE	0.89	13	< 0.05	0.42	0.52
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	0.44	6.6	< 0.05	0.21	0.23
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	< 0.05	1.6	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	NONE	0.51	7.2	< 0.05	0.28	0.31
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	12.1	212	< 0.80	5.17	6.05

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Analytical Report Number: 22-97517
Project / Site name: Don Street
Your Order No: 003508

Lab Sample Number				2503986	2503987	2503988	2503989	2503990
Sample Reference				BH4 BASE	BH4 ARISINGS	BH3 NORTH	BH3 EAST	BH3 SOUTH
Sample Number				None Supplied	None Supplied	VOLATILE+MERCURY	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				15/11/2022	15/11/2022	15/11/2022	15/11/2022	15/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	20	8.1	24	16
Barium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	160	140	140
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	-	-	0.43	0.38	0.34
Boron (water soluble)	mg/kg	0.2	MCERTS	-	-	1.7	3.4	2.4
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	1.3	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	-	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	22	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	290	16	19	19
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	300	13	24	23
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	0.6	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	30	12	13	11
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	10	7.6	8
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	720	48	73	64
Speciated Mercury (Dry Weight)								
Inorganic Mercury	mg/kg	0.005	NONE	-	-	-	-	-
Organo-Mercury Species (including Methyl Hg)	mg/kg	0.005	NONE	-	-	-	-	-
Elemental Mercury	mg/kg	0.005	NONE	-	-	-	-	-
Speciated Mercury (Dry Weight)								
F1 - Water soluble	mg/kg	0.005	NONE	-	-	-	-	-
F2 - Weak acid	mg/kg	0.005	NONE	-	-	-	-	-
F3 - Organo- complexed	mg/kg	0.005	NONE	-	-	-	-	-
F4 - Strongly complexed	mg/kg	0.005	NONE	-	-	-	-	-
F5 - Mineral bound	mg/kg	0.005	NONE	-	-	-	-	-
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	< 1.0	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	< 0.1	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	< 0.1	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	NONE	-	2.1	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	NONE	-	20	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	110	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	290	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	-	52	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	480	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 22-97517
Project / Site name: Don Street
Your Order No: 003508

Lab Sample Number				2503991	2503992	2503993	2503994	2503995
Sample Reference				BH3 WEST	BH3 BASE	BH3 ARISINGS	BH1 NORTH	BH1 EAST
Sample Number				None Supplied	None Supplied	None Supplied	VOLATILE+MERCURY	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				15/11/2022	15/11/2022	15/11/2022	15/11/2022	15/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	29	18	24	21	23
Total mass of sample received	kg	0.001	NONE	0.5	0.5	0.5	0.5	0.5
Asbestos in Soil	Type	N/A	ISO 17025	-	-	Not-detected	-	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A	N/A	SSZ	N/A	N/A
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	-	8.2	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	-	-	1300	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	-	0.33	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	-	670	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	-	333	-	-
Sulphide	mg/kg	1	MCERTS	-	-	30	-	-
Total Sulphur	mg/kg	50	MCERTS	-	-	1900	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	-	4.8	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	< 1.0	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	NONE	0.09	0.31	0.34	0.95	0.46
Acenaphthylene	mg/kg	0.05	NONE	< 0.05	0.24	0.07	0.18	0.16
Acenaphthene	mg/kg	0.05	NONE	0.06	0.28	0.21	1.3	0.83
Fluorene	mg/kg	0.05	NONE	0.05	0.27	0.21	1.1	0.63
Phenanthrene	mg/kg	0.05	NONE	0.5	4.3	2.2	10	5.8
Anthracene	mg/kg	0.05	NONE	0.13	1	0.65	2.3	1.3
Fluoranthene	mg/kg	0.05	NONE	0.72	6.7	3.7	11	8.3
Pyrene	mg/kg	0.05	NONE	0.74	6.3	3.4	11	7.7
Benzo(a)anthracene	mg/kg	0.05	NONE	0.43	3.7	1.4	6.3	4.3
Chrysene	mg/kg	0.05	NONE	0.4	3.1	1.5	4.8	3.8
Benzo(b)fluoranthene	mg/kg	0.05	NONE	0.46	4.2	1.5	5.7	4.5
Benzo(k)fluoranthene	mg/kg	0.05	NONE	0.17	1.2	0.96	2.2	1.6
Benzo(a)pyrene	mg/kg	0.05	NONE	0.36	3.2	1.5	5	3.7
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	0.18	1.7	0.88	2.4	1.7
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	< 0.05	0.31	0.16	0.5	0.44
Benzo(ghi)perylene	mg/kg	0.05	NONE	0.32	1.9	0.93	2.7	2.1
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	4.61	38.8	19.5	68.3	47.3

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Analytical Report Number: 22-97517
Project / Site name: Don Street
Your Order No: 003508

Lab Sample Number				2503991	2503992	2503993	2503994	2503995
Sample Reference				BH3 WEST	BH3 BASE	BH3 ARISINGS	BH1 NORTH	BH1 EAST
Sample Number				None Supplied	None Supplied	None Supplied	VOLATILE+MERCURY	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				15/11/2022	15/11/2022	15/11/2022	15/11/2022	15/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	13	34	12	47	40
Barium (aqua regia extractable)	mg/kg	1	MCERTS	200	300	-	380	280
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.52	2.6	-	1.9	2.1
Boron (water soluble)	mg/kg	0.2	MCERTS	2.5	2.6	-	1.4	1.1
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	2.4
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	12	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	36	1100	56	98	95
Lead (aqua regia extractable)	mg/kg	1	MCERTS	50	470	80	280	350
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	7.1	< 0.3	< 0.3	0.5
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	14	33	14	29	32
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	13	53	-	39	43
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	130	230	220	740	580
Speciated Mercury (Dry Weight)								
Inorganic Mercury	mg/kg	0.005	NONE	-	4.672	-	-	-
Organo-Mercury Species (including Methyl Hg)	mg/kg	0.005	NONE	-	0.154	-	-	-
Elemental Mercury	mg/kg	0.005	NONE	-	1.164	-	-	-
Speciated Mercury (Dry Weight)								
F1 - Water soluble	mg/kg	0.005	NONE	-	0.092	-	-	-
F2 - Weak acid	mg/kg	0.005	NONE	-	0.217	-	-	-
F3 - Organo- complexed	mg/kg	0.005	NONE	-	0.154	-	-	-
F4 - Strongly complexed	mg/kg	0.005	NONE	-	1.164	-	-	-
F5 - Mineral bound	mg/kg	0.005	NONE	-	4.363	-	-	-
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	< 1.0	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	< 0.1	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	< 0.1	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	NONE	-	-	< 2.0	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	NONE	-	-	< 4.0	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	7.5	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	19	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	< 10	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	27	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 22-97517
Project / Site name: Don Street
Your Order No: 003508

Lab Sample Number				2503996	2503997	2503998	2503999	2504000
Sample Reference				BH1 SOUTH	BH1 WEST	BH1 BASE	BH1 ARISINGS	TP342 NORTH
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	MERCURY
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				15/11/2022	15/11/2022	15/11/2022	15/11/2022	15/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	23	13	25	17	18
Total mass of sample received	kg	0.001	NONE	0.5	0.5	0.5	0.5	0.5
Asbestos in Soil	Type	N/A	ISO 17025	-	-	-	Not-detected	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A	N/A	N/A	SSZ	N/A
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	-	-	9.3	-
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	-	-	-	1000	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	-	-	0.25	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	-	-	500	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	-	-	252	-
Sulphide	mg/kg	1	MCERTS	-	-	-	92	-
Total Sulphur	mg/kg	50	MCERTS	-	-	-	1200	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	-	-	1.7	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-	< 1.0	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	NONE	0.94	0.25	0.13	0.34	-
Acenaphthylene	mg/kg	0.05	NONE	0.13	< 0.05	< 0.05	0.09	-
Acenaphthene	mg/kg	0.05	NONE	0.88	0.32	0.12	0.38	-
Fluorene	mg/kg	0.05	NONE	0.72	0.28	0.09	0.45	-
Phenanthrene	mg/kg	0.05	NONE	7	2	1.2	2.8	-
Anthracene	mg/kg	0.05	NONE	1.8	0.43	0.28	0.85	-
Fluoranthene	mg/kg	0.05	NONE	9.2	2.4	2.1	4.2	-
Pyrene	mg/kg	0.05	NONE	8.6	2.3	2.2	3.7	-
Benzo(a)anthracene	mg/kg	0.05	NONE	4.8	1.2	1.3	1.5	-
Chrysene	mg/kg	0.05	NONE	3.8	1.2	1	1.4	-
Benzo(b)fluoranthene	mg/kg	0.05	NONE	5.2	1.3	1.3	1.4	-
Benzo(k)fluoranthene	mg/kg	0.05	NONE	1.3	0.51	0.55	0.66	-
Benzo(a)pyrene	mg/kg	0.05	NONE	3.9	1	1.1	1.3	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	1.9	0.49	0.56	0.62	-
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	0.36	0.11	0.1	0.1	-
Benzo(ghi)perylene	mg/kg	0.05	NONE	2.1	0.5	0.62	0.72	-
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	52.5	14.2	12.6	20.5	-

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Analytical Report Number: 22-97517
Project / Site name: Don Street
Your Order No: 003508

Lab Sample Number				2503996	2503997	2503998	2503999	2504000
Sample Reference				BH1 SOUTH	BH1 WEST	BH1 BASE	BH1 ARISINGS	TP342 NORTH
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	MERCURY
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				15/11/2022	15/11/2022	15/11/2022	15/11/2022	15/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	31	21	25	23	9.4
Barium (aqua regia extractable)	mg/kg	1	MCERTS	330	190	110	-	48
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	1.7	0.89	0.74	-	0.51
Boron (water soluble)	mg/kg	0.2	MCERTS	2	1.9	1.4	-	0.5
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	1.9
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	22	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	71	48	48	58	25
Lead (aqua regia extractable)	mg/kg	1	MCERTS	150	120	91	180	41
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	4.5
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	29	21	17	19	12
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	42	29	25	-	20
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	210	210	130	190	48
Speciated Mercury (Dry Weight)								
Inorganic Mercury	mg/kg	0.005	NONE	-	-	-	-	-
Organo-Mercury Species (including Methyl Hg)	mg/kg	0.005	NONE	-	-	-	-	-
Elemental Mercury	mg/kg	0.005	NONE	-	-	-	-	-
Speciated Mercury (Dry Weight)								
F1 - Water soluble	mg/kg	0.005	NONE	-	-	-	-	-
F2 - Weak acid	mg/kg	0.005	NONE	-	-	-	-	-
F3 - Organo- complexed	mg/kg	0.005	NONE	-	-	-	-	-
F4 - Strongly complexed	mg/kg	0.005	NONE	-	-	-	-	-
F5 - Mineral bound	mg/kg	0.005	NONE	-	-	-	-	-
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	< 1.0	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	< 0.1	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	< 0.1	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	NONE	-	-	-	< 2.0	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	NONE	-	-	-	< 4.0	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	16	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	32	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	< 10	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	48	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 22-97517
Project / Site name: Don Street
Your Order No: 003508

Lab Sample Number				2504001	2504002	2504003	2504004	2504005
Sample Reference				TP342 EAST	TP342 SOUTH	TP342 WEST	TP342 BASE	TP342 ARISINGS
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				15/11/2022	15/11/2022	15/11/2022	15/11/2022	15/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	18	21	27	10	18
Total mass of sample received	kg	0.001	NONE	0.5	0.5	0.5	0.5	0.5
Asbestos in Soil	Type	N/A	ISO 17025	-	-	-	-	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	N/A	N/A	N/A	N/A	SSZ
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	-	-	-	7
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	-	-	-	-	430
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	-	-	-	0.013
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	-	-	-	25
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	-	-	-	12.5
Sulphide	mg/kg	1	MCERTS	-	-	-	-	1.5
Total Sulphur	mg/kg	50	MCERTS	-	-	-	-	320
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	-	-	-	2.5
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-	-	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	NONE	-	-	-	-	< 0.05
Acenaphthylene	mg/kg	0.05	NONE	-	-	-	-	< 0.05
Acenaphthene	mg/kg	0.05	NONE	-	-	-	-	0.11
Fluorene	mg/kg	0.05	NONE	-	-	-	-	0.09
Phenanthrene	mg/kg	0.05	NONE	-	-	-	-	0.68
Anthracene	mg/kg	0.05	NONE	-	-	-	-	0.16
Fluoranthene	mg/kg	0.05	NONE	-	-	-	-	1.3
Pyrene	mg/kg	0.05	NONE	-	-	-	-	1.1
Benzo(a)anthracene	mg/kg	0.05	NONE	-	-	-	-	0.43
Chrysene	mg/kg	0.05	NONE	-	-	-	-	0.45
Benzo(b)fluoranthene	mg/kg	0.05	NONE	-	-	-	-	0.4
Benzo(k)fluoranthene	mg/kg	0.05	NONE	-	-	-	-	0.31
Benzo(a)pyrene	mg/kg	0.05	NONE	-	-	-	-	0.4
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	-	-	-	-	0.19
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	-	-	-	-	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	NONE	-	-	-	-	0.22
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	-	-	-	-	5.76

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 22-97517
Project / Site name: Don Street
Your Order No: 003508

Lab Sample Number				2504001	2504002	2504003	2504004	2504005
Sample Reference				TP342 EAST	TP342 SOUTH	TP342 WEST	TP342 BASE	TP342 ARISINGS
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				15/11/2022	15/11/2022	15/11/2022	15/11/2022	15/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	10	9.3	10	6.2	9.8
Barium (aqua regia extractable)	mg/kg	1	MCERTS	50	45	52	31	-
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.55	0.49	0.53	0.45	-
Boron (water soluble)	mg/kg	0.2	MCERTS	0.4	0.4	0.6	0.2	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	1.8	2.7	2.3	< 1.8	2.3
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	13
Copper (aqua regia extractable)	mg/kg	1	MCERTS	20	23	21	15	25
Lead (aqua regia extractable)	mg/kg	1	MCERTS	41	42	48	11	43
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	5	6	6.5	< 0.3	4.5
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	13	12	13	14	12
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	21	19	20	17	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	48	43	47	34	46
Speciated Mercury (Dry Weight)								
Inorganic Mercury	mg/kg	0.005	NONE	-	-	2.316	-	-
Organo-Mercury Species (including Methyl Hg)	mg/kg	0.005	NONE	-	-	2.169	-	-
Elemental Mercury	mg/kg	0.005	NONE	-	-	0.887	-	-
Speciated Mercury (Dry Weight)								
F1 - Water soluble	mg/kg	0.005	NONE	-	-	0.123	-	-
F2 - Weak acid	mg/kg	0.005	NONE	-	-	0.075	-	-
F3 - Organo- complexed	mg/kg	0.005	NONE	-	-	2.169	-	-
F4 - Strongly complexed	mg/kg	0.005	NONE	-	-	0.887	-	-
F5 - Mineral bound	mg/kg	0.005	NONE	-	-	2.118	-	-
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	NONE	-	-	-	-	< 2.0
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	NONE	-	-	-	-	< 4.0
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	2.3
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	3.2
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	-	< 10
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	-	< 10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 22-97517
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2503976	TP8 NORTH	MERCURY	None Supplied	Brown loam and sand with gravel and vegetation.
2503977	TP8 EAST	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2503978	TP8 SOUTH	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2503979	TP8 WEST	None Supplied	None Supplied	Brown clay and loam with gravel and vegetation.
2503980	TP8 BASE	None Supplied	None Supplied	Brown clay and loam with gravel and vegetation.
2503981	TP8 ARISINGS	None Supplied	None Supplied	Brown clay and loam with gravel and vegetation.
2503982	BH4 NORTH	VOLATILE	None Supplied	Brown loam and sand with gravel and vegetation.
2503983	BH4 EAST	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2503984	BH4 SOUTH	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2503985	BH4 WEST	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2503986	BH4 BASE	None Supplied	None Supplied	Light brown clay and sand with gravel.
2503987	BH4 ARISINGS	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2503988	BH3 NORTH	LATILE+MERCU	None Supplied	Brown clay and loam with gravel and vegetation.
2503989	BH3 EAST	None Supplied	None Supplied	Brown clay and loam with gravel and vegetation.
2503990	BH3 SOUTH	None Supplied	None Supplied	Brown clay and loam with gravel and vegetation.
2503991	BH3 WEST	None Supplied	None Supplied	Brown clay and loam with gravel and vegetation.
2503992	BH3 BASE	None Supplied	None Supplied	Brown clay and loam with gravel and vegetation.
2503993	BH3 ARISINGS	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2503994	BH1 NORTH	LATILE+MERCU	None Supplied	Brown loam and sand with gravel and vegetation.
2503995	BH1 EAST	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2503996	BH1 SOUTH	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2503997	BH1 WEST	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2503998	BH1 BASE	None Supplied	None Supplied	Brown clay and loam with gravel and vegetation.
2503999	BH1 ARISINGS	None Supplied	None Supplied	Brown clay and loam with gravel and vegetation.
2504000	TP342 NORTH	MERCURY	None Supplied	Brown loam and clay with gravel and vegetation.
2504001	TP342 EAST	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2504002	TP342 SOUTH	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2504003	TP342 WEST	None Supplied	None Supplied	Brown clay and loam with gravel and vegetation.
2504004	TP342 BASE	None Supplied	None Supplied	Brown clay and loam with gravel and vegetation.
2504005	TP342 ARISINGS	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.

Analytical Report Number : 22-97517
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Speciated Mercury in soil by Millennium Merlin Ana	Determination of Speciated Mercury in soil by Millennium Merlin Analyzer	In-house method	L085-PL	Dry	NONE
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS

Analytical Report Number : 22-97517
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-21616

Project / Site name:	Don Street	**Samples received on:**	07/03/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	07/03/2023
Your order number:	004287	**Analysis completed by:**	14/03/2023
Report Issue Number:	1	**Report issued on:**	14/03/2023
Samples Analysed:	11 soil samples		

Izabela Wójcik

Signed:

Izabela Wójcik
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Analytical Report Number: 23-21616
Project / Site name: Don Street
Your Order No: 004287

Lab Sample Number				2609032	2609033	2609034	2609035	2609036
Sample Reference				TP1 North	TP1 East	TP1 South	TP1 West	TP1 Base
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				07/03/2023	07/03/2023	07/03/2023	07/03/2023	07/03/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	16	16	16	16	13
Total mass of sample received	kg	0.001	NONE	0.8	0.4	0.4	0.4	0.4
Asbestos in Soil	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	-	-	-	-	-
Total Sulphate as SO4	mg/kg	50	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	-	-	-	-
Sulphide	mg/kg	1	MCERTS	-	-	-	-	-
Total Sulphur	mg/kg	50	MCERTS	-	-	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-	-	-

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	0.28	0.29	0.15	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	0.14	0.2	0.09	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	2.2	1.9	1.4	0.5	< 0.05
Anthracene	mg/kg	0.05	MCERTS	0.34	0.39	0.27	0.1	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	2.4	2	2.2	0.78	0.21
Pyrene	mg/kg	0.05	MCERTS	2.3	1.9	2	0.71	0.16
Benzo(a)anthracene	mg/kg	0.05	MCERTS	1	1	1.1	0.43	< 0.05
Chrysene	mg/kg	0.05	MCERTS	0.99	0.81	0.94	0.35	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.84	0.84	0.98	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.43	0.59	0.36	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.84	0.84	0.94	0.34	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.37	0.39	0.46	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.59	0.52	0.59	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	12.8	11.7	11.4	3.21	< 0.80

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Analytical Report Number: 23-21616
Project / Site name: Don Street
Your Order No: 004287

Lab Sample Number				2609032	2609033	2609034	2609035	2609036
Sample Reference				TP1 North	TP1 East	TP1 South	TP1 West	TP1 Base
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				07/03/2023	07/03/2023	07/03/2023	07/03/2023	07/03/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	-	-	-	-
Chromium (hexavalent)	mg/kg	1.8	MCERTS	-	-	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	-	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	-	-	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	-	-	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	-	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	-	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	-	-	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 23-21616
Project / Site name: Don Street
Your Order No: 004287

Lab Sample Number				2609037	2609038	2609039	2609040	2609041
Sample Reference				TP1 Arisings	TP1 North A	TP1 East A	TP1 South A	TP1 West A
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				07/03/2023	07/03/2023	07/03/2023	07/03/2023	07/03/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	48	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	7.2	17	15	17	15
Total mass of sample received	kg	0.001	NONE	0.4	0.4	0.4	0.4	0.4
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	SFS	N/A	N/A	N/A	N/A

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.9	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1.0	-	-	-	-
Total Sulphate as SO4	mg/kg	50	MCERTS	990	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.28	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	560	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	280	-	-	-	-
Sulphide	mg/kg	1	MCERTS	3.3	-	-	-	-
Total Sulphur	mg/kg	50	MCERTS	560	-	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.3	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	-	-	-	-

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.17	< 0.05	< 0.05	< 0.05	0.19
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	0.23	0.7	0.12	0.27	0.28
Fluorene	mg/kg	0.05	MCERTS	0.16	0.36	0.08	0.14	0.17
Phenanthrene	mg/kg	0.05	MCERTS	1.7	4.6	1	1.9	2
Anthracene	mg/kg	0.05	MCERTS	0.37	0.96	0.21	0.36	0.43
Fluoranthene	mg/kg	0.05	MCERTS	2.5	4.7	1.5	2.2	2.2
Pyrene	mg/kg	0.05	MCERTS	2.5	4.5	1.4	1.9	2
Benzo(a)anthracene	mg/kg	0.05	MCERTS	1.2	2.4	0.77	1	0.96
Chrysene	mg/kg	0.05	MCERTS	1.4	1.8	0.65	0.88	0.98
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	1.7	1.7	0.67	0.71	0.71
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.39	0.76	0.33	0.4	0.44
Benzo(a)pyrene	mg/kg	0.05	MCERTS	1.2	1.7	0.65	0.75	0.67
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.64	0.72	0.34	0.35	0.29
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.06
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.84	0.96	0.4	0.41	0.32

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	15	26	8.13	11.2	11.6

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-21616
Project / Site name: Don Street
Your Order No: 004287

Lab Sample Number				2609037	2609038	2609039	2609040	2609041
Sample Reference				TP1 Arisings	TP1 North A	TP1 East A	TP1 South A	TP1 West A
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				07/03/2023	07/03/2023	07/03/2023	07/03/2023	07/03/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	15	-	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	-	-	-	-
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	-	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	15	-	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	84	-	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	94	-	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	18	-	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	-	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	120	-	-	-	-
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	-	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	-	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	-	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	< 2.0	-	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	< 4.0	-	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	8.6	-	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	24	-	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	< 10	-	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	35	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 23-21616
Project / Site name: Don Street
Your Order No: 004287

Lab Sample Number				2609042
Sample Reference				TP1 Base A
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				07/03/2023
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	13
Total mass of sample received	kg	0.001	NONE	0.4

Asbestos in Soil	Type	N/A	ISO 17025	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	-
Total Cyanide	mg/kg	1	MCERTS	-
Total Sulphate as SO4	mg/kg	50	MCERTS	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-
Sulphide	mg/kg	1	MCERTS	-
Total Sulphur	mg/kg	50	MCERTS	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	-

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.19
Anthracene	mg/kg	0.05	MCERTS	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.22
Pyrene	mg/kg	0.05	MCERTS	0.21
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.1
Chrysene	mg/kg	0.05	MCERTS	0.16
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.07
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.08
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.06
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	1.09

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Analytical Report Number: 23-21616
Project / Site name: Don Street
Your Order No: 004287

Lab Sample Number				2609042
Sample Reference				TP1 Base A
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				07/03/2023
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Heavy Metals / Metalloids				
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-
Chromium (hexavalent)	mg/kg	1.8	MCERTS	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-
Petroleum Hydrocarbons				
TPH (C5 - C6) HS_1D_TOTAL	mg/kg	1	NONE	-
TPH (C6 - C8) HS_1D_TOTAL	mg/kg	0.1	NONE	-
TPH (C8 - C10) HS_1D_TOTAL	mg/kg	0.1	NONE	-
TPH (C10 - C12) EH_CU_1D_TOTAL	mg/kg	2	MCERTS	-
TPH (C12 - C16) EH_CU_1D_TOTAL	mg/kg	4	MCERTS	-
TPH (C16 - C21) EH_CU_1D_TOTAL	mg/kg	1	MCERTS	-
TPH (C21 - C35) EH_CU_1D_TOTAL	mg/kg	1	MCERTS	-
TPH (C35 - C40) EH_CU_1D_TOTAL	mg/kg	10	MCERTS	-
TPH Total C5 - C40 EH_CU+HS_1D_TOTAL	mg/kg	10	NONE	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-21616
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2609032	TP1 North	None Supplied	None Supplied	Brown clay and sand with vegetation.
2609033	TP1 East	None Supplied	None Supplied	Brown clay with vegetation.
2609034	TP1 South	None Supplied	None Supplied	Brown clay and sand with vegetation and gravel
2609035	TP1 West	None Supplied	None Supplied	Brown clay and sand with vegetation and gravel
2609036	TP1 Base	None Supplied	None Supplied	Brown sand with gravel.
2609037	TP1 Arisings	None Supplied	None Supplied	Brown loam and clay with stones and gravel
2609038	TP1 North A	None Supplied	None Supplied	Brown clay and sand with gravel.
2609039	TP1 East A	None Supplied	None Supplied	Brown clay and sand with gravel.
2609040	TP1 South A	None Supplied	None Supplied	Brown clay and sand with gravel.
2609041	TP1 West A	None Supplied	None Supplied	Brown clay and sand with vegetation and gravel
2609042	TP1 Base A	None Supplied	None Supplied	Brown loam and sand with gravel.

Analytical Report Number : 23-21616
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

Analytical Report Number : 23-21616
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-22451

Project / Site name:	Don Street	**Samples received on:**	10/03/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	10/03/2023
Your order number:	004311	**Analysis completed by:**	20/03/2023
Report Issue Number:	1	**Report issued on:**	20/03/2023
Samples Analysed:	22 soil samples		

Signed:

Dominika Warjan
Junior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Analytical Report Number: 23-22451
Project / Site name: Don Street
Your Order No: 004311

Lab Sample Number				2613381	2613382	2613383	2613384	2613385
Sample Reference				BH 2 North	BH2 EAST	BH2 SOUTH	BH2 WEST	BH2 BASE
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				09/03/2023	09/03/2023	09/03/2023	09/03/2023	09/03/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	19	20	15	15	11
Total mass of sample received	kg	0.001	NONE	0.4	0.4	0.4	0.4	0.4
Asbestos in Soil	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	-	-	-	-	-
Total Sulphate as SO4	mg/kg	50	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	-	-	-	-
Sulphide	mg/kg	1	MCERTS	-	-	-	-	-
Total Sulphur	mg/kg	50	MCERTS	-	-	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	-	-	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	0.46	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	0.08	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	0.68	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	0.74	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	5.5	< 0.05	0.06	0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	1.2	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	5.5	< 0.05	0.07	0.07	< 0.05
Pyrene	mg/kg	0.05	MCERTS	4.9	< 0.05	0.07	0.06	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	2.2	< 0.05	< 0.05	0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	1.9	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	1.8	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.9	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	1.8	< 0.05	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.7	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.17	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.87	< 0.05	< 0.05	< 0.05	< 0.05
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	29.4	< 0.80	< 0.80	< 0.80	< 0.80

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Analytical Report Number: 23-22451
Project / Site name: Don Street
Your Order No: 004311

Lab Sample Number				2613381	2613382	2613383	2613384	2613385
Sample Reference				BH 2 North	BH2 EAST	BH2 SOUTH	BH2 WEST	BH2 BASE
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				09/03/2023	09/03/2023	09/03/2023	09/03/2023	09/03/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	-	-	-	-
Chromium (hexavalent)	mg/kg	1.8	MCERTS	-	-	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	-	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	-	-	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	-	-	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	-	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	-	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	-	-	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-22451
Project / Site name: Don Street
Your Order No: 004311

Lab Sample Number				2613386	2613387	2613388	2613389	2613390
Sample Reference				BH2 ARISINGS	BH2 North A	BH2 EAST A	BH2 SOUTH 2	BH2 WEST A
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				09/03/2023	09/03/2023	09/03/2023	09/03/2023	09/03/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	16	17	19	17	16
Total mass of sample received	kg	0.001	NONE	0.3	0.4	0.4	0.4	0.4
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	DSO	N/A	N/A	N/A	N/A
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	7.9	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1.0	-	-	-	-
Total Sulphate as SO4	mg/kg	50	MCERTS	240	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.071	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	140	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	70.6	-	-	-	-
Sulphide	mg/kg	1	MCERTS	85	-	-	-	-
Total Sulphur	mg/kg	50	MCERTS	1200	-	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	0.6	-	-	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	-	-	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	0.08	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	0.05	0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.2	0.33	< 0.05	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	0.06	0.06	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.2	0.35	< 0.05	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	0.21	0.31	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.09	0.16	< 0.05	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	0.08	0.17	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.07	0.12	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.05	0.07	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.07	0.11	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	0.06	< 0.05	< 0.05	< 0.05
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	1.08	1.92	< 0.80	< 0.80	< 0.80

Analytical Report Number: 23-22451
Project / Site name: Don Street
Your Order No: 004311

Lab Sample Number				2613386	2613387	2613388	2613389	2613390
Sample Reference				BH2 ARISINGS	BH2 North A	BH2 EAST A	BH2 SOUTH 2	BH2 WEST A
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				09/03/2023	09/03/2023	09/03/2023	09/03/2023	09/03/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	7.5	-	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	-	-	-	-
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	-	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	8.2	-	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	13	-	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	14	-	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	11	-	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	-	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	30	-	-	-	-
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	-	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	-	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	-	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	< 2.0	-	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	< 4.0	-	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	< 1.0	-	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	< 1.0	-	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	< 10	-	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	< 10	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 23-22451
Project / Site name: Don Street
Your Order No: 004311

Lab Sample Number				2613391	2613392	2613393	2613394	2613395
Sample Reference				BH2 BASE A	TP204 North	TP 204 EAST	TP204 SOUTH	TP204 WEST
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				09/03/2023	09/03/2023	09/03/2023	09/03/2023	09/03/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	10	15	13	17	19
Total mass of sample received	kg	0.001	NONE	0.4	0.4	0.4	0.4	0.4
Asbestos in Soil	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	-	-	-	-	-
Total Sulphate as SO4	mg/kg	50	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	-	-	-	-
Sulphide	mg/kg	1	MCERTS	-	-	-	-	-
Total Sulphur	mg/kg	50	MCERTS	-	-	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	-	-	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.1
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.11
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.1
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.38	< 0.05	1.3
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.08	< 0.05	0.25
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	0.14	0.4	< 0.05	1.4
Pyrene	mg/kg	0.05	MCERTS	< 0.05	0.13	0.36	< 0.05	1.4
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.24	< 0.05	0.69
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.24	< 0.05	0.66
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	0.46
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	0.32
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.55
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	< 0.80	< 0.80	1.7	< 0.80	7.31

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Analytical Report Number: 23-22451
Project / Site name: Don Street
Your Order No: 004311

Lab Sample Number				2613391	2613392	2613393	2613394	2613395
Sample Reference				BH2 BASE A	TP204 North	TP 204 EAST	TP204 SOUTH	TP204 WEST
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				09/03/2023	09/03/2023	09/03/2023	09/03/2023	09/03/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	-	-	-	-
Chromium (hexavalent)	mg/kg	1.8	MCERTS	-	-	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	-	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	-	-	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	-	-	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	-	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	-	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	-	-	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 23-22451
Project / Site name: Don Street
Your Order No: 004311

Lab Sample Number				2613396	2613397	2613398	2613399	2613400
Sample Reference				TP204 BASE	TP204 ARISINGS	TP204 North A	TP204 EAST A	TP204 SOUTH A
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				09/03/2023	09/03/2023	09/03/2023	09/03/2023	09/03/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	15	14	14	15	21
Total mass of sample received	kg	0.001	NONE	0.4	0.3	0.4	0.4	0.4
Asbestos in Soil	Type	N/A	ISO 17025	-	Not-detected	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A	DSO	N/A	N/A	N/A
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	7.5	-	-	-
Total Cyanide	mg/kg	1	MCERTS	-	< 1.0	-	-	-
Total Sulphate as SO4	mg/kg	50	MCERTS	-	240	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	0.058	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	120	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	58.4	-	-	-
Sulphide	mg/kg	1	MCERTS	-	73	-	-	-
Total Sulphur	mg/kg	50	MCERTS	-	500	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	0.7	-	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	< 1.0	-	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	0.24	0.08	< 0.05	0.06
Anthracene	mg/kg	0.05	MCERTS	< 0.05	0.06	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	0.19	0.07	0.06	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05	0.16	0.06	0.06	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	0.08	< 0.05	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	0.07	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	0.07	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	0.07	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	< 0.80	1.04	< 0.80	< 0.80	< 0.80

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Analytical Report Number: 23-22451
Project / Site name: Don Street
Your Order No: 004311

Lab Sample Number				2613396	2613397	2613398	2613399	2613400
Sample Reference				TP204 BASE	TP204 ARISINGS	TP204 North A	TP204 EAST A	TP204 SOUTH A
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				09/03/2023	09/03/2023	09/03/2023	09/03/2023	09/03/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	7.9	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	< 0.2	-	-	-
Chromium (hexavalent)	mg/kg	1.8	MCERTS	-	< 1.8	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	8.8	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	16	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	18	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	< 0.3	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	9.5	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	< 1.0	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	28	-	-	-
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	< 1.0	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	< 0.1	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	< 0.1	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	-	< 2.0	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	-	< 4.0	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	< 1.0	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	< 1.0	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	-	< 10	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	< 10	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-22451
Project / Site name: Don Street
Your Order No: 004311

Lab Sample Number				2613401	2613402
Sample Reference				TP204 WEST A	TP204 BASE A
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				09/03/2023	09/03/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	19	16
Total mass of sample received	kg	0.001	NONE	0.4	0.4
Asbestos in Soil	Type	N/A	ISO 17025	-	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A	N/A
General Inorganics					
pH - Automated	pH Units	N/A	MCERTS	-	-
Total Cyanide	mg/kg	1	MCERTS	-	-
Total Sulphate as SO4	mg/kg	50	MCERTS	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	-
Sulphide	mg/kg	1	MCERTS	-	-
Total Sulphur	mg/kg	50	MCERTS	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	-
Total Phenols					
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-
Speciated PAHs					
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.55	< 0.05
Anthracene	mg/kg	0.05	MCERTS	0.11	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.67	< 0.05
Pyrene	mg/kg	0.05	MCERTS	0.63	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.29	< 0.05
Chrysene	mg/kg	0.05	MCERTS	0.35	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.22	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.17	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.21	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Total PAH					
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	3.2	< 0.80

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Analytical Report Number: 23-22451
Project / Site name: Don Street
Your Order No: 004311

Lab Sample Number				2613401	2613402
Sample Reference				TP204 WEST A	TP204 BASE A
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				09/03/2023	09/03/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Heavy Metals / Metalloids					
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	-
Chromium (hexavalent)	mg/kg	1.8	MCERTS	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	-
Petroleum Hydrocarbons					
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-22451
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2613381	BH 2 North	None Supplied	None Supplied	Brown sand with gravel.
2613382	BH2 EAST	None Supplied	None Supplied	Brown sand.
2613383	BH2 SOUTH	None Supplied	None Supplied	Brown sand with gravel.
2613384	BH2 WEST	None Supplied	None Supplied	Brown sand with gravel.
2613385	BH2 BASE	None Supplied	None Supplied	Brown sand with gravel.
2613386	BH2 ARISINGS	None Supplied	None Supplied	Brown sand with gravel.
2613387	BH2 North A	None Supplied	None Supplied	Brown sand with gravel.
2613388	BH2 EAST A	None Supplied	None Supplied	Brown sand.
2613389	BH2 SOUTH 2	None Supplied	None Supplied	Brown sand.
2613390	BH2 WEST A	None Supplied	None Supplied	Brown sand with gravel.
2613391	BH2 BASE A	None Supplied	None Supplied	Brown sand with gravel.
2613392	TP204 North	None Supplied	None Supplied	Brown sand with gravel.
2613393	TP 204 EAST	None Supplied	None Supplied	Brown sand with gravel.
2613394	TP204 SOUTH	None Supplied	None Supplied	Brown sand with gravel.
2613395	TP204 WEST	None Supplied	None Supplied	Brown sand with gravel and brick.
2613396	TP204 BASE	None Supplied	None Supplied	Brown sand with gravel.
2613397	TP204 ARISINGS	None Supplied	None Supplied	Brown sand with gravel.
2613398	TP204 North A	None Supplied	None Supplied	Brown sand with gravel.
2613399	TP204 EAST A	None Supplied	None Supplied	Brown clay and sand with gravel.
2613400	TP204 SOUTH A	None Supplied	None Supplied	Brown clay and sand with gravel.
2613401	TP204 WEST A	None Supplied	None Supplied	Brown clay and sand with gravel and brick.
2613402	TP204 BASE A	None Supplied	None Supplied	Brown sand with gravel.

Analytical Report Number : 23-22451
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

Analytical Report Number : 23-22451
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 22-98397

Project / Site name:	Don Street	**Samples received on:**	22/11/2022
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	22/11/2022
Your order number:	003524	**Analysis completed by:**	05/12/2022
Report Issue Number:	1	**Report issued on:**	05/12/2022
Samples Analysed:	6 soil samples		

Signed:

Dominika Warjan
Junior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Analytical Report Number: 22-98397
Project / Site name: Don Street
Your Order No: 003524

Lab Sample Number				2508899	2508900	2508901	2508902	2508903
Sample Reference				TP48 North	TP48 East	TP48 South	TP48 West	TP48 Base
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	-	-	-	-	-
Moisture Content	%	0.01	NONE	-	-	-	-	-
Total mass of sample received	kg	0.001	NONE	-	-	-	-	-
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	Chrysotile & Amosite	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	< 0.001	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	< 0.001	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	KSZ	KSZ	KSZ	KSZ	KSZ
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	-	-	-	-	-
Total Sulphate as SO4	mg/kg	50	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	-	-	-	-
Sulphide	mg/kg	1	NONE	-	-	-	-	-
Total Sulphur	mg/kg	50	MCERTS	-	-	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	-	-	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	NONE	-	-	-	-	-
Acenaphthylene	mg/kg	0.05	NONE	-	-	-	-	-
Acenaphthene	mg/kg	0.05	NONE	-	-	-	-	-
Fluorene	mg/kg	0.05	NONE	-	-	-	-	-
Phenanthrene	mg/kg	0.05	NONE	-	-	-	-	-
Anthracene	mg/kg	0.05	NONE	-	-	-	-	-
Fluoranthene	mg/kg	0.05	NONE	-	-	-	-	-
Pyrene	mg/kg	0.05	NONE	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	NONE	-	-	-	-	-
Chrysene	mg/kg	0.05	NONE	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	NONE	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	NONE	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	NONE	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	NONE	-	-	-	-	-
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	-	-	-	-	-

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Analytical Report Number: 22-98397
Project / Site name: Don Street
Your Order No: 003524

Lab Sample Number				2508899	2508900	2508901	2508902	2508903
Sample Reference				TP48 North	TP48 East	TP48 South	TP48 West	TP48 Base
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	-	-	-	-
Chromium (hexavalent)	mg/kg	1.8	MCERTS	-	-	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	-	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	NONE	-	-	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	NONE	-	-	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample

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Analytical Report Number: 22-98397
Project / Site name: Don Street
Your Order No: 003524

Lab Sample Number				2508904
Sample Reference				TP48 Arisings
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				21/11/2022
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	13
Total mass of sample received	kg	0.001	NONE	0.3

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-
Asbestos Quantification Total	%	0.001	ISO 17025	-
Asbestos Analyst ID	N/A	N/A	N/A	KSZ

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.3
Total Cyanide	mg/kg	1	MCERTS	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	790
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.06
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	120
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	59.8
Sulphide	mg/kg	1	NONE	180
Total Sulphur	mg/kg	50	MCERTS	1600
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	2.3

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0

Speciated PAHs

Naphthalene	mg/kg	0.05	NONE	1.8
Acenaphthylene	mg/kg	0.05	NONE	< 0.05
Acenaphthene	mg/kg	0.05	NONE	2.7
Fluorene	mg/kg	0.05	NONE	1.7
Phenanthrene	mg/kg	0.05	NONE	12
Anthracene	mg/kg	0.05	NONE	2.3
Fluoranthene	mg/kg	0.05	NONE	13
Pyrene	mg/kg	0.05	NONE	12
Benzo(a)anthracene	mg/kg	0.05	NONE	6.1
Chrysene	mg/kg	0.05	NONE	5.2
Benzo(b)fluoranthene	mg/kg	0.05	NONE	6.9
Benzo(k)fluoranthene	mg/kg	0.05	NONE	1.9
Benzo(a)pyrene	mg/kg	0.05	NONE	5.5
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	2.8
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	0.61
Benzo(ghi)perylene	mg/kg	0.05	NONE	3.3

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	77.7

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 22-98397
Project / Site name: Don Street
Your Order No: 003524

Lab Sample Number				2508904
Sample Reference				TP48 Arisings
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				21/11/2022
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Heavy Metals / Metalloids				
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	19
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	32
Copper (aqua regia extractable)	mg/kg	1	MCERTS	57
Lead (aqua regia extractable)	mg/kg	1	MCERTS	150
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	27
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	390

Petroleum Hydrocarbons

TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	NONE	< 2.0
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	NONE	8.1
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	57
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	320
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	97
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	480

U/S = Unsuitable Sample I/S = Insufficient Sample

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The results included within the report relate only to the sample(s) submitted for testing.

UKAS TESTING
4041

Analytical i2 Environmental Science

Analytical Report Number: 22-98397
Project / Site name: Don Street
Your Order No: 003524

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2508900	TP48 East		134	Loose Fibres	**Chrysotile & Amosite**	< 0.001	**< 0.001**

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 22-98397
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2508904	TP48 Arisings	None Supplied	None Supplied	Brown loam and sand with gravel and brick.

Analytical Report Number : 22-98397
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	NONE
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	NONE
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	NONE
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

Analytical Report Number : 22-98397
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-28075

Project / Site name:	Don Street	**Samples received on:**	12/04/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	13/04/2023
Your order number:	004574	**Analysis completed by:**	20/04/2023
Report Issue Number:	1	**Report issued on:**	20/04/2023
Samples Analysed:	48 soil samples		

Signed:

Elżbieta Suchy
Junior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-28075
Project / Site name: Don Street
Your Order No: 004574

Lab Sample Number				2646332	2646333	2646334	2646335	2646336
Sample Reference				TP501 North	TP501 North	TP501 East	TP501 East	TP501 South
Sample Number				1	2	1	2	1
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	61	23	< 0.1
Moisture Content	%	0.01	NONE	11	12	8.7	11	11
Total mass of sample received	kg	0.001	NONE	0.4	0.4	0.4	0.4	0.4
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	-	-	-	-
Sulphide	mg/kg	1	MCERTS	-	-	-	-	-
Total Sulphur	mg/kg	50	MCERTS	-	-	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	-	-	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.05	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	-	-	-	-	-

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Analytical Report Number: 23-28075
Project / Site name: Don Street
Your Order No: 004574

Lab Sample Number				2646332	2646333	2646334	2646335	2646336
Sample Reference				TP501 North	TP501 North	TP501 East	TP501 East	TP501 South
Sample Number				1	2	1	2	1
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	10	13	19	14	12
Barium (aqua regia extractable)	mg/kg	1	MCERTS	97	120	170	200	150
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.8	0.85	1.1	1.8	1
Boron (water soluble)	mg/kg	0.2	MCERTS	0.5	0.9	1.1	0.5	0.8
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	28	35	33	32	35
Lead (aqua regia extractable)	mg/kg	1	MCERTS	41	77	27	28	52
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	20	19	26	17	20
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	22	24	39	27	26
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	58	57	48	32	61
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	-	-	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	-	-	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	-	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	-	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	-	-	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 23-28075
Project / Site name: Don Street
Your Order No: 004574

Lab Sample Number				2646337	2646338	2646339	2646340	2646341
Sample Reference				TP501 South	TP501 West	TP501 West	TP501 Base	TP501 Base
Sample Number				2	1	2	1	2
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	59	< 0.1	< 0.1	30	< 0.1
Moisture Content	%	0.01	NONE	8.2	12	15	16	16
Total mass of sample received	kg	0.001	NONE	0.4	0.4	0.4	0.4	0.3
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	-	-	-	-
Sulphide	mg/kg	1	MCERTS	-	-	-	-	-
Total Sulphur	mg/kg	50	MCERTS	-	-	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	-	-	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.05	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	-	-	-	-	-

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Analytical Report Number: 23-28075
Project / Site name: Don Street
Your Order No: 004574

Lab Sample Number				2646337	2646338	2646339	2646340	2646341
Sample Reference				TP501 South	TP501 West	TP501 West	TP501 Base	TP501 Base
Sample Number				2	1	2	1	2
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	8.9	21	28	24	19
Barium (aqua regia extractable)	mg/kg	1	MCERTS	86	250	370	270	220
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.66	1.1	1.6	1.6	1.4
Boron (water soluble)	mg/kg	0.2	MCERTS	0.5	0.4	0.5	0.6	0.9
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	27	79	120	120	110
Lead (aqua regia extractable)	mg/kg	1	MCERTS	31	240	300	170	200
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	0.7	0.8	0.5	0.4
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	16	19	26	27	25
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	19	38	44	37	33
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	38	190	220	230	170
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	-	-	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	-	-	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	-	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	-	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	-	-	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 23-28075
Project / Site name: Don Street
Your Order No: 004574

Lab Sample Number				2646342	2646343	2646344	2646345	2646346
Sample Reference				TP501 Arisings	TP505 + TP25 North	TP505 + TP25 North	TP505 + TP25 East	TP505 + TP25 East
Sample Number				None Supplied	1	2	1	2
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	25	31	29	< 0.1
Moisture Content	%	0.01	NONE	13	11	9.6	12	14
Total mass of sample received	kg	0.001	NONE	0.3	0.4	0.4	0.4	0.4
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Detected	-	-	-	-
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	0.002	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	0.002	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	LFT	N/A	N/A	N/A	N/A
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	8.1	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1.0	33	110	130	54
Total Sulphate as SO4	mg/kg	50	MCERTS	480	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.053	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	110	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	53.4	-	-	-	-
Sulphide	mg/kg	1	MCERTS	5.5	-	-	-	-
Total Sulphur	mg/kg	50	MCERTS	400	-	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.8	-	-	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	-	-	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	2.5	-	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	0.22	-	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	4.9	-	-	-	-
Fluorene	mg/kg	0.05	MCERTS	4.1	-	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	25	-	-	-	-
Anthracene	mg/kg	0.05	MCERTS	7.7	-	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	34	-	-	-	-
Pyrene	mg/kg	0.05	MCERTS	31	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	15	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	13	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	15	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	6.5	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	13	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	6.5	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.91	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	7.2	-	-	-	-
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	187	-	-	-	-

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Analytical Report Number: 23-28075
Project / Site name: Don Street
Your Order No: 004574

Lab Sample Number				2646342	2646343	2646344	2646345	2646346
Sample Reference				TP501 Arisings	TP505 + TP25 North	TP505 + TP25 North	TP505 + TP25 East	TP505 + TP25 East
Sample Number				None Supplied	1	2	1	2
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	16	7	7.4	17	13
Barium (aqua regia extractable)	mg/kg	1	MCERTS	-	39	52	100	130
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	-	0.39	0.49	0.8	0.74
Boron (water soluble)	mg/kg	0.2	MCERTS	-	0.2	< 0.2	0.2	0.9
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	16	-	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	55	18	20	44	34
Lead (aqua regia extractable)	mg/kg	1	MCERTS	94	16	28	420	110
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.3	< 0.3	< 0.3	0.5	0.4
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	19	9.2	10	17	16
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	-	12	12	22	20
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	78	31	33	86	100
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	-	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	-	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	-	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	< 2.0	-	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	13	-	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	81	-	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	170	-	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	23	-	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	290	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 23-28075
Project / Site name: Don Street
Your Order No: 004574

Lab Sample Number				2646347	2646348	2646349	2646350	2646351
Sample Reference				TP505 + TP25 South	TP505 + TP25 South	TP505 + TP25 West	TP505 + TP25 West	TP505 + TP25 Base
Sample Number				1	2	1	2	1
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	15	15	15	13	18
Total mass of sample received	kg	0.001	NONE	0.4	0.4	0.4	0.4	0.4
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	2.4	24	1.2	8.3	110
Total Sulphate as SO4	mg/kg	50	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	-	-	-	-
Sulphide	mg/kg	1	MCERTS	-	-	-	-	-
Total Sulphur	mg/kg	50	MCERTS	-	-	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	-	-	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.05	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	-	-	-	-	-

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Analytical Report Number: 23-28075
Project / Site name: Don Street
Your Order No: 004574

Lab Sample Number				2646347	2646348	2646349	2646350	2646351
Sample Reference				TP505 + TP25 South	TP505 + TP25 South	TP505 + TP25 West	TP505 + TP25 West	TP505 + TP25 Base
Sample Number				1	2	1	2	1
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	27	48	17	31	42
Barium (aqua regia extractable)	mg/kg	1	MCERTS	88	150	74	84	110
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.87	1	0.72	0.72	1
Boron (water soluble)	mg/kg	0.2	MCERTS	< 0.2	0.3	< 0.2	0.2	0.3
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	53	110	70	72	77
Lead (aqua regia extractable)	mg/kg	1	MCERTS	86	240	77	110	150
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	2.2	4.5	1.3	1.6	2.4
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	21	25	17	15	29
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	22	26	20	18	27
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	110	230	110	190	180
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	-	-	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	-	-	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	-	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	-	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	-	-	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 23-28075
Project / Site name: Don Street
Your Order No: 004574

Lab Sample Number				2646352	2646353	2646354	2646355	2646356
Sample Reference				TP505 + TP25 Base	TP505 + TP25 Arisings	TP507 North	TP507 East	TP507 South
Sample Number				2	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	54	< 0.1
Moisture Content	%	0.01	NONE	18	11	10	10	14
Total mass of sample received	kg	0.001	NONE	0.4	0.3	0.4	0.4	0.4
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	Chrysotile	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	-	Detected	-	-	-
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	< 0.001	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	< 0.001	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A	LFT	N/A	N/A	N/A
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	7.9	-	-	-
Total Cyanide	mg/kg	1	MCERTS	4.3	67	3.3	2.3	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	-	1800	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	0.19	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	380	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	188	-	-	-
Sulphide	mg/kg	1	MCERTS	-	32	-	-	-
Total Sulphur	mg/kg	50	MCERTS	-	890	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	1.1	-	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	< 1.0	-	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	-	0.88	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	0.5	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	-	0.36	-	-	-
Fluorene	mg/kg	0.05	MCERTS	-	0.8	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	-	2.8	-	-	-
Anthracene	mg/kg	0.05	MCERTS	-	1.3	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	-	5.6	-	-	-
Pyrene	mg/kg	0.05	MCERTS	-	5.4	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	3.1	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	3	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	-	4.2	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	-	1	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	3.1	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	1.7	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	2.2	-	-	-
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	-	36	-	-	-

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Analytical Report Number: 23-28075
Project / Site name: Don Street
Your Order No: 004574

Lab Sample Number				2646352	2646353	2646354	2646355	2646356
Sample Reference				TP505 + TP25 Base	TP505 + TP25 Arisings	TP507 North	TP507 East	TP507 South
Sample Number				2	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	23	51	12	16	17
Barium (aqua regia extractable)	mg/kg	1	MCERTS	66	-	160	94	110
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.77	-	0.99	0.93	1.3
Boron (water soluble)	mg/kg	0.2	MCERTS	0.2	-	< 0.2	< 0.2	0.8
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	150	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	51	190	43	49	56
Lead (aqua regia extractable)	mg/kg	1	MCERTS	120	380	47	91	86
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	2.2	7.2	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	25	19	18	21	23
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	21	-	24	21	28
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	150	340	61	100	84
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	< 1.0	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	< 0.1	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	< 0.1	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	-	4.6	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	-	17	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	42	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	110	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	-	19	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	200	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 23-28075
Project / Site name: Don Street
Your Order No: 004574

Lab Sample Number				2646357	2646358	2646359	2646360	2646361
Sample Reference				TP507 West	TP507 Base	TP507 Arisings	WS2 North	WS2 North
Sample Number				None Supplied	None Supplied	None Supplied	1	2
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	12	13	21	11	11
Total mass of sample received	kg	0.001	NONE	0.4	0.4	0.4	0.4	0.4
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	Chrysotile & Amosite	-	-
Asbestos in Soil	Type	N/A	ISO 17025	-	-	Detected	-	-
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	< 0.001	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	< 0.001	-	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A	N/A	LFT	N/A	N/A
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	-	7.6	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1.0	3.7	1.4	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	-	-	910	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	-	0.13	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	-	270	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	-	134	-	-
Sulphide	mg/kg	1	MCERTS	-	-	22	-	-
Total Sulphur	mg/kg	50	MCERTS	-	-	1600	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	-	2.6	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	< 1.0	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	-	-	< 0.05	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	< 0.05	-	-
Acenaphthene	mg/kg	0.05	MCERTS	-	-	0.22	-	-
Fluorene	mg/kg	0.05	MCERTS	-	-	0.26	-	-
Phenanthrene	mg/kg	0.05	MCERTS	-	-	1.7	-	-
Anthracene	mg/kg	0.05	MCERTS	-	-	0.55	-	-
Fluoranthene	mg/kg	0.05	MCERTS	-	-	3.6	-	-
Pyrene	mg/kg	0.05	MCERTS	-	-	3.2	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	1.6	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	1.4	-	-
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	-	-	1.5	-	-
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	-	-	0.7	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	1.2	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	0.64	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	0.1	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	0.81	-	-
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	-	-	17.4	-	-

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Analytical Report Number: 23-28075
Project / Site name: Don Street
Your Order No: 004574

Lab Sample Number				2646357	2646358	2646359	2646360	2646361
Sample Reference				TP507 West	TP507 Base	TP507 Arisings	WS2 North	WS2 North
Sample Number				None Supplied	None Supplied	None Supplied	1	2
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	20	19	24	9.7	11
Barium (aqua regia extractable)	mg/kg	1	MCERTS	110	110	-	110	140
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	1.3	1.1	-	0.75	0.82
Boron (water soluble)	mg/kg	0.2	MCERTS	0.4	0.7	-	< 0.2	< 0.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	1.3	< 0.2	< 0.2	0.6	0.6
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	60	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	75	54	94	50	54
Lead (aqua regia extractable)	mg/kg	1	MCERTS	140	160	140	68	120
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	31	25	28	17	19
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	29	28	-	21	23
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	100	96	150	87	92
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	< 1.0	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	< 0.1	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	< 0.1	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	-	-	3.1	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	-	-	20	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	-	39	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	-	87	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	-	-	16	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	160	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 23-28075
Project / Site name: Don Street
Your Order No: 004574

Lab Sample Number				2646362	2646363	2646364	2646365	2646366
Sample Reference				WS2 East	WS2 East	WS2 South	WS2 West	WS2 West
Sample Number				1	2	None Supplied	1	2
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	11	11	11	9.4	12
Total mass of sample received	kg	0.001	NONE	0.4	0.4	0.4	0.4	0.4
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1.0	1.1	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	-	-	-	-
Sulphide	mg/kg	1	MCERTS	-	-	-	-	-
Total Sulphur	mg/kg	50	MCERTS	-	-	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	-	-	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.05	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	-	-	-	-	-

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Analytical Report Number: 23-28075
Project / Site name: Don Street
Your Order No: 004574

Lab Sample Number				2646362	2646363	2646364	2646365	2646366
Sample Reference				WS2 East	WS2 East	WS2 South	WS2 West	WS2 West
Sample Number				1	2	None Supplied	1	2
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	12	12	10	8.3	11
Barium (aqua regia extractable)	mg/kg	1	MCERTS	150	140	150	100	140
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	1.1	0.86	0.88	0.75	0.91
Boron (water soluble)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	0.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	1.6	0.7	0.5	0.4	0.5
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	110	66	48	41	49
Lead (aqua regia extractable)	mg/kg	1	MCERTS	81	100	62	61	72
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.5	0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	24	19	21	23	21
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	27	23	24	26	25
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	93	110	90	91	85
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	-	-	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	-	-	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	-	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	-	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	-	-	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 23-28075
Project / Site name: Don Street
Your Order No: 004574

Lab Sample Number				2646367	2646368	2646369	2646370	2646371
Sample Reference				WS2 Base	WS2 Base	TP351 North	TP351 North	TP351 East
Sample Number				1	2	1	2	1
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	39	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	27	23	9	13	12
Total mass of sample received	kg	0.001	NONE	0.4	0.4	0.4	0.4	0.4
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	-	-	-
Total Sulphate as SO4	mg/kg	50	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	-	-	-	-
Sulphide	mg/kg	1	MCERTS	-	-	-	-	-
Total Sulphur	mg/kg	50	MCERTS	-	-	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	-	-	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	-	-	1.1	0.24	1.8
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	0.13	< 0.05	0.09
Acenaphthene	mg/kg	0.05	MCERTS	-	-	3.6	0.57	5.9
Fluorene	mg/kg	0.05	MCERTS	-	-	3	0.51	4.3
Phenanthrene	mg/kg	0.05	MCERTS	-	-	21	4	29
Anthracene	mg/kg	0.05	MCERTS	-	-	6.2	1.2	8.9
Fluoranthene	mg/kg	0.05	MCERTS	-	-	27	7.8	42
Pyrene	mg/kg	0.05	MCERTS	-	-	24	7.3	37
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	11	3.4	15
Chrysene	mg/kg	0.05	MCERTS	-	-	9.6	3.5	13
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	-	-	12	4.1	14
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	-	-	4.2	1.5	6
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	9.8	3.3	12
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	5	1.9	6.1
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	0.69	< 0.05	0.95
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	5.7	2	6.7
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	-	-	144	41.2	203

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Analytical Report Number: 23-28075
Project / Site name: Don Street
Your Order No: 004574

Lab Sample Number				2646367	2646368	2646369	2646370	2646371
Sample Reference				WS2 Base	WS2 Base	TP351 North	TP351 North	TP351 East
Sample Number				1	2	1	2	1
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	29	22	-	-	-
Barium (aqua regia extractable)	mg/kg	1	MCERTS	100	93	-	-	-
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.69	0.81	-	-	-
Boron (water soluble)	mg/kg	0.2	MCERTS	1.2	0.4	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	-	-	-
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	61	51	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	110	78	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.3	0.3	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	13	15	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	-	-	-
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	35	29	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	41	43	-	-	-
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	-	-	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	-	-	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	-	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	-	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	-	-	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 23-28075
Project / Site name: Don Street
Your Order No: 004574

Lab Sample Number				2646372	2646373	2646374	2646375	2646376
Sample Reference				TP351 East	TP351 South	TP351 South	TP351 West	TP351 West
Sample Number				2	1	2	1	2
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	45	< 0.1	33	38
Moisture Content	%	0.01	NONE	14	5.8	9.2	10	10
Total mass of sample received	kg	0.001	NONE	0.4	0.4	0.4	0.4	0.4
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	-	-	-	-	-
Total Sulphate as SO4	mg/kg	50	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	-	-	-	-
Sulphide	mg/kg	1	MCERTS	-	-	-	-	-
Total Sulphur	mg/kg	50	MCERTS	-	-	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	-	-	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	0.46	0.55	< 0.05	0.58	0.43
Acenaphthylene	mg/kg	0.05	MCERTS	0.13	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	2.8	1.1	0.11	1.2	0.68
Fluorene	mg/kg	0.05	MCERTS	3.1	0.75	0.07	1.1	0.62
Phenanthrene	mg/kg	0.05	MCERTS	21	4.7	0.64	7.2	3.9
Anthracene	mg/kg	0.05	MCERTS	6.7	1.3	0.2	2.4	1.4
Fluoranthene	mg/kg	0.05	MCERTS	29	7.3	1.3	13	7.2
Pyrene	mg/kg	0.05	MCERTS	24	6.4	1.2	11	6.6
Benzo(a)anthracene	mg/kg	0.05	MCERTS	11	3	0.58	4.8	3
Chrysene	mg/kg	0.05	MCERTS	10	2.8	0.53	4.5	3
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	11	3.7	0.75	5.3	3.4
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	4.5	1.2	0.24	1.6	1.3
Benzo(a)pyrene	mg/kg	0.05	MCERTS	9.5	2.9	0.55	4.1	2.7
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	4.7	1.4	0.33	2	1.4
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.63	0.19	< 0.05	0.26	0.25
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	4.9	1.7	0.44	2.2	1.5
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	144	39	6.96	60.9	37.3

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Analytical Report Number: 23-28075
Project / Site name: Don Street
Your Order No: 004574

Lab Sample Number				2646372	2646373	2646374	2646375	2646376
Sample Reference				TP351 East	TP351 South	TP351 South	TP351 West	TP351 West
Sample Number				2	1	2	1	2
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Barium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	-	-	-	-	-
Boron (water soluble)	mg/kg	0.2	MCERTS	-	-	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	-	-	-	-
Chromium (hexavalent)	mg/kg	1.8	MCERTS	-	-	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	-	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	-	-	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	-	-	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	-	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	-	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	-	-	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 23-28075
Project / Site name: Don Street
Your Order No: 004574

Lab Sample Number				2646377	2646378	2646379
Sample Reference				TP351 Base	TP351 Base	TP351 Arisings
Sample Number				1	2	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				11/04/2023	11/04/2023	11/04/2023
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Stone Content	%	0.1	NONE	< 0.1	24	< 0.1
Moisture Content	%	0.01	NONE	6.6	5.5	12
Total mass of sample received	kg	0.001	NONE	0.4	0.4	0.4
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	-	-	-
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A	N/A	N/A
General Inorganics						
pH - Automated	pH Units	N/A	MCERTS	-	-	-
Total Cyanide	mg/kg	1	MCERTS	-	-	-
Total Sulphate as SO4	mg/kg	50	MCERTS	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	-	-
Sulphide	mg/kg	1	MCERTS	-	-	-
Total Sulphur	mg/kg	50	MCERTS	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	-	-
Total Phenols						
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-
Speciated PAHs						
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.59
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.21
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	1.5
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	1.3
Phenanthrene	mg/kg	0.05	MCERTS	0.13	0.08	8.5
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	2.7
Fluoranthene	mg/kg	0.05	MCERTS	0.17	0.16	12
Pyrene	mg/kg	0.05	MCERTS	0.14	0.14	11
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.09	0.08	5.3
Chrysene	mg/kg	0.05	MCERTS	0.05	0.08	4.9
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	6.5
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	2.2
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	5.3
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	2.8
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.44
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	3.1
Total PAH						
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	< 0.80	< 0.80	68.7

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Analytical Report Number: 23-28075
Project / Site name: Don Street
Your Order No: 004574

Lab Sample Number				2646377	2646378	2646379
Sample Reference				TP351 Base	TP351 Base	TP351 Arisings
Sample Number				1	2	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				11/04/2023	11/04/2023	11/04/2023
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Heavy Metals / Metalloids						
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-
Barium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	-	-	-
Boron (water soluble)	mg/kg	0.2	MCERTS	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	-	-
Chromium (hexavalent)	mg/kg	1.8	MCERTS	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-
Petroleum Hydrocarbons						
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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UKAS TESTING
4041

Analytical i2 Environmental Science

Analytical Report Number: 23-28075
Project / Site name: Don Street
Your Order No: 004574

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2646342	TP501 Arisings		167	Loose Fibrous Debris	**Chrysotile**	0.002	**0.002**
2646353	TP505 + TP25 Arisings		153	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**
2646359	TP507 Arisings		157	Loose Fibres	**Chrysotile & Amosite**	< 0.001	**< 0.001**

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 23-28075
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2646332	TP501 North	1	None Supplied	Brown clay and sand with gravel.
2646333	TP501 North	2	None Supplied	Brown clay and sand with gravel.
2646334	TP501 East	1	None Supplied	Brown sand with stones.
2646335	TP501 East	2	None Supplied	Brown sand with stones.
2646336	TP501 South	1	None Supplied	Brown clay and sand with gravel.
2646337	TP501 South	2	None Supplied	Brown sand with stones.
2646338	TP501 West	1	None Supplied	Brown sand with gravel and plastic.
2646339	TP501 West	2	None Supplied	Brown sand with gravel and vegetation.
2646340	TP501 Base	1	None Supplied	Brown clay and sand with vegetation and stones.
2646341	TP501 Base	2	None Supplied	Brown clay and sand with gravel and vegetation.
2646342	TP501 Arisings	None Supplied	None Supplied	Brown sand with gravel and vegetation.
2646343	P505 + TP25 No	1	None Supplied	Brown sand with gravel and stones.
2646344	P505 + TP25 No	2	None Supplied	Brown sand with gravel and stones.
2646345	P505 + TP25 Ea	1	None Supplied	Brown sand with gravel and stones.
2646346	P505 + TP25 Ea	2	None Supplied	Brown sand with gravel.
2646347	P505 + TP25 So	1	None Supplied	Brown clay and sand with gravel.
2646348	P505 + TP25 So	2	None Supplied	Brown sandy clay with gravel.
2646349	P505 + TP25 We	1	None Supplied	Brown sandy clay with gravel.
2646350	P505 + TP25 We	2	None Supplied	Brown sandy clay with gravel.
2646351	P505 + TP25 Ba	1	None Supplied	Brown clay and loam with gravel.
2646352	P505 + TP25 Ba	2	None Supplied	Brown clay and loam with gravel.
2646353	505 + TP25 Aris	None Supplied	None Supplied	Brown loam and sand with gravel.
2646354	TP507 North	None Supplied	None Supplied	Brown loam and sand with gravel.
2646355	TP507 East	None Supplied	None Supplied	Brown loam with stones.
2646356	TP507 South	None Supplied	None Supplied	Brown loam with gravel.
2646357	TP507 West	None Supplied	None Supplied	Brown loam with gravel.
2646358	TP507 Base	None Supplied	None Supplied	Brown loam with gravel.
2646359	TP507 Arisings	None Supplied	None Supplied	Brown loam and gravel with vegetation.
2646360	WS2 North	1	None Supplied	Brown clay and loam with gravel.
2646361	WS2 North	2	None Supplied	Brown loam and clay with gravel.
2646362	WS2 East	1	None Supplied	Brown loam and clay with gravel.
2646363	WS2 East	2	None Supplied	Brown loam and clay with gravel.
2646364	WS2 South	None Supplied	None Supplied	Brown loam and clay with gravel.
2646365	WS2 West	1	None Supplied	Brown loam and clay with gravel and vegetation.
2646366	WS2 West	2	None Supplied	Brown loam and clay with gravel and vegetation.
2646367	WS2 Base	1	None Supplied	Brown loam with gravel and vegetation.
2646368	WS2 Base	2	None Supplied	Brown clay and loam with gravel and vegetation.
2646369	TP351 North	1	None Supplied	Brown loam and sand with stones.
2646370	TP351 North	2	None Supplied	Brown clay and loam with gravel.
2646371	TP351 East	1	None Supplied	Brown clay and loam with gravel.
2646372	TP351 East	2	None Supplied	Brown clay and loam with gravel.
2646373	TP351 South	1	None Supplied	Brown sand with stones.
2646374	TP351 South	2	None Supplied	Brown sand with gravel and brick.
2646375	TP351 West	1	None Supplied	Brown clay and sand with vegetation and stones.
2646376	TP351 West	2	None Supplied	Brown clay and sand with stones.
2646377	TP351 Base	1	None Supplied	Brown sand with gravel.
2646378	TP351 Base	2	None Supplied	Brown sand with stones.
2646379	TP351 Arisings	None Supplied	None Supplied	Brown clay and sand with brick and gravel

Analytical Report Number : 23-28075
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS

Analytical Report Number : 23-28075
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-40134

Project / Site name:	Don Street	**Samples received on:**	19/06/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	19/06/2023
Your order number:	005244	**Analysis completed by:**	26/06/2023
Report Issue Number:	1	**Report issued on:**	26/06/2023
Samples Analysed:	4 soil samples		

Signed:

Joanna Wawrzeczko
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-40134
Project / Site name: Don Street
Your Order No: 005244

Lab Sample Number				2719183	2719184	2719185	2719186
Sample Reference				Stockpile 14 A	Stockpile 14 B	Stockpile 15 A	Stockpile 15 B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				16/06/2023	16/06/2023	16/06/2023	16/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	6.5	6.3	5.1	5.6
Total mass of sample received	kg	0.001	NONE	0.3	0.3	0.3	0.3
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	< 0.001	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	< 0.001	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	SPU	SPU	SPU	SPU
General Inorganics							
pH - Automated	pH Units	N/A	MCERTS	7.5	8.2	8.3	8.1
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	1.4	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	330	650	600	610
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.0052	0.15	0.15	0.16
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	10	300	290	320
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	5.2	152	145	162
Sulphide	mg/kg	1	MCERTS	< 1.0	1.7	5.5	< 1.0
Total Sulphur	mg/kg	50	MCERTS	190	390	520	410
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1	1.3	1.4	1.5
Total Phenols							
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Heavy Metals / Metalloids							
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	12	11	17	11
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	17	14	18	14
Copper (aqua regia extractable)	mg/kg	1	MCERTS	13	31	52	32
Lead (aqua regia extractable)	mg/kg	1	MCERTS	21	54	45	54
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	12	15	25	15
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	46	83	70	76
Monoaromatics & Oxygenates							
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
o-xylene#	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0

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Analytical Report Number: 23-40134
Project / Site name: Don Street
Your Order No: 005244

Lab Sample Number				2719183	2719184	2719185	2719186
Sample Reference				Stockpile 14 A	Stockpile 14 B	Stockpile 15 A	Stockpile 15 B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				16/06/2023	16/06/2023	16/06/2023	16/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Petroleum Hydrocarbons							
TPH-CWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	< 1.0	< 1.0	1.4	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	< 2.0	< 2.0	7.2	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	< 8.0	8.2	13	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	< 8.0	26	48	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	< 10	36	69	< 10
TPH-CWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	< 2.0	2.4	2	< 2.0
TPH-CWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	< 10	10	15	< 10
TPH-CWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	< 10	26	67	20
TPH-CWG - Aromatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	< 10	38	84	28
VOCs							
Chloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Chloroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Bromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Vinyl Chloride	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Trichlorofluoromethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1-Dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Cis-1,2-dichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1-Dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
2,2-Dichloropropane#	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Trichloromethane	µg/kg	5	NONE	7.2	< 5.0	8.4	7.8
1,1,1-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dichloroethane##	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,1-Dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Trans-1,2-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloromethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Trichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Dibromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Bromodichloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Cis-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Trans-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
1,1,2-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,3-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Dibromochloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dibromoethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Chlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,1,1,2-Tetrachloroethane##	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0

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Analytical Report Number: 23-40134
Project / Site name: Don Street
Your Order No: 005244

Lab Sample Number				2719183	2719184	2719185	2719186
Sample Reference				Stockpile 14 A	Stockpile 14 B	Stockpile 15 A	Stockpile 15 B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				16/06/2023	16/06/2023	16/06/2023	16/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Styrene#	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Tribromomethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene#	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1,2,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Isopropylbenzene#	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Bromobenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
n-Propylbenzene#	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
2-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
4-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,3,5-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
tert-Butylbenzene#	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2,4-Trimethylbenzene#	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
sec-Butylbenzene#	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,3-Dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
p-Isopropyltoluene#	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,4-Dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dibromo-3-chloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Hexachlorobutadiene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2,3-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0

SVOCs

Aniline	mg/kg	0.1	NONE	3.4	3.3	4.2	4.6
Phenol	mg/kg	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Hexachloroethane	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Isophorone	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
2-Nitrophenol	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	0.32	0.57	0.3
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	< 0.1	0.2	0.2	0.2
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1

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Analytical Report Number: 23-40134
Project / Site name: Don Street
Your Order No: 005244

Lab Sample Number				2719183	2719184	2719185	2719186
Sample Reference				Stockpile 14 A	Stockpile 14 B	Stockpile 15 A	Stockpile 15 B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				16/06/2023	16/06/2023	16/06/2023	16/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.08	0.12
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	0.44	1.1	0.49
2,4-Dinitrotoluene	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	< 0.2	0.2	0.5	0.3
4-Chlorophenyl phenyl ether	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
4-Nitroaniline	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Fluorene	mg/kg	0.05	MCERTS	< 0.05	0.37	0.74	0.49
Azobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	0.16	2.7	5	3.5
Anthracene	mg/kg	0.05	MCERTS	< 0.05	0.76	1.6	0.84
Carbazole	mg/kg	0.3	MCERTS	< 0.3	< 0.3	0.4	< 0.3
Dibutyl phthalate	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Anthraquinone	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Fluoranthene	mg/kg	0.05	MCERTS	0.4	4.2	7.7	4.9
Pyrene	mg/kg	0.05	MCERTS	0.3	3.9	7.1	4.5
Butyl benzyl phthalate	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.13	1.8	2.9	2
Chrysene	mg/kg	0.05	MCERTS	0.15	1.6	3.1	1.9
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.2	2	3.6	2.2
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.08	0.82	1.5	0.97
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.14	1.5	2.9	1.8
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.09	0.95	1.8	1
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	0.2	0.36	0.26
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.11	1.1	2.2	1.2

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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The results included within the report relate only to the sample(s) submitted for testing.

UKAS TESTING
4041

Analytical i2 Environmental Science

Analytical Report Number: 23-40134
Project / Site name: Don Street
Your Order No: 005244

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2719183	Stockpile 14 A		177	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 23-40134
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2719183	Stockpile 14 A	None Supplied	None Supplied	Brown loam and sand with gravel.
2719184	Stockpile 14 B	None Supplied	None Supplied	Brown loam and sand with gravel.
2719185	Stockpile 15 A	None Supplied	None Supplied	Brown loam and sand with gravel.
2719186	Stockpile 15 B	None Supplied	None Supplied	Brown loam and sand with gravel.

Analytical Report Number : 23-40134
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025

Analytical Report Number : 23-40134
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

- Data reported unaccredited due to quality control parameter failure associated with this result; other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.
- Quality control parameter has a high recovery (outside of limit); however the associated result is below the reporting limit, other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.

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Analytical Report Number : 23-23959

Project / Site name:	Don Street	**Samples received on:**	20/03/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	20/03/2023
Your order number:	004389	**Analysis completed by:**	29/03/2023
Report Issue Number:	1	**Report issued on:**	29/03/2023
Samples Analysed:	3 soil samples		

Signed:

Elżbieta Suchy
Junior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-23959
Project / Site name: Don Street
Your Order No: 004389

Lab Sample Number				2623123	2623124	2623125
Sample Reference				SW-Crush 001	SW-Crush 002	SW-Crush 003
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				17/03/2023	17/03/2023	17/03/2023
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	14	15	13
Total mass of sample received	kg	0.001	NONE	0.3	0.3	0.3
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	PDO	PDO	PDO
General Inorganics						
Total Cyanide	mg/kg	1	MCERTS	< 1.0	1	8.3
Speciated PAHs						
Naphthalene	mg/kg	0.05	MCERTS	0.2	0.2	0.36
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.08
Acenaphthene	mg/kg	0.05	MCERTS	0.06	0.09	0.32
Fluorene	mg/kg	0.05	MCERTS	0.06	0.08	0.3
Phenanthrene	mg/kg	0.05	MCERTS	0.65	0.85	2.5
Anthracene	mg/kg	0.05	MCERTS	0.13	0.22	0.69
Fluoranthene	mg/kg	0.05	MCERTS	0.76	1.1	3.4
Pyrene	mg/kg	0.05	MCERTS	0.76	1.2	3.2
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.37	0.57	1.6
Chrysene	mg/kg	0.05	MCERTS	0.42	0.55	1.5
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.4	0.57	1.7
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.15	0.19	0.55
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.32	0.51	1.4
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	0.2	0.74
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.22
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	0.27	0.86
Total PAH						
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	4.28	6.61	19.4
Heavy Metals / Metalloids						
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	11	13	12
Barium (aqua regia extractable)	mg/kg	1	MCERTS	140	130	180
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.85	0.86	0.79
Boron (water soluble)	mg/kg	0.2	MCERTS	1.7	1.8	1.3
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.6	< 0.2	0.5
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8
Copper (aqua regia extractable)	mg/kg	1	MCERTS	26	28	31
Lead (aqua regia extractable)	mg/kg	1	MCERTS	110	140	94
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	18	20	19
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	34	30	28
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	110	94	200

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Analytical Report Number: 23-23959
Project / Site name: Don Street
Your Order No: 004389

Lab Sample Number				2623123	2623124	2623125
Sample Reference				SW-Crush 001	SW-Crush 002	SW-Crush 003
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				17/03/2023	17/03/2023	17/03/2023
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Petroleum Hydrocarbons						
TPH (C5 - C6) HS_1D_TOTAL	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0
TPH (C6 - C8) HS_1D_TOTAL	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1
TPH (C8 - C10) HS_1D_TOTAL	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1
TPH (C10 - C12) EH_CU_1D_TOTAL	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0
TPH (C12 - C16) EH_CU_1D_TOTAL	mg/kg	4	MCERTS	< 4.0	< 4.0	9.2
TPH (C16 - C21) EH_CU_1D_TOTAL	mg/kg	1	MCERTS	34	31	66
TPH (C21 - C35) EH_CU_1D_TOTAL	mg/kg	1	MCERTS	590	420	310
TPH (C35 - C40) EH_CU_1D_TOTAL	mg/kg	10	MCERTS	370	260	150
TPH Total C5 - C40 EH_CU+HS_1D_TOTAL	mg/kg	10	NONE	990	710	530

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-23959
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2623123	SW-Crush 001	None Supplied	None Supplied	Brown sandy loam with brick and gravel
2623124	SW-Crush 002	None Supplied	None Supplied	Brown sandy loam with brick and gravel
2623125	SW-Crush 003	None Supplied	None Supplied	Brown sandy loam with brick and gravel

Analytical Report Number : 23-23959
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Analytical Report Number : 23-23959
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-51281

Project / Site name:	Don Street	**Samples received on:**	14/08/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	16/08/2023
Your order number:	5828	**Analysis completed by:**	22/08/2023
Report Issue Number:	1	**Report issued on:**	23/08/2023
Samples Analysed:	3 soil samples		

Signed:

Dominika Warjan
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-51281
Project / Site name: Don Street
Your Order No: 5828

Lab Sample Number				2782716	2782717	2782718
Sample Reference				6F Road 6	6F Road 7	6F Road 8
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				11/08/2023	11/08/2023	11/08/2023
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	10	12	8.2
Total mass of sample received	kg	0.001	NONE	0.3	0.3	0.3
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile	Chrysotile	Chrysotile
Asbestos in Soil	Type	N/A	ISO 17025	Detected	Detected	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	< 0.001	< 0.001	< 0.001
Asbestos Quantification Total	%	0.001	ISO 17025	< 0.001	< 0.001	< 0.001
Asbestos Analyst ID	N/A	N/A	N/A	MJN	MJN	MJN
General Inorganics						
pH - Automated	pH Units	N/A	MCERTS	10.1	10.5	9.6
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	1800	1600	970
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.3	0.3	0.19
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	610	600	380
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	303	302	191
Sulphide	mg/kg	1	MCERTS	12	5.7	5.8
Total Sulphur	mg/kg	50	MCERTS	980	1000	780
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.1	1.1	1.5
Total Phenols						
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Speciated PAHs						
Naphthalene	mg/kg	0.05	MCERTS	0.7	0.46	1.4
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	0.07	0.07
Acenaphthene	mg/kg	0.05	MCERTS	0.98	1.4	2.2
Fluorene	mg/kg	0.05	MCERTS	0.77	1.4	1.9
Phenanthrene	mg/kg	0.05	MCERTS	5.7	7.7	9.6
Anthracene	mg/kg	0.05	MCERTS	1.6	2.1	2.6
Fluoranthene	mg/kg	0.05	MCERTS	7.2	10	10
Pyrene	mg/kg	0.05	MCERTS	6.3	8.7	8.6
Benzo(a)anthracene	mg/kg	0.05	MCERTS	2.9	4	4.2
Chrysene	mg/kg	0.05	MCERTS	2.6	3.7	3.6
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	3.3	4.4	4.3
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.96	1.3	1.6
Benzo(a)pyrene	mg/kg	0.05	MCERTS	2.6	3.5	3.4
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	1.2	1.5	1.6
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.33	0.42	0.39
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	1.4	1.7	1.7
Total PAH						
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	38.5	52.3	57.1

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-51281
Project / Site name: Don Street
Your Order No: 5828

Lab Sample Number				2782716	2782717	2782718
Sample Reference				6F Road 6	6F Road 7	6F Road 8
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				11/08/2023	11/08/2023	11/08/2023
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Heavy Metals / Metalloids						
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	15	16	18
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	25	20	17
Copper (aqua regia extractable)	mg/kg	1	MCERTS	30	35	31
Lead (aqua regia extractable)	mg/kg	1	MCERTS	91	46	47
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	18	19	17
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	110	110	88
Petroleum Hydrocarbons						
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	< 2.0	< 2.0	2
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	8.8	6.3	7.3
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	33	31	47
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	110	82	250
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	40	26	51
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	190	150	360

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-51281
Project / Site name: Don Street
Your Order No: 5828

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2782716	6F Road 6		153	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**
2782717	6F Road 7		160	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**
2782718	6F Road 8		162	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 23-51281
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2782716	6F Road 6	None Supplied	None Supplied	Brown clay and loam with gravel and vegetation.
2782717	6F Road 7	None Supplied	None Supplied	Brown clay and sand with gravel and brick.
2782718	6F Road 8	None Supplied	None Supplied	Brown clay and sand with gravel and brick.

Analytical Report Number : 23-51281
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

Analytical Report Number : 23-51281
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-58049

Project / Site name:	Don Street	**Samples received on:**	22/09/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	22/09/2023
Your order number:	006265	**Analysis completed by:**	27/09/2023
Report Issue Number:	1	**Report issued on:**	27/09/2023
Samples Analysed:	3 soil samples		

Signed:

Adam Fenwick
Technical Reviewer
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-58049
Project / Site name: Don Street
Your Order No: 006265

Lab Sample Number				2820665	2820666	2820667
Sample Reference				LF Crush 007	LF Crush 008	LF Crush 009
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				20/09/2023	20/09/2023	20/09/2023
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Stone Content	%	0.1	NONE	< 0.1	16	59
Moisture Content	%	0.01	NONE	13	16	12
Total mass of sample received	kg	0.001	NONE	0.3	0.3	0.3
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	WEM	WEM	WEM
General Inorganics						
Total Cyanide	mg/kg	1	MCERTS	< 1.0	3.2	< 1.0
Speciated PAHs						
Naphthalene	mg/kg	0.05	MCERTS	0.51	0.85	2.3
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	0.06	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	0.82	1.4	2.3
Fluorene	mg/kg	0.05	MCERTS	0.66	1.3	1.6
Phenanthrene	mg/kg	0.05	MCERTS	3.5	8.5	8.6
Anthracene	mg/kg	0.05	MCERTS	1	2.3	2.4
Fluoranthene	mg/kg	0.05	MCERTS	5	9.8	9.4
Pyrene	mg/kg	0.05	MCERTS	4.5	8.3	8
Benzo(a)anthracene	mg/kg	0.05	MCERTS	2.3	4.1	3.9
Chrysene	mg/kg	0.05	MCERTS	2.3	3.9	3.8
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	3	4.7	4.3
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.83	1.9	1.8
Benzo(a)pyrene	mg/kg	0.05	MCERTS	2.2	3.9	3.6
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	1	1.8	1.6
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.3	0.52	0.47
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	1.2	2	1.9
Total PAH						
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	29	55.3	56
Heavy Metals / Metalloids						
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	14	16	13
Barium (aqua regia extractable)	mg/kg	1	MCERTS	130	120	110
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.48	0.59	0.67
Boron (water soluble)	mg/kg	0.2	MCERTS	0.3	0.3	0.9
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8
Copper (aqua regia extractable)	mg/kg	1	MCERTS	21	28	22
Lead (aqua regia extractable)	mg/kg	1	MCERTS	41	51	41
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	13	17	16
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	20	20	20
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	63	81	84
Petroleum Hydrocarbons						
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	< 4.0	4.6	< 4.0

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Analytical Report Number: 23-58049
Project / Site name: Don Street
Your Order No: 006265

Lab Sample Number				2820665	2820666	2820667
Sample Reference				LF Crush 007	LF Crush 008	LF Crush 009
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				20/09/2023	20/09/2023	20/09/2023
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
TPH (C16 - C21) EH_CU_1D_TOTAL	mg/kg	10	MCERTS	36	27	18
TPH (C21 - C35) EH_CU_1D_TOTAL	mg/kg	10	MCERTS	540	65	82
TPH (C35 - C40) EH_CU_1D_TOTAL	mg/kg	10	NONE	240	16	39
TPH Total C5 - C40 EH_CU+HS_1D_TOTAL	mg/kg	10	NONE	820	110	140

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-58049
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2820665	LF Crush 007	None Supplied	None Supplied	Brown clay and sand with gravel.
2820666	LF Crush 008	None Supplied	None Supplied	Brown clay and sand with gravel and stones.
2820667	LF Crush 009	None Supplied	None Supplied	Brown clay and gravel with stones and vegetation.

Analytical Report Number : 23-58049
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards. Refer to CoA for analyte specific accreditation.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted

Analytical Report Number : 23-58049
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
#2	EH_2D_Total but with fatty acids mathematically subtracted				
_	Operator - understore to separate acronyms (exception for +)				
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total				

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Analytical Report Number : 23-41866

Project / Site name:	Don Street	**Samples received on:**	21/06/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	28/06/2023
Your order number:	005274	**Analysis completed by:**	04/07/2023
Report Issue Number:	1	**Report issued on:**	04/07/2023
Samples Analysed:	3 soil samples		

Signed:

Dominika Warjan
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-41866
Project / Site name: Don Street
Your Order No: 005274

Lab Sample Number				2729477	2729478	2729479
Sample Reference				LF - CRUSH 101	LF - CRUSH 102	LF - CRUSH 103
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				20/06/2023	20/06/2023	20/06/2023
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	10	14	15
Total mass of sample received	kg	0.001	NONE	0.4	0.4	0.4

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile & Amosite	Chrysotile	Chrysotile & Amosite
Asbestos in Soil	Type	N/A	ISO 17025	Detected	Detected	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	0.014	0.005	0.003
Asbestos Quantification Total	%	0.001	ISO 17025	0.014	0.005	0.003
Asbestos Analyst ID	N/A	N/A	N/A	SCA	SCA	SCA

General Inorganics

Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	1.7	0.72	0.34
Acenaphthylene	mg/kg	0.05	MCERTS	0.12	0.08	0.05
Acenaphthene	mg/kg	0.05	MCERTS	2.9	1.4	0.55
Fluorene	mg/kg	0.05	MCERTS	2.5	1.2	0.41
Phenanthrene	mg/kg	0.05	MCERTS	15	7.3	2.9
Anthracene	mg/kg	0.05	MCERTS	4.6	2.2	0.88
Fluoranthene	mg/kg	0.05	MCERTS	18	9.1	4.9
Pyrene	mg/kg	0.05	MCERTS	16	7.8	4.5
Benzo(a)anthracene	mg/kg	0.05	MCERTS	8.1	4.1	2.2
Chrysene	mg/kg	0.05	MCERTS	7.2	3.5	2.2
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	9	4.6	2.4
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	2.5	1.2	1.2
Benzo(a)pyrene	mg/kg	0.05	MCERTS	7.1	3.4	2.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	3.5	1.8	1
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.83	0.43	0.27
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	4.1	2.2	1.2

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	103	51.1	27.1

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	15	16	16
Barium (aqua regia extractable)	mg/kg	1	MCERTS	170	160	160
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.71	0.82	0.77
Boron (water soluble)	mg/kg	0.2	MCERTS	1.1	1	0.9
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.7	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	18	26	34
Copper (aqua regia extractable)	mg/kg	1	MCERTS	41	38	49
Lead (aqua regia extractable)	mg/kg	1	MCERTS	110	70	60
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	17	19	19
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	23	26	26
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	120	130	130

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Analytical Report Number: 23-41866
Project / Site name: Don Street
Your Order No: 005274

Lab Sample Number				2729477	2729478	2729479
Sample Reference				LF - CRUSH 101	LF - CRUSH 102	LF - CRUSH 103
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				20/06/2023	20/06/2023	20/06/2023
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Petroleum Hydrocarbons						
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	3.6	< 2.0	3.1
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	14	11	12
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	48	41	43
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	130	120	130
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	27	36	35
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	220	210	220

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 23-41866
Project / Site name: Don Street
Your Order No: 005274

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2729477	LF - CRUSH 101		162	Loose Fibrous Debris	**Chrysotile & Amosite**	0.014	**0.014**
2729478	LF - CRUSH 102		164	Loose Fibrous Debris	**Chrysotile**	0.005	**0.005**
2729479	LF - CRUSH 103		159	Loose Fibrous Debris	**Chrysotile & Amosite**	0.003	**0.003**

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 23-41866
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2729477	LF - CRUSH 101	None Supplied	None Supplied	Brown sand with gravel and vegetation.
2729478	LF - CRUSH 102	None Supplied	None Supplied	Brown sandy clay with gravel.
2729479	LF - CRUSH 103	None Supplied	None Supplied	Brown sandy clay with gravel.

Analytical Report Number : 23-41866
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS

Analytical Report Number : 23-41866
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Sample Deviation Report

Analytical Report Number : 23-41866
Project / Site name: Don Street

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
LF - CRUSH 101	None Supplied	S	2729477	c	Total cyanide in soil	L080-PL	c
LF - CRUSH 102	None Supplied	S	2729478	c	Total cyanide in soil	L080-PL	c
LF - CRUSH 103	None Supplied	S	2729479	c	Total cyanide in soil	L080-PL	c

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Analytical Report Number : 23-52105

Project / Site name:	Don Street	**Samples received on:**	17/08/2023
Your job number:	14 554	**Samples instructed on/ Analysis started on:**	21/08/2023
Your order number:	5847	**Analysis completed by:**	28/08/2023
Report Issue Number:	1	**Report issued on:**	28/08/2023
Samples Analysed:	3 soil samples		

Signed:

Joanna Wawrzeczko
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

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Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Analytical Report Number: 23-52105
Project / Site name: Don Street
Your Order No: 5847

Lab Sample Number				2787083	2787084	2787085
Sample Reference				IMP 6F5 110	IMP 6F5 111	IMP 6F5 112
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				16/08/2023	16/08/2023	16/08/2023
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Stone Content	%	0.1	NONE	< 0.1	20	19
Moisture Content	%	0.01	NONE	7.5	8.3	8.1
Total mass of sample received	kg	0.001	NONE	0.2	0.3	0.3

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile	Chrysotile	Chrysotile
Asbestos in Soil	Type	N/A	ISO 17025	Detected	Detected	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	< 0.001	< 0.001	< 0.001
Asbestos Quantification Total	%	0.001	ISO 17025	< 0.001	< 0.001	< 0.001
Asbestos Analyst ID	N/A	N/A	N/A	MJN	MJN	MJN

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	9.6	11.2	9.5
Total Cyanide	mg/kg	1	MCERTS	7.4	6.4	7.3
Total Sulphate as SO4	mg/kg	50	MCERTS	4000	3400	3600
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.96	0.9	1.4
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	1900	1800	2800
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	959	898	1380
Sulphide	mg/kg	1	MCERTS	14	17	21
Total Sulphur	mg/kg	50	MCERTS	1400	2000	2300
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.2	1.1	1.5

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	2.8	9.8	4.5
Acenaphthylene	mg/kg	0.05	MCERTS	0.91	1.5	0.81
Acenaphthene	mg/kg	0.05	MCERTS	2.1	3.5	2.5
Fluorene	mg/kg	0.05	MCERTS	2.4	4.5	2.9
Phenanthrene	mg/kg	0.05	MCERTS	16	26	18
Anthracene	mg/kg	0.05	MCERTS	3.6	6	4.7
Fluoranthene	mg/kg	0.05	MCERTS	15	22	18
Pyrene	mg/kg	0.05	MCERTS	15	22	17
Benzo(a)anthracene	mg/kg	0.05	MCERTS	6.5	9.5	8.3
Chrysene	mg/kg	0.05	MCERTS	6.8	11	8.6
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	7.3	9.8	9.1
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	2.5	4.1	3.8
Benzo(a)pyrene	mg/kg	0.05	MCERTS	5.9	8.6	7.9
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	3	3.9	3.7
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.93	1.3	1.2
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	4	5.1	4.8

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	93.8	147	116

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Analytical Report Number: 23-52105
Project / Site name: Don Street
Your Order No: 5847

Lab Sample Number				2787083	2787084	2787085
Sample Reference				IMP 6F5 110	IMP 6F5 111	IMP 6F5 112
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				16/08/2023	16/08/2023	16/08/2023
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Heavy Metals / Metalloids						
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	9.3	13	12
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	0.7
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	13	17	18
Copper (aqua regia extractable)	mg/kg	1	MCERTS	30	37	54
Lead (aqua regia extractable)	mg/kg	1	MCERTS	74	82	110
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	14	15	18
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	68	81	100
Petroleum Hydrocarbons						
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	4.7	7.9	6.6
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	24	30	25
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	71	92	91
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	27	24	30
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	130	160	150

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-52105
Project / Site name: Don Street
Your Order No: 5847

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2787083	IMP 6F5 110		211	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**
2787084	IMP 6F5 111		222	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**
2787085	IMP 6F5 112		200	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

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Analytical Report Number : 23-52105
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2787083	IMP 6F5 110	None Supplied	None Supplied	Brown loam and sand with gravel.
2787084	IMP 6F5 111	None Supplied	None Supplied	Brown loam and sand with gravel and stones.
2787085	IMP 6F5 112	None Supplied	None Supplied	Brown loam and sand with gravel and stones.

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Analytical Report Number : 23-52105
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number : 23-52105
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 22-96290

Project / Site name:	Don Street	**Samples received on:**	11/11/2022
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	11/11/2022
Your order number:	003455	**Analysis completed by:**	28/11/2022
Report Issue Number:	1	**Report issued on:**	28/11/2022
Samples Analysed:	3 soil samples		

Signed:

Elżbieta Suchy
Junior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing

Analytical Report Number: 22-96290
Project / Site name: Don Street
Your Order No: 003455

Lab Sample Number				2497332	2497333	2497334
Sample Reference				TP611	TP609	TP522
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				10/11/2022	10/11/2022	10/11/2022
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	42	25	56
Total mass of sample received	kg	0.001	NONE	0.5	0.5	0.5

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	< 0.001	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	< 0.001	-	-
Asbestos Analyst ID	N/A	N/A	N/A	JSW	JSW	JSW

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.3	7.5	7
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	3400	400	4100
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	1.1	0.05	1.3
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	2200	100	2600
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	1120	49.9	1310
Sulphide	mg/kg	1	NONE	210	26	120
Total Sulphur	mg/kg	50	MCERTS	21000	700	8100
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	7.1	2.7	-
Total Organic Carbon (TOC) – Manual	%	0.1	MCERTS	-	-	7.4

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0

Speciated PAHs

Naphthalene	mg/kg	0.05	NONE	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	NONE	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	NONE	< 0.05	0.35	0.29
Fluorene	mg/kg	0.05	NONE	< 0.05	0.28	< 0.05
Phenanthrene	mg/kg	0.05	NONE	1	2.2	1.4
Anthracene	mg/kg	0.05	NONE	0.4	0.83	0.59
Fluoranthene	mg/kg	0.05	NONE	2.6	6	4
Pyrene	mg/kg	0.05	NONE	2.7	5.3	3.7
Benzo(a)anthracene	mg/kg	0.05	NONE	1.1	2	1.7
Chrysene	mg/kg	0.05	NONE	1.5	3	2
Benzo(b)fluoranthene	mg/kg	0.05	NONE	1.5	1.9	1.8
Benzo(k)fluoranthene	mg/kg	0.05	NONE	0.7	1.8	1.7
Benzo(a)pyrene	mg/kg	0.05	NONE	1	2	1.5
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	0.73	1.2	1.1
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	< 0.05	0.17	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	NONE	0.9	1.5	1.5

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	14.2	28.5	21.2

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Analytical Report Number: 22-96290
Project / Site name: Don Street
Your Order No: 003455

Lab Sample Number				2497332	2497333	2497334
Sample Reference				TP611	TP609	TP522
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				10/11/2022	10/11/2022	10/11/2022
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Heavy Metals / Metalloids						
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	51	16	29
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	U/S*
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	13	17	14
Copper (aqua regia extractable)	mg/kg	1	MCERTS	66	36	41
Lead (aqua regia extractable)	mg/kg	1	MCERTS	120	78	98
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.4	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	22	19	17
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	98	84	66
Petroleum Hydrocarbons						
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	NONE	< 2.0	< 2.0	3.1
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	NONE	< 4.0	5.6	8.9
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	9	19	23
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	23	48	120
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	< 10	< 10	< 10
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	32	73	150

U/S = Unsuitable Sample I/S = Insufficient Sample

*U/S - Unsuitable for analysis due to high colour intensity.

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The results included within the report relate only to the sample(s) submitted for testing.

UKAS TESTING
4041

Analytical i2 Environmental Science

Analytical Report Number: 22-96290
Project / Site name: Don Street
Your Order No: 003455

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2497332	TP611		93	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 22-96290
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2497332	TP611	None Supplied	None Supplied	Brown loam and clay with gravel and vegetation.
2497333	TP609	None Supplied	None Supplied	Brown loam and clay with gravel and vegetation.
2497334	TP522	None Supplied	None Supplied	Brown loam and clay with gravel and vegetation.

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Analytical Report Number : 22-96290
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	NONE
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	NONE
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	NONE
Total organic carbon in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L023-PL	D	MCERTS
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS

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Analytical Report Number : 22-96290
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 22-95877

Project / Site name:	Don Street	**Samples received on:**	09/11/2022
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	10/11/2022
Your order number:	003454	**Analysis completed by:**	28/11/2022
Report Issue Number:	1	**Report issued on:**	28/11/2022
Samples Analysed:	2 soil samples		

Signed:

Anna Goc
Junior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing

Analytical Report Number: 22-95877
Project / Site name: Don Street
Your Order No: 003454

Lab Sample Number				2495032	2495033
Sample Reference				TP409 A	TP411
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				08/11/2022	08/11/2022
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	12	11
Total mass of sample received	kg	0.001	NONE	0.5	0.5

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	Chrysotile & Amosite & Crocidolite
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	3.706
Asbestos Quantification Total	%	0.001	ISO 17025	-	3.71
Asbestos Analyst ID	N/A	N/A	N/A	MLO	MLO

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.1	U/S
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	550	U/S
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.13	U/S
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	260	U/S
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	132	U/S
Sulphide	mg/kg	1	NONE	50	U/S
Total Sulphur	mg/kg	50	MCERTS	840	U/S
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	2.3	U/S

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0

Speciated PAHs

Naphthalene	mg/kg	0.05	NONE	1.5	< 0.05
Acenaphthylene	mg/kg	0.05	NONE	0.14	0.18
Acenaphthene	mg/kg	0.05	NONE	2.2	0.05
Fluorene	mg/kg	0.05	NONE	1.9	0.11
Phenanthrene	mg/kg	0.05	NONE	12	1.1
Anthracene	mg/kg	0.05	NONE	3.3	0.26
Fluoranthene	mg/kg	0.05	NONE	16	2.2
Pyrene	mg/kg	0.05	NONE	14	2.1
Benzo(a)anthracene	mg/kg	0.05	NONE	7.8	1.2
Chrysene	mg/kg	0.05	NONE	8.2	1.1
Benzo(b)fluoranthene	mg/kg	0.05	NONE	8.2	1.2
Benzo(k)fluoranthene	mg/kg	0.05	NONE	3.1	0.66
Benzo(a)pyrene	mg/kg	0.05	NONE	7.6	1.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	3.8	0.61
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	0.9	0.14
Benzo(ghi)perylene	mg/kg	0.05	NONE	4.3	0.68

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	95.1	12.7

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 22-95877
Project / Site name: Don Street
Your Order No: 003454

Lab Sample Number				2495032	2495033
Sample Reference				TP409 A	TP411
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				08/11/2022	08/11/2022
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Heavy Metals / Metalloids					
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	25	U/S
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	U/S
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	18	U/S
Copper (aqua regia extractable)	mg/kg	1	MCERTS	60	U/S
Lead (aqua regia extractable)	mg/kg	1	MCERTS	110	U/S
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	U/S
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	30	U/S
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	U/S
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	150	U/S
Petroleum Hydrocarbons					
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	NONE	< 2.0	U/S
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	NONE	9.1	U/S
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	56	U/S
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	180	U/S
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	14	U/S
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	260	< 10

U/S = Unsuitable Sample I/S = Insufficient Sample

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Analytical Report Number: 22-95877
Project / Site name: Don Street
Your Order No: 003454

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2495033	TP411		133	Loose Fibrous Debris	**Chrysotile & Amosite & Crocidolite**	3.706	**3.71**

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

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Analytical Report Number : 22-95877
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2495032	TP409 A	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2495033	TP411	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.

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Analytical Report Number : 22-95877
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	NONE
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	NONE
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	NONE
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

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Analytical Report Number : 22-95877
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-14757

Project / Site name:	Don Street	**Samples received on:**	30/01/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	30/01/2023
Your order number:	003980	**Analysis completed by:**	06/02/2023
Report Issue Number:	1	**Report issued on:**	06/02/2023
Samples Analysed:	6 soil samples		

Signed:

Claire Brown-Crociquia
Group Customer Services Manager
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-14757
Project / Site name: Don Street
Your Order No: 003980

Lab Sample Number				2569219	2569220	2569221	2569222	2569223
Sample Reference				TANK PARCEL C N	TANK PARCEL C E	TANK PARCEL C S	TANK PARCEL C W	TANK PARCEL C BASE
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				30/01/2023	30/01/2023	30/01/2023	30/01/2023	30/01/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	35	27	29	27	17
Total mass of sample received	kg	0.001	NONE	0.3	0.3	0.3	0.3	0.3
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	Amosite- Loose Fibres	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	ASE	ASE	ASE	ASE	ASE

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7	7.5	7.5	7.5	8
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	410	1300	420	580	110
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.015	0.23	0.016	0.048	0.0048
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	30	450	32	96	9.6
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	15	226	16.2	47.8	4.8
Sulphide	mg/kg	1	MCERTS	47	140	25	70	10
Total Sulphur	mg/kg	50	MCERTS	1000	7300	1600	2300	380
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	4.7	3.6	2.7	2.7	0.4

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	1.1	1.2	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	0.17	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	0.17	2.3	0.07	0.15	< 0.05
Fluorene	mg/kg	0.05	MCERTS	0.11	1.5	0.09	0.11	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.91	14	0.35	0.86	< 0.05
Anthracene	mg/kg	0.05	MCERTS	0.21	4.2	0.11	0.22	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	1.3	32	0.49	1.7	< 0.05
Pyrene	mg/kg	0.05	MCERTS	1.2	32	0.46	1.6	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.58	16	0.24	0.85	< 0.05
Chrysene	mg/kg	0.05	MCERTS	0.61	15	0.26	0.96	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.63	20	0.25	0.95	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.36	6.8	0.14	0.5	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.65	18	0.24	0.89	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.32	8.5	0.14	0.48	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.09	2.1	< 0.05	0.13	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.41	9.8	0.16	0.53	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	8.64	183	3.0	9.94	< 0.80

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Analytical Report Number: 23-14757
Project / Site name: Don Street
Your Order No: 003980

Lab Sample Number				2569219	2569220	2569221	2569222	2569223
Sample Reference				TANK PARCEL C N	TANK PARCEL C E	TANK PARCEL C S	TANK PARCEL C W	TANK PARCEL C BASE
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				30/01/2023	30/01/2023	30/01/2023	30/01/2023	30/01/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	10	39	11	28	4.1
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.5	2.3	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	18	20	12	15	5.3
Copper (aqua regia extractable)	mg/kg	1	MCERTS	27	100	23	52	10
Lead (aqua regia extractable)	mg/kg	1	MCERTS	41	620	36	58	5.1
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	21	38	14	27	6.1
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	56	310	47	100	14
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	< 4.0	25	< 4.0	< 4.0	< 4.0
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	7.5	180	< 1.0	14	< 1.0
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	23	560	< 1.0	42	< 1.0
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	< 10	80	< 10	< 10	< 10
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	31	840	< 10	57	< 10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 23-14757
Project / Site name: Don Street
Your Order No: 003980

Lab Sample Number				2569224
Sample Reference				TANK PARCEL C ARISINGS
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				30/01/2023
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Stone Content	%	0.1	NONE	79
Moisture Content	%	0.01	NONE	18
Total mass of sample received	kg	0.001	NONE	0.3

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile, Amosite- Loose Fibres
Asbestos in Soil	Type	N/A	ISO 17025	Detected
Asbestos Analyst ID	N/A	N/A	N/A	ASE

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.5
Total Cyanide	mg/kg	1	MCERTS	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	1000
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.078
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	160
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	78
Sulphide	mg/kg	1	MCERTS	22
Total Sulphur	mg/kg	50	MCERTS	810
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.6

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	1.2
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	2.0
Fluorene	mg/kg	0.05	MCERTS	1.7
Phenanthrene	mg/kg	0.05	MCERTS	16
Anthracene	mg/kg	0.05	MCERTS	4.4
Fluoranthene	mg/kg	0.05	MCERTS	20
Pyrene	mg/kg	0.05	MCERTS	17
Benzo(a)anthracene	mg/kg	0.05	MCERTS	7.4
Chrysene	mg/kg	0.05	MCERTS	7.1
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	7.2
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	3.3
Benzo(a)pyrene	mg/kg	0.05	MCERTS	6.9
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	3.3
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.87
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	3.6

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	102

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Analytical Report Number: 23-14757
Project / Site name: Don Street
Your Order No: 003980

Lab Sample Number				2569224
Sample Reference				TANK PARCEL C ARISINGS
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				30/01/2023
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Heavy Metals / Metalloids				
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	24
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.9
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	17
Copper (aqua regia extractable)	mg/kg	1	MCERTS	61
Lead (aqua regia extractable)	mg/kg	1	MCERTS	130
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.4
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	26
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	160

Petroleum Hydrocarbons

TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	2.6
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	20
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	92
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	200
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	31
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	340

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number : 23-14757
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2569219	TANK PARCEL C N	None Supplied	None Supplied	Brown clay and loam with gravel and vegetation.
2569220	TANK PARCEL C E	None Supplied	None Supplied	Brown clay and sand with gravel.
2569221	TANK PARCEL C S	None Supplied	None Supplied	Brown sand.
2569222	TANK PARCEL C W	None Supplied	None Supplied	Brown gravelly sand.
2569223	TANK PARCEL C BASE	None Supplied	None Supplied	Brown sand.
2569224	TANK PARCEL C ARISINGS	None Supplied	None Supplied	Brown gravelly sand with stones.

Analytical Report Number : 23-14757
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

Analytical Report Number : 23-14757
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-30021-2

Replaces Analytical Report Number: 23-30021, issue no. 1
Client sampling date amended.
Date sampled amended for all samples as per client's request

Project / Site name:	Don Street	**Samples received on:**	21/04/2023
Your job number:	14 554	**Samples instructed on/ Analysis started on:**	21/04/2023
Your order number:	004653	**Analysis completed by:**	28/04/2023
Report Issue Number:	2	**Report issued on:**	28/04/2023
Samples Analysed:	2 soil samples		

Izabela Wójcik
Signed:

Izabela Wójcik
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-30021
Project / Site name: Don Street
Your Order No: 004653

Lab Sample Number				2657252	2657253
Sample Reference				1-A	1-B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				19/04/2023	19/04/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	17	14
Total mass of sample received	kg	0.001	NONE	0.3	0.3

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	SCA	SCA

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.8	7.8
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	720	530
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.14	0.084
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	280	170
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	142	84.3
Sulphide	mg/kg	1	MCERTS	7.3	11
Total Sulphur	mg/kg	50	MCERTS	550	500
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.6	1.5

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.18	0.29
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	0.29	0.46
Fluorene	mg/kg	0.05	MCERTS	0.22	0.33
Phenanthrene	mg/kg	0.05	MCERTS	1.8	2.8
Anthracene	mg/kg	0.05	MCERTS	0.38	0.53
Fluoranthene	mg/kg	0.05	MCERTS	3	3.8
Pyrene	mg/kg	0.05	MCERTS	2.8	3.5
Benzo(a)anthracene	mg/kg	0.05	MCERTS	1.3	1.8
Chrysene	mg/kg	0.05	MCERTS	1.5	1.7
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	1.3	1.6
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.8	1
Benzo(a)pyrene	mg/kg	0.05	MCERTS	1.3	1.5
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.76	0.82
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.22	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.83	0.98

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	16.8	21.2

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Analytical Report Number: 23-30021
Project / Site name: Don Street
Your Order No: 004653

Lab Sample Number				2657252	2657253
Sample Reference				1-A	1-B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				19/04/2023	19/04/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Heavy Metals / Metalloids					
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	18	18
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	27	20
Copper (aqua regia extractable)	mg/kg	1	MCERTS	57	51
Lead (aqua regia extractable)	mg/kg	1	MCERTS	150	140
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.6	0.5
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	24	21
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	180	230
Petroleum Hydrocarbons					
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	< 2.0	< 2.0
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	6.9	< 4.0
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	17	10
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	47	40
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	12	< 10
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	83	61

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number : 23-30021
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2657252	1-A	None Supplied	None Supplied	Brown clay and sand with gravel.
2657253	1-B	None Supplied	None Supplied	Brown sand with gravel and vegetation.

Analytical Report Number : 23-30021
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

Analytical Report Number : 23-30021
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-30824

Project / Site name:	Don Street	**Samples received on:**	26/04/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	26/04/2023
Your order number:	004684	**Analysis completed by:**	04/05/2023
Report Issue Number:	1	**Report issued on:**	05/05/2023
Samples Analysed:	4 soil samples		

Signed:

Anna Goc
Junior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-30824
Project / Site name: Don Street
Your Order No: 004684

Lab Sample Number				2661809	2661810	2661811	2661812
Sample Reference				Stockpile 2-A	Stockpile 2-B	Stockpile 3-A	Stockpile 3-B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				25/04/2023	25/04/2023	25/04/2023	25/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	14	13	18	14
Total mass of sample received	kg	0.001	NONE	0.4	0.4	0.4	0.4

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	Chrysotile	Chrysotile
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Detected	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	0.011	< 0.001
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	0.011	< 0.001
Asbestos Analyst ID	N/A	N/A	N/A	KSZ	KSZ	KSZ	KSZ

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.7	7.7	8.6	8.1
Total Cyanide	mg/kg	1	MCERTS	< 1.0	1.2	< 1.0	2.2
Total Sulphate as SO4	mg/kg	50	MCERTS	720	630	860	560
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.19	0.14	0.18	0.09
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	380	290	360	180
Sulphide	mg/kg	1	MCERTS	22	13	6.8	7.1
Total Sulphur	mg/kg	50	MCERTS	640	460	510	390
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.7	1.7	1.8	1.5

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	17	15	30	33
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	19	23	27	27
Copper (aqua regia extractable)	mg/kg	1	MCERTS	46	50	51	48
Lead (aqua regia extractable)	mg/kg	1	MCERTS	130	140	130	110
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.3	0.4	0.8	1.2
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	23	22	28	21
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	260	230	270	150

Petroleum Hydrocarbons

TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	< 4.0	6.7	4.7	< 4.0
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	16	25	22	24
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	53	68	88	120
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	11	14	33	51
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	84	110	150	200

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Analytical Report Number: 23-30824
Project / Site name: Don Street
Your Order No: 004684

Lab Sample Number				2661809	2661810	2661811	2661812
Sample Reference				Stockpile 2-A	Stockpile 2-B	Stockpile 3-A	Stockpile 3-B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				25/04/2023	25/04/2023	25/04/2023	25/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
VOCs							
Chloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Chloroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Bromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Vinyl Chloride	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Trichlorofluoromethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1-Dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Cis-1,2-dichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1-Dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
2,2-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Trichloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,1,1-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,1-Dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Trans-1,2-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloromethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Trichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Dibromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Bromodichloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Cis-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Trans-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
1,1,2-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,3-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Dibromochloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dibromoethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Chlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,1,1,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Styrene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Tribromomethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
1,1,2,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Isopropylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Bromobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
n-Propylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
2-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
4-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,3,5-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
tert-Butylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,2,4-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
sec-Butylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,3-Dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
p-Isopropyltoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,4-Dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0

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Analytical Report Number: 23-30824
Project / Site name: Don Street
Your Order No: 004684

Lab Sample Number				2661809	2661810	2661811	2661812
Sample Reference				Stockpile 2-A	Stockpile 2-B	Stockpile 3-A	Stockpile 3-B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				25/04/2023	25/04/2023	25/04/2023	25/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
1,2-Dibromo-3-chloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Hexachlorobutadiene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2,3-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
SVOCs							
Aniline	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Phenol	mg/kg	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Hexachloroethane	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Isophorone	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
2-Nitrophenol	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	0.26	0.64	0.7	0.19
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	0.2	0.4	0.4	0.2
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthylene	mg/kg	0.05	MCERTS	0.07	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	0.54	0.62	0.66	0.37
2,4-Dinitrotoluene	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	0.3	0.3	0.4	< 0.2
4-Chlorophenyl phenyl ether	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
4-Nitroaniline	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Fluorene	mg/kg	0.05	MCERTS	0.51	0.5	0.57	0.31
Azobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	3.2	4	4.5	2.3
Anthracene	mg/kg	0.05	MCERTS	0.86	1	1.1	0.58
Carbazole	mg/kg	0.3	MCERTS	< 0.3	< 0.3	0.4	< 0.3
Dibutyl phthalate	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Anthraquinone	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Fluoranthene	mg/kg	0.05	MCERTS	4.8	5.7	5.6	3.1
Pyrene	mg/kg	0.05	MCERTS	4.4	5.3	5	2.9
Butyl benzyl phthalate	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3

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Analytical Report Number: 23-30824
Project / Site name: Don Street
Your Order No: 004684

Lab Sample Number				2661809	2661810	2661811	2661812
Sample Reference				Stockpile 2-A	Stockpile 2-B	Stockpile 3-A	Stockpile 3-B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				25/04/2023	25/04/2023	25/04/2023	25/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Benzo(a)anthracene	mg/kg	0.05	MCERTS	2.5	2.9	2.7	1.5
Chrysene	mg/kg	0.05	MCERTS	2	2.5	2.5	1.4
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	2.5	2.8	2.6	1.4
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	1.1	1.4	1.3	0.72
Benzo(a)pyrene	mg/kg	0.05	MCERTS	2.1	2.6	2.3	1.3
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	1.1	1.3	1.1	0.64
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.24	0.32	0.26	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	1.1	1.4	1.3	0.7

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 23-30824
Project / Site name: Don Street
Your Order No: 004684

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2661811	Stockpile 3-A		162	Loose Fibrous Debris	**Chrysotile**	0.011	**0.011**
2661812	Stockpile 3-B		173	Loose Fibrous Debris	**Chrysotile**	< 0.001	**< 0.001**

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

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Analytical Report Number : 23-30824
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2661809	Stockpile 2-A	None Supplied	None Supplied	Brown clay and sand with gravel and vegetation.
2661810	Stockpile 2-B	None Supplied	None Supplied	Brown clay and sand with gravel and vegetation.
2661811	Stockpile 3-A	None Supplied	None Supplied	Brown clay and sand with gravel and vegetation.
2661812	Stockpile 3-B	None Supplied	None Supplied	Brown clay and sand with gravel and brick.

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Analytical Report Number : 23-30824
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS

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Analytical Report Number : 23-30824
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-31573

Project / Site name:	Don Street	**Samples received on:**	02/05/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	02/05/2023
Your order number:	004710	**Analysis completed by:**	09/05/2023
Report Issue Number:	1	**Report issued on:**	09/05/2023
Samples Analysed:	2 soil samples		

Izabela Wójcik

Signed:

Izabela Wójcik
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-31573
Project / Site name: Don Street
Your Order No: 004710

Lab Sample Number				2666564	2666565
Sample Reference				Stockpile 4 A	Stockpile 4 B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				28/04/2023	28/04/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	76	72
Total mass of sample received	kg	0.001	NONE	0.4	0.4

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	Chrysotile
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	< 0.001
Asbestos Quantification Total	%	0.001	ISO 17025	-	< 0.001
Asbestos Analyst ID	N/A	N/A	N/A	SSZ	SSZ

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.4	7.6
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	1100	600
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.32	0.15
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	650	310
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	324	153
Sulphide	mg/kg	1	MCERTS	56	20
Total Sulphur	mg/kg	50	MCERTS	1200	720
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.8	1.6

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	14	9.4
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	16	13
Copper (aqua regia extractable)	mg/kg	1	MCERTS	36	25
Lead (aqua regia extractable)	mg/kg	1	MCERTS	79	56
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	17	13
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	87	85

Monoaromatics & Oxygenates

Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0

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Analytical Report Number: 23-31573
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Lab Sample Number				2666564	2666565
Sample Reference				Stockpile 4 A	Stockpile 4 B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				28/04/2023	28/04/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Petroleum Hydrocarbons					
TPH-CWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	1.8	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	6.3	3.2
TPH-CWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	24	16
TPH-CWG - Aliphatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	39	24
TPH-CWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	3.3	3.9
TPH-CWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	16	12
TPH-CWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	26	16
TPH-CWG - Aromatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	45	31
VOCs					
Chloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Chloroethane	µg/kg	5	NONE	< 5.0	< 5.0
Bromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Vinyl Chloride	µg/kg	5	NONE	< 5.0	< 5.0
Trichlorofluoromethane	µg/kg	5	NONE	< 5.0	< 5.0
1,1-Dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	5	NONE	< 5.0	< 5.0
Cis-1,2-dichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0
1,1-Dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
2,2-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Trichloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,1,1-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2-Dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,1-Dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Trans-1,2-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0
Tetrachloromethane	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Trichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Dibromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Bromodichloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Cis-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Trans-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0
1,1,2-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,3-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Dibromochloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Tetrachloroethene	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dibromoethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Chlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,1,1,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0

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Analytical Report Number: 23-31573
Project / Site name: Don Street
Your Order No: 004710

Lab Sample Number				2666564	2666565
Sample Reference				Stockpile 4 A	Stockpile 4 B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				28/04/2023	28/04/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
Styrene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Tribromomethane	µg/kg	5	NONE	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
1,1,2,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Isopropylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Bromobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
n-Propylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
2-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0
4-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,3,5-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
tert-Butylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2,4-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
sec-Butylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,3-Dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
p-Isopropyltoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2-Dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,4-Dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dibromo-3-chloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Hexachlorobutadiene	µg/kg	5	NONE	< 5.0	< 5.0
1,2,3-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0

SVOCs

Aniline	mg/kg	0.1	NONE	0.2	0.4
Phenol	mg/kg	0.2	ISO 17025	< 0.2	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	0.3	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Hexachloroethane	mg/kg	0.05	ISO 17025	< 0.05	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	< 0.2
Isophorone	mg/kg	0.2	MCERTS	< 0.2	< 0.2
2-Nitrophenol	mg/kg	0.3	NONE	< 0.3	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	0.39	0.22
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	NONE	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	NONE	< 0.2	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	0.2	0.4
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	< 0.1
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	NONE	< 0.1	< 0.1

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Analytical Report Number: 23-31573
Project / Site name: Don Street
Your Order No: 004710

Lab Sample Number				2666564	2666565
Sample Reference				Stockpile 4 A	Stockpile 4 B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				28/04/2023	28/04/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	0.39	1.3
2,4-Dinitrotoluene	mg/kg	0.2	NONE	< 0.2	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	0.2	0.7
4-Chlorophenyl phenyl ether	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	< 0.2
4-Nitroaniline	mg/kg	0.2	NONE	< 0.2	< 0.2
Fluorene	mg/kg	0.05	MCERTS	0.32	1.1
Azobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	3.3	8.4
Anthracene	mg/kg	0.05	MCERTS	0.64	1.9
Carbazole	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Dibutyl phthalate	mg/kg	0.2	NONE	< 0.2	< 0.2
Anthraquinone	mg/kg	0.3	NONE	< 0.3	< 0.3
Fluoranthene	mg/kg	0.05	MCERTS	4.1	9.4
Pyrene	mg/kg	0.05	MCERTS	3.5	8.5
Butyl benzyl phthalate	mg/kg	0.3	NONE	< 0.3	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	1.7	3.7
Chrysene	mg/kg	0.05	MCERTS	1.6	3.5
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	1.7	3.4
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.64	1.3
Benzo(a)pyrene	mg/kg	0.05	MCERTS	1.4	3.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.69	1.5
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	0.27
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.88	1.8

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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UKAS TESTING
4041

Analytical i2 Environmental Science

Analytical Report Number: 23-31573
Project / Site name: Don Street
Your Order No: 004710

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2666565	Stockpile 4 B		159	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

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Analytical Report Number : 23-31573
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* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2666564	Stockpile 4 A	None Supplied	None Supplied	Brown clay and sand with gravel.
2666565	Stockpile 4 B	None Supplied	None Supplied	Brown clay and sand with gravel.

Analytical Report Number : 23-31573
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025

Analytical Report Number : 23-31573
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-32252

Project / Site name:	Don Street	**Samples received on:**	04/05/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	05/05/2023
Your order number:	004752	**Analysis completed by:**	11/05/2023
Report Issue Number:	1	**Report issued on:**	11/05/2023
Samples Analysed:	2 soil samples		

Signed:

Elżbieta Suchy
Junior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-32252
Project / Site name: Don Street
Your Order No: 004752

Lab Sample Number				2670460	2670461
Sample Reference				Stockpile 5A	Stockpile 5B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				02/05/2023	02/05/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	20	17
Total mass of sample received	kg	0.001	NONE	0.3	0.3

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Amosite	-
Asbestos in Soil	Type	N/A	ISO 17025	Detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	< 0.001	-
Asbestos Quantification Total	%	0.001	ISO 17025	< 0.001	-
Asbestos Analyst ID	N/A	N/A	N/A	DSA	DSA

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.6	7.8
Total Cyanide	mg/kg	1	MCERTS	1.1	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	800	230
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.2	0.025
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	390	49
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	196	24.6
Sulphide	mg/kg	1	NONE	59	6.1
Total Sulphur	mg/kg	50	MCERTS	1500	210
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	2	1

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	22	12
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	21	28
Copper (aqua regia extractable)	mg/kg	1	MCERTS	52	29
Lead (aqua regia extractable)	mg/kg	1	MCERTS	120	27
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	27	49
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	240	82

Monoaromatics & Oxygenates

Benzene	µg/kg	5	NONE	< 5.0	< 5.0
Toluene	µg/kg	5	NONE	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	NONE	< 5.0	< 5.0
p & m-xylene	µg/kg	5	NONE	< 5.0	< 5.0
o-xylene	µg/kg	5	NONE	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0

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Analytical Report Number: 23-32252
Project / Site name: Don Street
Your Order No: 004752

Lab Sample Number				2670460	2670461
Sample Reference				Stockpile 5A	Stockpile 5B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				02/05/2023	02/05/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Petroleum Hydrocarbons					
TPH-CWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	NONE	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	NONE	5.8	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	NONE	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	NONE	24	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	38	< 10
TPH-CWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	NONE	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	NONE	5	< 2.0
TPH-CWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	NONE	25	< 10
TPH-CWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	NONE	40	< 10
TPH-CWG - Aromatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	70	< 10
VOCs					
Chloromethane	µg/kg	5	NONE	< 5.0	< 5.0
Chloroethane	µg/kg	5	NONE	< 5.0	< 5.0
Bromomethane	µg/kg	5	NONE	< 5.0	< 5.0
Vinyl Chloride	µg/kg	5	NONE	< 5.0	< 5.0
Trichlorofluoromethane	µg/kg	5	NONE	< 5.0	< 5.0
1,1-Dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	5	NONE	< 5.0	< 5.0
Cis-1,2-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0
1,1-Dichloroethane	µg/kg	5	NONE	< 5.0	< 5.0
2,2-Dichloropropane	µg/kg	5	NONE	< 5.0	< 5.0
Trichloromethane	µg/kg	5	NONE	< 5.0	< 5.0
1,1,1-Trichloroethane	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dichloroethane	µg/kg	5	NONE	< 5.0	< 5.0
1,1-Dichloropropene	µg/kg	5	NONE	< 5.0	< 5.0
Trans-1,2-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0
Benzene	µg/kg	5	NONE	< 5.0	< 5.0
Tetrachloromethane	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dichloropropane	µg/kg	5	NONE	< 5.0	< 5.0
Trichloroethene	µg/kg	5	NONE	< 5.0	< 5.0
Dibromomethane	µg/kg	5	NONE	< 5.0	< 5.0
Bromodichloromethane	µg/kg	5	NONE	< 5.0	< 5.0
Cis-1,3-dichloropropene	µg/kg	5	NONE	< 5.0	< 5.0
Trans-1,3-dichloropropene	µg/kg	5	NONE	< 5.0	< 5.0
Toluene	µg/kg	5	NONE	< 5.0	< 5.0
1,1,2-Trichloroethane	µg/kg	5	NONE	< 5.0	< 5.0
1,3-Dichloropropane	µg/kg	5	NONE	< 5.0	< 5.0
Dibromochloromethane	µg/kg	5	NONE	< 5.0	< 5.0
Tetrachloroethene	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dibromoethane	µg/kg	5	NONE	< 5.0	< 5.0
Chlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0
1,1,1,2-Tetrachloroethane	µg/kg	5	NONE	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	NONE	< 5.0	< 5.0

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Analytical Report Number: 23-32252
Project / Site name: Don Street
Your Order No: 004752

Lab Sample Number				2670460	2670461
Sample Reference				Stockpile 5A	Stockpile 5B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				02/05/2023	02/05/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
p & m-Xylene	µg/kg	5	NONE	< 5.0	< 5.0
Styrene	µg/kg	5	NONE	< 5.0	< 5.0
Tribromomethane	µg/kg	5	NONE	< 5.0	< 5.0
o-Xylene	µg/kg	5	NONE	< 5.0	< 5.0
1,1,2,2-Tetrachloroethane	µg/kg	5	NONE	< 5.0	< 5.0
Isopropylbenzene	µg/kg	5	NONE	< 5.0	< 5.0
Bromobenzene	µg/kg	5	NONE	< 5.0	< 5.0
n-Propylbenzene	µg/kg	5	NONE	< 5.0	< 5.0
2-Chlorotoluene	µg/kg	5	NONE	< 5.0	< 5.0
4-Chlorotoluene	µg/kg	5	NONE	< 5.0	< 5.0
1,3,5-Trimethylbenzene	µg/kg	5	NONE	< 5.0	< 5.0
tert-Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0
1,2,4-Trimethylbenzene	µg/kg	5	NONE	< 5.0	< 5.0
sec-Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0
1,3-Dichlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0
p-Isopropyltoluene	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dichlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0
1,4-Dichlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0
Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dibromo-3-chloropropane	µg/kg	5	NONE	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0
Hexachlorobutadiene	µg/kg	5	NONE	< 5.0	< 5.0
1,2,3-Trichlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0

SVOCs

Aniline	mg/kg	0.1	NONE	< 0.1	< 0.1
Phenol	mg/kg	0.2	NONE	< 0.2	< 0.2
2-Chlorophenol	mg/kg	0.1	NONE	< 0.1	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	NONE	< 0.2	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	NONE	< 0.2	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	NONE	< 0.1	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	NONE	< 0.2	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	NONE	< 0.1	< 0.1
2-Methylphenol	mg/kg	0.3	NONE	< 0.3	< 0.3
Hexachloroethane	mg/kg	0.05	NONE	< 0.05	< 0.05
Nitrobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	< 0.2
Isophorone	mg/kg	0.2	NONE	< 0.2	< 0.2
2-Nitrophenol	mg/kg	0.3	NONE	< 0.3	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	NONE	< 0.3	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	NONE	< 0.3	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3
Naphthalene	mg/kg	0.05	NONE	0.19	< 0.05
2,4-Dichlorophenol	mg/kg	0.3	NONE	< 0.3	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	< 0.1
Hexachlorobutadiene	mg/kg	0.1	NONE	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	NONE	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	NONE	< 0.2	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	0.2	< 0.1
2-Chloronaphthalene	mg/kg	0.1	NONE	< 0.1	< 0.1
Dimethylphthalate	mg/kg	0.1	NONE	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	NONE	< 0.1	< 0.1

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Analytical Report Number: 23-32252
Project / Site name: Don Street
Your Order No: 004752

Lab Sample Number				2670460	2670461
Sample Reference				Stockpile 5A	Stockpile 5B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				02/05/2023	02/05/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Acenaphthylene	mg/kg	0.05	NONE	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	NONE	1.1	0.07
2,4-Dinitrotoluene	mg/kg	0.2	NONE	< 0.2	< 0.2
Dibenzofuran	mg/kg	0.2	NONE	0.4	< 0.2
4-Chlorophenyl phenyl ether	mg/kg	0.3	NONE	< 0.3	< 0.3
Diethyl phthalate	mg/kg	0.2	NONE	< 0.2	< 0.2
4-Nitroaniline	mg/kg	0.2	NONE	< 0.2	< 0.2
Fluorene	mg/kg	0.05	NONE	0.93	0.06
Azobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	NONE	< 0.2	< 0.2
Hexachlorobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3
Phenanthrene	mg/kg	0.05	NONE	5.5	0.32
Anthracene	mg/kg	0.05	NONE	1.1	0.05
Carbazole	mg/kg	0.3	NONE	< 0.3	< 0.3
Dibutyl phthalate	mg/kg	0.2	NONE	< 0.2	< 0.2
Anthraquinone	mg/kg	0.3	NONE	0.4	< 0.3
Fluoranthene	mg/kg	0.05	NONE	6.3	0.35
Pyrene	mg/kg	0.05	NONE	6.6	0.32
Butyl benzyl phthalate	mg/kg	0.3	NONE	< 0.3	< 0.3
Benzo(a)anthracene	mg/kg	0.05	NONE	3.4	0.15
Chrysene	mg/kg	0.05	NONE	2.7	0.15
Benzo(b)fluoranthene	mg/kg	0.05	NONE	2.7	0.15
Benzo(k)fluoranthene	mg/kg	0.05	NONE	1.4	0.09
Benzo(a)pyrene	mg/kg	0.05	NONE	2.6	0.13
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	1.2	0.09
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	0.34	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	NONE	1.3	0.1

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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UKAS TESTING
4041

Analytical i2 Environmental Science

Analytical Report Number: 23-32252
Project / Site name: Don Street
Your Order No: 004752

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2670460	Stockpile 5A		162	Loose Fibres	**Amosite**	< 0.001	**< 0.001**

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 23-32252
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2670460	Stockpile 5A	None Supplied	None Supplied	Brown clay and sand with gravel.
2670461	Stockpile 5B	None Supplied	None Supplied	Brown clay and sand.

Analytical Report Number : 23-32252
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	NONE
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	NONE
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260	L073B-PL	W	NONE
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	NONE
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025

Analytical Report Number : 23-32252
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-32496

Project / Site name:	Don Street	**Samples received on:**	05/05/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	05/05/2023
Your order number:	004754	**Analysis completed by:**	12/05/2023
Report Issue Number:	1	**Report issued on:**	12/05/2023
Samples Analysed:	2 soil samples		

Izabela Wójcik

Signed:

Izabela Wójcik
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-32496
Project / Site name: Don Street
Your Order No: 004754

Lab Sample Number				2671655	2671656
Sample Reference				Stockpile 6 A	Stockpile 6 B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				04/05/2023	04/05/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	15	16
Total mass of sample received	kg	0.001	NONE	0.3	0.3

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile & Amosite	Chrysotile
Asbestos in Soil	Type	N/A	ISO 17025	Detected	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	0.006	< 0.001
Asbestos Quantification Total	%	0.001	ISO 17025	0.006	< 0.001
Asbestos Analyst ID	N/A	N/A	N/A	DSO	DSO

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.9	7.7
Total Cyanide	mg/kg	1	MCERTS	2.2	2.3
Total Sulphate as SO4	mg/kg	50	MCERTS	1500	1500
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.42	0.54
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	840	1100
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	419	539
Sulphide	mg/kg	1	NONE	14	34
Total Sulphur	mg/kg	50	MCERTS	950	1400
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	2	2.2

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	130	200
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	24	20
Copper (aqua regia extractable)	mg/kg	1	MCERTS	99	130
Lead (aqua regia extractable)	mg/kg	1	MCERTS	140	170
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.8	1
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	24	22
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	200	180

Monoaromatics & Oxygenates

Benzene	µg/kg	5	NONE	< 5.0	< 5.0
Toluene	µg/kg	5	NONE	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	NONE	< 5.0	< 5.0
p & m-xylene	µg/kg	5	NONE	< 5.0	< 5.0
o-xylene	µg/kg	5	NONE	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0

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Analytical Report Number: 23-32496
Project / Site name: Don Street
Your Order No: 004754

Lab Sample Number				2671655	2671656
Sample Reference				Stockpile 6 A	Stockpile 6 B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				04/05/2023	04/05/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Petroleum Hydrocarbons					
TPH-CWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	NONE	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	NONE	3.7	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	NONE	8.8	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	NONE	39	30
TPH-CWG - Aliphatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	52	35
TPH-CWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	NONE	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	NONE	5.7	2.4
TPH-CWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	NONE	35	27
TPH-CWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	NONE	88	66
TPH-CWG - Aromatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	130	96
VOCs					
Chloromethane	µg/kg	5	NONE	< 5.0	< 5.0
Chloroethane	µg/kg	5	NONE	< 5.0	< 5.0
Bromomethane	µg/kg	5	NONE	< 5.0	< 5.0
Vinyl Chloride	µg/kg	5	NONE	< 5.0	< 5.0
Trichlorofluoromethane	µg/kg	5	NONE	< 5.0	< 5.0
1,1-Dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	5	NONE	< 5.0	< 5.0
Cis-1,2-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0
1,1-Dichloroethane	µg/kg	5	NONE	< 5.0	< 5.0
2,2-Dichloropropane	µg/kg	5	NONE	< 5.0	< 5.0
Trichloromethane	µg/kg	5	NONE	< 5.0	< 5.0
1,1,1-Trichloroethane	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dichloroethane	µg/kg	5	NONE	< 5.0	< 5.0
1,1-Dichloropropene	µg/kg	5	NONE	< 5.0	< 5.0
Trans-1,2-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0
Benzene	µg/kg	5	NONE	< 5.0	< 5.0
Tetrachloromethane	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dichloropropane	µg/kg	5	NONE	< 5.0	< 5.0
Trichloroethene	µg/kg	5	NONE	< 5.0	< 5.0
Dibromomethane	µg/kg	5	NONE	< 5.0	< 5.0
Bromodichloromethane	µg/kg	5	NONE	< 5.0	< 5.0
Cis-1,3-dichloropropene	µg/kg	5	NONE	< 5.0	< 5.0
Trans-1,3-dichloropropene	µg/kg	5	NONE	< 5.0	< 5.0
Toluene	µg/kg	5	NONE	< 5.0	< 5.0
1,1,2-Trichloroethane	µg/kg	5	NONE	< 5.0	< 5.0
1,3-Dichloropropane	µg/kg	5	NONE	< 5.0	< 5.0
Dibromochloromethane	µg/kg	5	NONE	< 5.0	< 5.0
Tetrachloroethene	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dibromoethane	µg/kg	5	NONE	< 5.0	< 5.0
Chlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0
1,1,1,2-Tetrachloroethane	µg/kg	5	NONE	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	NONE	< 5.0	< 5.0

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Analytical Report Number: 23-32496
Project / Site name: Don Street
Your Order No: 004754

Lab Sample Number				2671655	2671656
Sample Reference				Stockpile 6 A	Stockpile 6 B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				04/05/2023	04/05/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
p & m-Xylene	µg/kg	5	NONE	< 5.0	< 5.0
Styrene	µg/kg	5	NONE	< 5.0	< 5.0
Tribromomethane	µg/kg	5	NONE	< 5.0	< 5.0
o-Xylene	µg/kg	5	NONE	< 5.0	< 5.0
1,1,2,2-Tetrachloroethane	µg/kg	5	NONE	< 5.0	< 5.0
Isopropylbenzene	µg/kg	5	NONE	< 5.0	< 5.0
Bromobenzene	µg/kg	5	NONE	< 5.0	< 5.0
n-Propylbenzene	µg/kg	5	NONE	< 5.0	< 5.0
2-Chlorotoluene	µg/kg	5	NONE	< 5.0	< 5.0
4-Chlorotoluene	µg/kg	5	NONE	< 5.0	< 5.0
1,3,5-Trimethylbenzene	µg/kg	5	NONE	< 5.0	< 5.0
tert-Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0
1,2,4-Trimethylbenzene	µg/kg	5	NONE	< 5.0	< 5.0
sec-Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0
1,3-Dichlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0
p-Isopropyltoluene	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dichlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0
1,4-Dichlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0
Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dibromo-3-chloropropane	µg/kg	5	NONE	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0
Hexachlorobutadiene	µg/kg	5	NONE	< 5.0	< 5.0
1,2,3-Trichlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0

SVOCs

Aniline	mg/kg	0.1	NONE	4	2.4
Phenol	mg/kg	0.2	NONE	< 0.2	< 0.2
2-Chlorophenol	mg/kg	0.1	NONE	< 0.1	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	NONE	< 0.2	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	NONE	< 0.2	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	NONE	< 0.1	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	NONE	< 0.2	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	NONE	< 0.1	< 0.1
2-Methylphenol	mg/kg	0.3	NONE	< 0.3	< 0.3
Hexachloroethane	mg/kg	0.05	NONE	< 0.05	< 0.05
Nitrobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	< 0.2
Isophorone	mg/kg	0.2	NONE	< 0.2	< 0.2
2-Nitrophenol	mg/kg	0.3	NONE	< 0.3	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	NONE	< 0.3	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	NONE	< 0.3	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3
Naphthalene	mg/kg	0.05	NONE	0.56	1.4
2,4-Dichlorophenol	mg/kg	0.3	NONE	< 0.3	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	< 0.1
Hexachlorobutadiene	mg/kg	0.1	NONE	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	NONE	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	NONE	< 0.2	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	0.5	1
2-Chloronaphthalene	mg/kg	0.1	NONE	< 0.1	< 0.1
Dimethylphthalate	mg/kg	0.1	NONE	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	NONE	< 0.1	< 0.1

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Analytical Report Number: 23-32496
Project / Site name: Don Street
Your Order No: 004754

Lab Sample Number				2671655	2671656
Sample Reference				Stockpile 6 A	Stockpile 6 B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				04/05/2023	04/05/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Acenaphthylene	mg/kg	0.05	NONE	0.23	0.17
Acenaphthene	mg/kg	0.05	NONE	1.6	2.2
2,4-Dinitrotoluene	mg/kg	0.2	NONE	< 0.2	< 0.2
Dibenzofuran	mg/kg	0.2	NONE	0.7	0.9
4-Chlorophenyl phenyl ether	mg/kg	0.3	NONE	< 0.3	< 0.3
Diethyl phthalate	mg/kg	0.2	NONE	< 0.2	< 0.2
4-Nitroaniline	mg/kg	0.2	NONE	< 0.2	< 0.2
Fluorene	mg/kg	0.05	NONE	1.2	1.6
Azobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	NONE	< 0.2	< 0.2
Hexachlorobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3
Phenanthrene	mg/kg	0.05	NONE	9.8	12
Anthracene	mg/kg	0.05	NONE	2.5	3.2
Carbazole	mg/kg	0.3	NONE	0.6	0.9
Dibutyl phthalate	mg/kg	0.2	NONE	< 0.2	< 0.2
Anthraquinone	mg/kg	0.3	NONE	0.6	0.5
Fluoranthene	mg/kg	0.05	NONE	13	15
Pyrene	mg/kg	0.05	NONE	12	14
Butyl benzyl phthalate	mg/kg	0.3	NONE	< 0.3	< 0.3
Benzo(a)anthracene	mg/kg	0.05	NONE	5.3	6.9
Chrysene	mg/kg	0.05	NONE	5.8	7.1
Benzo(b)fluoranthene	mg/kg	0.05	NONE	5.7	7.3
Benzo(k)fluoranthene	mg/kg	0.05	NONE	2.6	3.1
Benzo(a)pyrene	mg/kg	0.05	NONE	4.8	6.2
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	2.7	3.5
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	0.66	0.84
Benzo(ghi)perylene	mg/kg	0.05	NONE	3.2	3.9

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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UKAS TESTING
4041

Analytical i2 Environmental Science

Analytical Report Number: 23-32496
Project / Site name: Don Street
Your Order No: 004754

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2671655	Stockpile 6 A		152	Loose Fibres & Loose Fibrous Debris	**Chrysotile & Amosite**	0.006	**0.006**
2671656	Stockpile 6 B		155	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 23-32496
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2671655	Stockpile 6 A	None Supplied	None Supplied	Brown loam and clay with gravel and vegetation.
2671656	Stockpile 6 B	None Supplied	None Supplied	Brown loam and clay with gravel and vegetation.

Analytical Report Number : 23-32496
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	NONE
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	NONE
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260	L073B-PL	W	NONE
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	NONE
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025

Analytical Report Number : 23-32496
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-35733

Project / Site name:	Don Street	**Samples received on:**	24/05/2023
Your job number:	14 554	**Samples instructed on/ Analysis started on:**	24/05/2023
Your order number:	004922	**Analysis completed by:**	31/05/2023
Report Issue Number:	1	**Report issued on:**	01/06/2023
Samples Analysed:	2 soil samples		

Signed:

Joanna Wawrzeczko
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-35733
Project / Site name: Don Street
Your Order No: 004922

Lab Sample Number				2690909	2690910
Sample Reference				Stockpile 7 A	Stockpile 7 B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				18/05/2023	18/05/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	17	19
Total mass of sample received	kg	0.001	NONE	0.4	0.4

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile	Chrysotile
Asbestos in Soil	Type	N/A	ISO 17025	Detected	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	< 0.001	0.002
Asbestos Quantification Total	%	0.001	ISO 17025	< 0.001	0.002
Asbestos Analyst ID	N/A	N/A	N/A	ASE	ASE

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.5	7.7
Total Cyanide	mg/kg	1	MCERTS	< 1.0	1.1
Total Sulphate as SO4	mg/kg	50	MCERTS	2100	2000
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.72	0.77
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	1400	1500
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	715	771
Sulphide	mg/kg	1	NONE	11	10
Total Sulphur	mg/kg	50	MCERTS	1500	1500
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.8	1.9

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	18	22
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	19	24
Copper (aqua regia extractable)	mg/kg	1	MCERTS	49	54
Lead (aqua regia extractable)	mg/kg	1	MCERTS	110	110
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	29	30
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	320	420

Monoaromatics & Oxygenates

Benzene	µg/kg	5	NONE	< 5.0	< 5.0
Toluene	µg/kg	5	NONE	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	NONE	< 5.0	< 5.0
p & m-xylene	µg/kg	5	NONE	< 5.0	< 5.0
o-xylene	µg/kg	5	NONE	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0

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Analytical Report Number: 23-35733
Project / Site name: Don Street
Your Order No: 004922

Lab Sample Number				2690909	2690910
Sample Reference				Stockpile 7 A	Stockpile 7 B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				18/05/2023	18/05/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Petroleum Hydrocarbons					
TPH-CWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	NONE	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	NONE	3.7	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	NONE	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	NONE	29	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	40	< 10
TPH-CWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	NONE	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	NONE	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	NONE	12	< 10
TPH-CWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	NONE	38	< 10
TPH-CWG - Aromatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	51	11
VOCs					
Chloromethane##	µg/kg	5	NONE	< 5.0	< 5.0
Chloroethane	µg/kg	5	NONE	< 5.0	< 5.0
Bromomethane	µg/kg	5	NONE	< 5.0	< 5.0
Vinyl Chloride	µg/kg	5	NONE	< 5.0	< 5.0
Trichlorofluoromethane	µg/kg	5	NONE	< 5.0	< 5.0
1,1-Dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	5	NONE	< 5.0	< 5.0
Cis-1,2-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0
1,1-Dichloroethane##	µg/kg	5	NONE	< 5.0	< 5.0
2,2-Dichloropropane	µg/kg	5	NONE	< 5.0	< 5.0
Trichloromethane##	µg/kg	5	NONE	< 5.0	< 5.0
1,1,1-Trichloroethane##	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dichloroethane	µg/kg	5	NONE	< 5.0	< 5.0
1,1-Dichloropropene	µg/kg	5	NONE	< 5.0	< 5.0
Trans-1,2-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0
Benzene	µg/kg	5	NONE	< 5.0	< 5.0
Tetrachloromethane	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dichloropropane	µg/kg	5	NONE	< 5.0	< 5.0
Trichloroethene	µg/kg	5	NONE	< 5.0	< 5.0
Dibromomethane	µg/kg	5	NONE	< 5.0	< 5.0
Bromodichloromethane##	µg/kg	5	NONE	< 5.0	< 5.0
Cis-1,3-dichloropropene	µg/kg	5	NONE	< 5.0	< 5.0
Trans-1,3-dichloropropene	µg/kg	5	NONE	< 5.0	< 5.0
Toluene	µg/kg	5	NONE	< 5.0	< 5.0
1,1,2-Trichloroethane##	µg/kg	5	NONE	< 5.0	< 5.0
1,3-Dichloropropane	µg/kg	5	NONE	< 5.0	< 5.0
Dibromochloromethane	µg/kg	5	NONE	< 5.0	< 5.0
Tetrachloroethene##	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dibromoethane	µg/kg	5	NONE	< 5.0	< 5.0
Chlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0
1,1,1,2-Tetrachloroethane##	µg/kg	5	NONE	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	NONE	< 5.0	< 5.0

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Analytical Report Number: 23-35733
Project / Site name: Don Street
Your Order No: 004922

Lab Sample Number				2690909	2690910
Sample Reference				Stockpile 7 A	Stockpile 7 B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				18/05/2023	18/05/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
p & m-Xylene	µg/kg	5	NONE	< 5.0	< 5.0
Styrene###	µg/kg	5	NONE	< 5.0	< 5.0
Tribromomethane	µg/kg	5	NONE	< 5.0	< 5.0
o-Xylene	µg/kg	5	NONE	< 5.0	< 5.0
1,1,2,2-Tetrachloroethane	µg/kg	5	NONE	< 5.0	< 5.0
Isopropylbenzene###	µg/kg	5	NONE	< 5.0	< 5.0
Bromobenzene	µg/kg	5	NONE	< 5.0	< 5.0
n-Propylbenzene	µg/kg	5	NONE	< 5.0	< 5.0
2-Chlorotoluene##	µg/kg	5	NONE	< 5.0	< 5.0
4-Chlorotoluene	µg/kg	5	NONE	< 5.0	< 5.0
1,3,5-Trimethylbenzene	µg/kg	5	NONE	< 5.0	< 5.0
tert-Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0
1,2,4-Trimethylbenzene	µg/kg	5	NONE	< 5.0	< 5.0
sec-Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0
1,3-Dichlorobenzene##	µg/kg	5	NONE	< 5.0	< 5.0
p-Isopropyltoluene	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dichlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0
1,4-Dichlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0
Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dibromo-3-chloropropane	µg/kg	5	NONE	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0
Hexachlorobutadiene	µg/kg	5	NONE	< 5.0	< 5.0
1,2,3-Trichlorobenzene###	µg/kg	5	NONE	< 5.0	< 5.0

SVOCs

Aniline	mg/kg	0.1	NONE	< 0.1	< 0.1
Phenol	mg/kg	0.2	NONE	< 0.2	< 0.2
2-Chlorophenol	mg/kg	0.1	NONE	< 0.1	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	NONE	< 0.2	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	NONE	< 0.2	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	NONE	< 0.1	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	NONE	< 0.2	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	NONE	< 0.1	< 0.1
2-Methylphenol	mg/kg	0.3	NONE	< 0.3	< 0.3
Hexachloroethane	mg/kg	0.05	NONE	< 0.05	< 0.05
Nitrobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	< 0.2
Isophorone	mg/kg	0.2	NONE	< 0.2	< 0.2
2-Nitrophenol	mg/kg	0.3	NONE	< 0.3	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	NONE	< 0.3	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	NONE	< 0.3	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3
Naphthalene	mg/kg	0.05	NONE	0.35	0.32
2,4-Dichlorophenol	mg/kg	0.3	NONE	< 0.3	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	< 0.1
Hexachlorobutadiene	mg/kg	0.1	NONE	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	NONE	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	NONE	< 0.2	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	0.3	0.3
2-Chloronaphthalene	mg/kg	0.1	NONE	< 0.1	< 0.1
Dimethylphthalate	mg/kg	0.1	NONE	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	NONE	< 0.1	< 0.1

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Analytical Report Number: 23-35733
Project / Site name: Don Street
Your Order No: 004922

Lab Sample Number				2690909	2690910
Sample Reference				Stockpile 7 A	Stockpile 7 B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				18/05/2023	18/05/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Acenaphthylene	mg/kg	0.05	NONE	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	NONE	0.44	0.79
2,4-Dinitrotoluene	mg/kg	0.2	NONE	< 0.2	< 0.2
Dibenzofuran	mg/kg	0.2	NONE	0.3	0.4
4-Chlorophenyl phenyl ether	mg/kg	0.3	NONE	< 0.3	< 0.3
Diethyl phthalate	mg/kg	0.2	NONE	< 0.2	< 0.2
4-Nitroaniline	mg/kg	0.2	NONE	< 0.2	< 0.2
Fluorene	mg/kg	0.05	NONE	0.53	0.94
Azobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	NONE	< 0.2	< 0.2
Hexachlorobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3
Phenanthrene	mg/kg	0.05	NONE	3	5.3
Anthracene	mg/kg	0.05	NONE	1	1.8
Carbazole	mg/kg	0.3	NONE	0.3	0.4
Dibutyl phthalate	mg/kg	0.2	NONE	< 0.2	< 0.2
Anthraquinone	mg/kg	0.3	NONE	< 0.3	< 0.3
Fluoranthene	mg/kg	0.05	NONE	4.8	7.1
Pyrene	mg/kg	0.05	NONE	4.1	6.6
Butyl benzyl phthalate	mg/kg	0.3	NONE	< 0.3	< 0.3
Benzo(a)anthracene	mg/kg	0.05	NONE	2	3
Chrysene	mg/kg	0.05	NONE	2	2.9
Benzo(b)fluoranthene	mg/kg	0.05	NONE	2.2	3
Benzo(k)fluoranthene	mg/kg	0.05	NONE	0.89	1.4
Benzo(a)pyrene	mg/kg	0.05	NONE	1.8	2.6
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	1.1	1.5
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	0.34	0.42
Benzo(ghi)perylene	mg/kg	0.05	NONE	1.3	1.7

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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The results included within the report relate only to the sample(s) submitted for testing.

UKAS TESTING
4041

Analytical i2 Environmental Science

Analytical Report Number: 23-35733
Project / Site name: Don Street
Your Order No: 004922

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2690909	Stockpile 7 A		158	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**
2690910	Stockpile 7 B		156	Loose Fibrous Debris	**Chrysotile**	0.002	**0.002**

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 23-35733
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2690909	Stockpile 7 A	None Supplied	None Supplied	Brown clay and sand with gravel and vegetation.
2690910	Stockpile 7 B	None Supplied	None Supplied	Brown clay and loam with gravel and vegetation.

Analytical Report Number : 23-35733
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	NONE
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	NONE
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260	L073B-PL	W	NONE
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	NONE
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025

Analytical Report Number : 23-35733
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

- Quality control parameter has a high recovery (outside of limit); however the associated result is below the reporting limit, other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.
- Quality control parameter failure associated with this result; other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.

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Analytical Report Number : 23-35005

Project / Site name:	Don Street	**Samples received on:**	19/05/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	22/05/2023
Your order number:	004885	**Analysis completed by:**	30/05/2023
Report Issue Number:	1	**Report issued on:**	30/05/2023
Samples Analysed:	2 soil samples		

Signed:

Joanna Wawrzeczko
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-35005
Project / Site name: Don Street
Your Order No: 004885

Lab Sample Number				2686572	2686573
Sample Reference				Stockpile 8 A	Stockpile 8 B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				18/05/2023	18/05/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	15	13
Total mass of sample received	kg	0.001	NONE	0.3	0.3

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile	-
Asbestos in Soil	Type	N/A	ISO 17025	Detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	< 0.001	-
Asbestos Quantification Total	%	0.001	ISO 17025	< 0.001	-
Asbestos Analyst ID	N/A	N/A	N/A	SPU	SPU

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.9	7.8
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	570	480
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.071	0.032
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	140	64
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	70.8	31.8
Sulphide	mg/kg	1	NONE	2.2	< 1.0
Total Sulphur	mg/kg	50	MCERTS	320	310
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.7	1.8

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	18	16
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	19	18
Copper (aqua regia extractable)	mg/kg	1	MCERTS	45	45
Lead (aqua regia extractable)	mg/kg	1	MCERTS	100	95
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	19	18
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	100	99

Monoaromatics & Oxygenates

Benzene	µg/kg	5	NONE	< 5.0	< 5.0
Toluene	µg/kg	5	NONE	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	NONE	< 5.0	< 5.0
p & m-xylene	µg/kg	5	NONE	< 5.0	< 5.0
o-xylene	µg/kg	5	NONE	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0

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Analytical Report Number: 23-35005
Project / Site name: Don Street
Your Order No: 004885

Lab Sample Number				2686572	2686573
Sample Reference				Stockpile 8 A	Stockpile 8 B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				18/05/2023	18/05/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Petroleum Hydrocarbons					
TPH-CWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	NONE	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	NONE	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	NONE	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	NONE	< 8.0	49
TPH-CWG - Aliphatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	< 10	53
TPH-CWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	NONE	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	NONE	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	NONE	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	NONE	13	39
TPH-CWG - Aromatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	17	46
VOCs					
Chloromethane	µg/kg	5	NONE	< 5.0	< 5.0
Chloroethane	µg/kg	5	NONE	< 5.0	< 5.0
Bromomethane	µg/kg	5	NONE	< 5.0	< 5.0
Vinyl Chloride	µg/kg	5	NONE	< 5.0	< 5.0
Trichlorofluoromethane	µg/kg	5	NONE	< 5.0	< 5.0
1,1-Dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	5	NONE	< 5.0	< 5.0
Cis-1,2-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0
1,1-Dichloroethane	µg/kg	5	NONE	< 5.0	< 5.0
2,2-Dichloropropane	µg/kg	5	NONE	< 5.0	< 5.0
Trichloromethane	µg/kg	5	NONE	< 5.0	< 5.0
1,1,1-Trichloroethane	µg/kg	5	NONE	< 5.0##	< 5.0##
1,2-Dichloroethane	µg/kg	5	NONE	< 5.0	< 5.0
1,1-Dichloropropene	µg/kg	5	NONE	< 5.0	< 5.0
Trans-1,2-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0
Benzene	µg/kg	5	NONE	< 5.0	< 5.0
Tetrachloromethane	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dichloropropane	µg/kg	5	NONE	< 5.0	< 5.0
Trichloroethene	µg/kg	5	NONE	< 5.0	< 5.0
Dibromomethane	µg/kg	5	NONE	< 5.0##	< 5.0##
Bromodichloromethane	µg/kg	5	NONE	< 5.0##	< 5.0##
Cis-1,3-dichloropropene	µg/kg	5	NONE	< 5.0	< 5.0
Trans-1,3-dichloropropene	µg/kg	5	NONE	< 5.0##	< 5.0##
Toluene	µg/kg	5	NONE	< 5.0	< 5.0
1,1,2-Trichloroethane	µg/kg	5	NONE	< 5.0	< 5.0
1,3-Dichloropropane	µg/kg	5	NONE	< 5.0	< 5.0
Dibromochloromethane	µg/kg	5	NONE	< 5.0	< 5.0
Tetrachloroethene	µg/kg	5	NONE	< 5.0##	< 5.0##
1,2-Dibromoethane	µg/kg	5	NONE	< 5.0	< 5.0
Chlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0
1,1,1,2-Tetrachloroethane	µg/kg	5	NONE	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	NONE	< 5.0	< 5.0

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Analytical Report Number: 23-35005
Project / Site name: Don Street
Your Order No: 004885

Lab Sample Number				2686572	2686573
Sample Reference				Stockpile 8 A	Stockpile 8 B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				18/05/2023	18/05/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
p & m-Xylene	µg/kg	5	NONE	< 5.0	< 5.0
Styrene	µg/kg	5	NONE	< 5.0	< 5.0
Tribromomethane	µg/kg	5	NONE	< 5.0	< 5.0
o-Xylene	µg/kg	5	NONE	< 5.0	< 5.0
1,1,2,2-Tetrachloroethane	µg/kg	5	NONE	< 5.0	< 5.0
Isopropylbenzene	µg/kg	5	NONE	< 5.0	< 5.0
Bromobenzene	µg/kg	5	NONE	< 5.0	< 5.0
n-Propylbenzene	µg/kg	5	NONE	< 5.0	< 5.0
2-Chlorotoluene	µg/kg	5	NONE	< 5.0	< 5.0
4-Chlorotoluene	µg/kg	5	NONE	< 5.0	< 5.0
1,3,5-Trimethylbenzene	µg/kg	5	NONE	< 5.0	< 5.0
tert-Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0
1,2,4-Trimethylbenzene	µg/kg	5	NONE	< 5.0	< 5.0
sec-Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0
1,3-Dichlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0
p-Isopropyltoluene	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dichlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0
1,4-Dichlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0
Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dibromo-3-chloropropane	µg/kg	5	NONE	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0
Hexachlorobutadiene	µg/kg	5	NONE	< 5.0	< 5.0
1,2,3-Trichlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0

SVOCs

Aniline	mg/kg	0.1	NONE	< 0.1	< 0.1
Phenol	mg/kg	0.2	NONE	< 0.2	< 0.2
2-Chlorophenol	mg/kg	0.1	NONE	< 0.1	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	NONE	< 0.2	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	NONE	< 0.2	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	NONE	< 0.1	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	NONE	< 0.2	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	NONE	< 0.1	< 0.1
2-Methylphenol	mg/kg	0.3	NONE	< 0.3	< 0.3
Hexachloroethane	mg/kg	0.05	NONE	< 0.05	< 0.05
Nitrobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	< 0.2
Isophorone	mg/kg	0.2	NONE	< 0.2	< 0.2
2-Nitrophenol	mg/kg	0.3	NONE	< 0.3	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	NONE	< 0.3	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	NONE	< 0.3	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3
Naphthalene	mg/kg	0.05	NONE	0.11	0.17
2,4-Dichlorophenol	mg/kg	0.3	NONE	< 0.3	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	< 0.1
Hexachlorobutadiene	mg/kg	0.1	NONE	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	NONE	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	NONE	< 0.2	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	0.2	0.2
2-Chloronaphthalene	mg/kg	0.1	NONE	< 0.1	< 0.1
Dimethylphthalate	mg/kg	0.1	NONE	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	NONE	< 0.1	< 0.1

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Analytical Report Number: 23-35005
Project / Site name: Don Street
Your Order No: 004885

Lab Sample Number				2686572	2686573
Sample Reference				Stockpile 8 A	Stockpile 8 B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				18/05/2023	18/05/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Acenaphthylene	mg/kg	0.05	NONE	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	NONE	0.3	0.26
2,4-Dinitrotoluene	mg/kg	0.2	NONE	< 0.2	< 0.2
Dibenzofuran	mg/kg	0.2	NONE	< 0.2	< 0.2
4-Chlorophenyl phenyl ether	mg/kg	0.3	NONE	< 0.3	< 0.3
Diethyl phthalate	mg/kg	0.2	NONE	< 0.2	< 0.2
4-Nitroaniline	mg/kg	0.2	NONE	< 0.2	< 0.2
Fluorene	mg/kg	0.05	NONE	0.19	0.19
Azobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	NONE	< 0.2	< 0.2
Hexachlorobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3
Phenanthrene	mg/kg	0.05	NONE	2.2	1.7
Anthracene	mg/kg	0.05	NONE	0.39	0.34
Carbazole	mg/kg	0.3	NONE	< 0.3	< 0.3
Dibutyl phthalate	mg/kg	0.2	NONE	< 0.2	< 0.2
Anthraquinone	mg/kg	0.3	NONE	< 0.3	< 0.3
Fluoranthene	mg/kg	0.05	NONE	2.9	2.7
Pyrene	mg/kg	0.05	NONE	2.7	2.6
Butyl benzyl phthalate	mg/kg	0.3	NONE	< 0.3	< 0.3
Benzo(a)anthracene	mg/kg	0.05	NONE	1.3	1.4
Chrysene	mg/kg	0.05	NONE	1.3	1.3
Benzo(b)fluoranthene	mg/kg	0.05	NONE	1.5	1.8
Benzo(k)fluoranthene	mg/kg	0.05	NONE	0.65	0.72
Benzo(a)pyrene	mg/kg	0.05	NONE	1.2	1.6
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	0.71	0.99
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	0.15	0.19
Benzo(ghi)perylene	mg/kg	0.05	NONE	0.78	1.1

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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The results included within the report relate only to the sample(s) submitted for testing.

UKAS TESTING
4041

Analytical i2 Environmental Science

Analytical Report Number: 23-35005
Project / Site name: Don Street
Your Order No: 004885

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2686572	Stockpile 8 A		176	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 23-35005
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2686572	Stockpile 8 A	None Supplied	None Supplied	Brown clay with gravel and vegetation.
2686573	Stockpile 8 B	None Supplied	None Supplied	Brown loam with gravel and vegetation.

Analytical Report Number : 23-35005
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	NONE
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	NONE
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260	L073B-PL	W	NONE
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	NONE
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025

Analytical Report Number : 23-35005
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

- Quality control parameter has a high recovery (outside of limit); however the associated result is below the reporting limit, other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.

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Analytical Report Number : 23-35717

Project / Site name:	Don Street	**Samples received on:**	24/05/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	24/05/2023
Your order number:	004921	**Analysis completed by:**	01/06/2023
Report Issue Number:	1	**Report issued on:**	01/06/2023
Samples Analysed:	2 soil samples		

Signed:

Anna Goc
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-35717
Project / Site name: Don Street
Your Order No: 004921

Lab Sample Number				2690870	2690871
Sample Reference				Stockpile 9 A	Stockpile 9 B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				23/05/2023	23/05/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	12	12
Total mass of sample received	kg	0.001	NONE	0.4	0.4

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile	Chrysotile & Amosite
Asbestos in Soil	Type	N/A	ISO 17025	Detected	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	< 0.001	< 0.001
Asbestos Quantification Total	%	0.001	ISO 17025	< 0.001	< 0.001
Asbestos Analyst ID	N/A	N/A	N/A	EC	EC

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.7	7.5
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	840	930
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.25	0.25
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	510	490
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	254	246
Sulphide	mg/kg	1	NONE	9.6	20
Total Sulphur	mg/kg	50	MCERTS	950	640
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	2.1	1.9

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	20	17
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.8	0.7
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	22	19
Copper (aqua regia extractable)	mg/kg	1	MCERTS	68	60
Lead (aqua regia extractable)	mg/kg	1	MCERTS	180	140
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	25	22
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	380	370

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	NONE	1.7	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	NONE	2.2	2.5
TPH-CWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	NONE	< 8.0	8
TPH-CWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	NONE	16	33
TPH-CWG - Aliphatic >EC35 - EC40 $_{EH\_CU\_1D\_AL}$	mg/kg	10	NONE	< 10	11

TPH-CWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	NONE	< 1.0	< 1.0

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Analytical Report Number: 23-35717
Project / Site name: Don Street
Your Order No: 004921

Lab Sample Number				2690870	2690871
Sample Reference				Stockpile 9 A	Stockpile 9 B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				23/05/2023	23/05/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
TPH-CWG - Aromatic >EC12 - EC16 EH_CU_1D_AR	mg/kg	2	NONE	11	< 2.0
TPH-CWG - Aromatic >EC16 - EC21 EH_CU_1D_AR	mg/kg	10	NONE	41	11
TPH-CWG - Aromatic >EC21 - EC35 EH_CU_1D_AR	mg/kg	10	NONE	67	39
TPH-CWG - Aromatic >EC35 - EC40 EH_CU_1D_AR	mg/kg	10	NONE	11	14
TPH Total C5 - C40 EH_CU+HS_1D_TOTAL	mg/kg	10	NONE	160	120

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Analytical Report Number: 23-35717
Project / Site name: Don Street
Your Order No: 004921

Lab Sample Number				2690870	2690871
Sample Reference				Stockpile 9 A	Stockpile 9 B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				23/05/2023	23/05/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
VOCs					
Chloromethane	µg/kg	5	NONE	< 5.0	< 5.0
Chloroethane	µg/kg	5	NONE	< 5.0	< 5.0
Bromomethane	µg/kg	5	NONE	< 5.0	< 5.0
Vinyl Chloride	µg/kg	5	NONE	< 5.0	< 5.0
Trichlorofluoromethane	µg/kg	5	NONE	< 5.0	< 5.0
1,1-Dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	5	NONE	< 5.0	< 5.0
Cis-1,2-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0
1,1-Dichloroethane	µg/kg	5	NONE	< 5.0	< 5.0
2,2-Dichloropropane	µg/kg	5	NONE	< 5.0	< 5.0
Trichloromethane	µg/kg	5	NONE	< 5.0	< 5.0
1,1,1-Trichloroethane##	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dichloroethane	µg/kg	5	NONE	< 5.0	< 5.0
1,1-Dichloropropene##	µg/kg	5	NONE	< 5.0	< 5.0
Trans-1,2-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0
Benzene	µg/kg	5	NONE	< 5.0	< 5.0
Tetrachloromethane	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dichloropropane	µg/kg	5	NONE	< 5.0	< 5.0
Trichloroethene##	µg/kg	5	NONE	< 5.0	< 5.0
Dibromomethane	µg/kg	5	NONE	< 5.0	< 5.0
Bromodichloromethane	µg/kg	5	NONE	< 5.0	< 5.0
Cis-1,3-dichloropropene##	µg/kg	5	NONE	< 5.0	< 5.0
Trans-1,3-dichloropropene	µg/kg	5	NONE	< 5.0	< 5.0
Toluene##	µg/kg	5	NONE	< 5.0	< 5.0
1,1,2-Trichloroethane	µg/kg	5	NONE	< 5.0	< 5.0
1,3-Dichloropropane	µg/kg	5	NONE	< 5.0	< 5.0
Dibromochloromethane	µg/kg	5	NONE	< 5.0	< 5.0
Tetrachloroethene	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dibromoethane	µg/kg	5	NONE	< 5.0	< 5.0
Chlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0
1,1,1,2-Tetrachloroethane	µg/kg	5	NONE	< 5.0	< 5.0
Ethylbenzene##	µg/kg	5	NONE	< 5.0	< 5.0
p & m-Xylene##	µg/kg	5	NONE	< 5.0	< 5.0
Styrene	µg/kg	5	NONE	< 5.0	< 5.0
Tribromomethane	µg/kg	5	NONE	< 5.0	< 5.0
o-Xylene##	µg/kg	5	NONE	< 5.0	< 5.0
1,1,2,2-Tetrachloroethane	µg/kg	5	NONE	< 5.0	< 5.0
Isopropylbenzene	µg/kg	5	NONE	< 5.0	< 5.0
Bromobenzene	µg/kg	5	NONE	< 5.0	< 5.0
n-Propylbenzene	µg/kg	5	NONE	< 5.0	< 5.0
2-Chlorotoluene##	µg/kg	5	NONE	< 5.0	< 5.0
4-Chlorotoluene	µg/kg	5	NONE	< 5.0	< 5.0
1,3,5-Trimethylbenzene##	µg/kg	5	NONE	< 5.0	< 5.0
tert-Butylbenzene##	µg/kg	5	NONE	< 5.0	< 5.0
1,2,4-Trimethylbenzene	µg/kg	5	NONE	< 5.0	< 5.0
sec-Butylbenzene##	µg/kg	5	NONE	< 5.0	< 5.0
1,3-Dichlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0
p-Isopropyltoluene	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dichlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0
1,4-Dichlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0
Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0

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Analytical Report Number: 23-35717
Project / Site name: Don Street
Your Order No: 004921

Lab Sample Number				2690870	2690871
Sample Reference				Stockpile 9 A	Stockpile 9 B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				23/05/2023	23/05/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
1,2-Dibromo-3-chloropropane	µg/kg	5	NONE	< 5.0	< 5.0
1,2,4-Trichlorobenzene##	µg/kg	5	NONE	< 5.0	< 5.0
Hexachlorobutadiene	µg/kg	5	NONE	< 5.0	< 5.0
1,2,3-Trichlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0

SVOCs

Aniline	mg/kg	0.1	NONE	< 0.1	< 0.1
Phenol	mg/kg	0.2	NONE	< 0.2	< 0.2
2-Chlorophenol	mg/kg	0.1	NONE	< 0.1	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	NONE	< 0.2	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	NONE	< 0.2	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	NONE	< 0.1	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	NONE	< 0.2	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	NONE	< 0.1	< 0.1
2-Methylphenol	mg/kg	0.3	NONE	< 0.3	< 0.3
Hexachloroethane	mg/kg	0.05	NONE	< 0.05	< 0.05
Nitrobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	< 0.2
Isophorone	mg/kg	0.2	NONE	< 0.2	< 0.2
2-Nitrophenol	mg/kg	0.3	NONE	< 0.3	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	NONE	< 0.3	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	NONE	< 0.3	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3
Naphthalene	mg/kg	0.05	NONE	0.15	0.31
2,4-Dichlorophenol	mg/kg	0.3	NONE	< 0.3	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	< 0.1
Hexachlorobutadiene	mg/kg	0.1	NONE	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	NONE	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	NONE	< 0.2	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	0.2	0.6
2-Chloronaphthalene	mg/kg	0.1	NONE	< 0.1	< 0.1
Dimethylphthalate	mg/kg	0.1	NONE	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	NONE	< 0.1	< 0.1
Acenaphthylene	mg/kg	0.05	NONE	< 0.05	1.9
Acenaphthene	mg/kg	0.05	NONE	0.24	0.82
2,4-Dinitrotoluene	mg/kg	0.2	NONE	< 0.2	< 0.2
Dibenzofuran	mg/kg	0.2	NONE	< 0.2	1.2
4-Chlorophenyl phenyl ether	mg/kg	0.3	NONE	< 0.3	< 0.3
Diethyl phthalate	mg/kg	0.2	NONE	< 0.2	< 0.2
4-Nitroaniline	mg/kg	0.2	NONE	< 0.2	< 0.2
Fluorene	mg/kg	0.05	NONE	0.35	2.1
Azobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	NONE	< 0.2	< 0.2
Hexachlorobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3
Phenanthrene	mg/kg	0.05	NONE	2.1	16
Anthracene	mg/kg	0.05	NONE	0.73	4.8
Carbazole	mg/kg	0.3	NONE	< 0.3	1.5
Dibutyl phthalate	mg/kg	0.2	NONE	< 0.2	0.2
Anthraquinone	mg/kg	0.3	NONE	< 0.3	1.3
Fluoranthene	mg/kg	0.05	NONE	3.5	17
Pyrene	mg/kg	0.05	NONE	3.3	16
Butyl benzyl phthalate	mg/kg	0.3	NONE	< 0.3	< 0.3

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Analytical Report Number: 23-35717
Project / Site name: Don Street
Your Order No: 004921

Lab Sample Number				2690870	2690871
Sample Reference				Stockpile 9 A	Stockpile 9 B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				23/05/2023	23/05/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Benzo(a)anthracene	mg/kg	0.05	NONE	1.6	7.7
Chrysene	mg/kg	0.05	NONE	1.7	7.5
Benzo(b)fluoranthene	mg/kg	0.05	NONE	1.8	7.2
Benzo(k)fluoranthene	mg/kg	0.05	NONE	0.78	3.5
Benzo(a)pyrene	mg/kg	0.05	NONE	1.5	6.5
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	0.86	3.3
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	0.28	1.1
Benzo(ghi)perylene	mg/kg	0.05	NONE	1.1	4.2

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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UKAS TESTING
4041

Analytical i2 Environmental Science

Analytical Report Number: 23-35717
Project / Site name: Don Street
Your Order No: 004921

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2690870	Stockpile 9 A		162	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**
2690871	Stockpile 9 B		163	Loose Fibres	**Chrysotile & Amosite**	< 0.001	**< 0.001**

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 23-35717
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2690870	Stockpile 9 A	None Supplied	None Supplied	Brown sand with gravel.
2690871	Stockpile 9 B	None Supplied	None Supplied	Brown sand with gravel and vegetation.

Analytical Report Number : 23-35717
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	NONE
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	NONE
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	NONE
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	NONE
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025

Analytical Report Number : 23-35717
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-37201

Project / Site name:	Don Street	**Samples received on:**	02/06/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	05/06/2023
Your order number:	005061	**Analysis completed by:**	12/06/2023
Report Issue Number:	1	**Report issued on:**	12/06/2023
Samples Analysed:	4 soil samples		

Signed:

Joanna Wawrzeczko
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-37201
Project / Site name: Don Street
Your Order No: 005061

Lab Sample Number				2700230	2700231	2700232	2700233
Sample Reference				Stockpile 10 A	Stockpile 10 B	Stockpile 11 A	Stockpile 11 B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				31/05/2023	31/05/2023	31/05/2023	31/05/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	4.9	10	10	12
Total mass of sample received	kg	0.001	NONE	0.3	0.3	0.3	0.3

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile	Chrysotile	Amosite	Chrysotile
Asbestos in Soil	Type	N/A	ISO 17025	Detected	Detected	Detected	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	0.002	0.009	< 0.001	< 0.001
Asbestos Quantification Total	%	0.001	ISO 17025	0.002	0.009	< 0.001	< 0.001
Asbestos Analyst ID	N/A	N/A	N/A	SFS	SFS	ASE	LFT

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.5	7.7	8.3	8.2
Total Cyanide	mg/kg	1	MCERTS	1.3	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	1200	1200	710	740
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.38	0.4	0.17	0.2
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	750	810	340	400
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	377	405	173	202
Sulphide	mg/kg	1	NONE	32	14	4	3.1
Total Sulphur	mg/kg	50	MCERTS	940	840	410	390
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	2.3	1.8	1.2	1

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	20	18	13	12
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	3.5	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	26	22	28	15
Copper (aqua regia extractable)	mg/kg	1	MCERTS	79	55	37	42
Lead (aqua regia extractable)	mg/kg	1	MCERTS	130	150	73	62
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	0.4	< 0.3	0.4
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	26	25	17	15
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	350	340	130	120

Monoaromatics & Oxygenates

Benzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
p & m-xylene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
o-xylene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0

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Analytical Report Number: 23-37201
Project / Site name: Don Street
Your Order No: 005061

Lab Sample Number				2700230	2700231	2700232	2700233
Sample Reference				Stockpile 10 A	Stockpile 10 B	Stockpile 11 A	Stockpile 11 B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				31/05/2023	31/05/2023	31/05/2023	31/05/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Petroleum Hydrocarbons							
TPH-CWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	NONE	5	2.6	2.3	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	NONE	19	19	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	NONE	73	64	22	11
TPH-CWG - Aliphatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	97	85	32	14
TPH-CWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	NONE	3	3.1	4.5	3.2
TPH-CWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	NONE	26	27	12	13
TPH-CWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	NONE	61	79	25	32
TPH-CWG - Aromatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	90	110	43	49
VOCs							
Chloromethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Chloroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Bromomethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Vinyl Chloride	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Trichlorofluoromethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1-Dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Cis-1,2-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1-Dichloroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
2,2-Dichloropropane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Trichloromethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1,1-Trichloroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dichloroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1-Dichloropropene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Trans-1,2-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloromethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dichloropropane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Trichloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Dibromomethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Bromodichloromethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Cis-1,3-dichloropropene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Trans-1,3-dichloropropene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1,2-Trichloroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,3-Dichloropropane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Dibromochloromethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dibromoethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Chlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1,1,2-Tetrachloroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0

Analytical Report Number: 23-37201
Project / Site name: Don Street
Your Order No: 005061

Lab Sample Number				2700230	2700231	2700232	2700233
Sample Reference				Stockpile 10 A	Stockpile 10 B	Stockpile 11 A	Stockpile 11 B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				31/05/2023	31/05/2023	31/05/2023	31/05/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
p & m-Xylene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Styrene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Tribromomethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1,2,2-Tetrachloroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Isopropylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Bromobenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
n-Propylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
2-Chlorotoluene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
4-Chlorotoluene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,3,5-Trimethylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
tert-Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2,4-Trimethylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
sec-Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,3-Dichlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
p-Isopropyltoluene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dichlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,4-Dichlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dibromo-3-chloropropane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Hexachlorobutadiene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2,3-Trichlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0

SVOCs

Aniline	mg/kg	0.1	NONE	0.8	2	3.3	1.6
Phenol	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
2-Chlorophenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylphenol	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Hexachloroethane	mg/kg	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Isophorone	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
2-Nitrophenol	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Naphthalene	mg/kg	0.05	NONE	0.25	0.47	0.27	0.21
2,4-Dichlorophenol	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorobutadiene	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	0.3	0.4	0.2	0.1
2-Chloronaphthalene	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Dimethylphthalate	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1

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Analytical Report Number: 23-37201
Project / Site name: Don Street
Your Order No: 005061

Lab Sample Number				2700230	2700231	2700232	2700233
Sample Reference				Stockpile 10 A	Stockpile 10 B	Stockpile 11 A	Stockpile 11 B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				31/05/2023	31/05/2023	31/05/2023	31/05/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Acenaphthylene	mg/kg	0.05	NONE	0.1	0.08	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	NONE	1.1	0.82	0.64	0.32
2,4-Dinitrotoluene	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Dibenzofuran	mg/kg	0.2	NONE	0.4	0.4	0.3	< 0.2
4-Chlorophenyl phenyl ether	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Diethyl phthalate	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
4-Nitroaniline	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Fluorene	mg/kg	0.05	NONE	0.91	0.68	0.43	0.2
Azobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Hexachlorobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Phenanthrene	mg/kg	0.05	NONE	7.8	5.7	3.5	1.8
Anthracene	mg/kg	0.05	NONE	1.9	1.6	0.95	0.5
Carbazole	mg/kg	0.3	NONE	< 0.3	0.5	< 0.3	< 0.3
Dibutyl phthalate	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Anthraquinone	mg/kg	0.3	NONE	0.8	0.5	< 0.3	< 0.3
Fluoranthene	mg/kg	0.05	NONE	14	8.9	5.7	3.6
Pyrene	mg/kg	0.05	NONE	12	8	5	3.4
Butyl benzyl phthalate	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Benzo(a)anthracene	mg/kg	0.05	NONE	4.5	4.1	2.6	1.7
Chrysene	mg/kg	0.05	NONE	4	3.5	2.3	1.6
Benzo(b)fluoranthene	mg/kg	0.05	NONE	4.4	4.4	3.1	2
Benzo(k)fluoranthene	mg/kg	0.05	NONE	2.1	1.7	0.9	0.75
Benzo(a)pyrene	mg/kg	0.05	NONE	4.1	3.9	2.5	1.7
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	2.1	2.1	1.4	0.91
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	0.57	0.65	0.36	0.28
Benzo(ghi)perylene	mg/kg	0.05	NONE	2.3	2.3	1.5	1

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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UKAS TESTING
4041

Analytical i2 Environmental Science

Analytical Report Number: 23-37201
Project / Site name: Don Street
Your Order No: 005061

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2700230	Stockpile 10 A		188	Loose Fibrous Debris	**Chrysotile**	0.002	**0.002**
2700231	Stockpile 10 B		176	Loose Fibrous Debris	**Chrysotile**	0.009	**0.009**
2700232	Stockpile 11 A		148	Loose Fibres	**Amosite**	< 0.001	**< 0.001**
2700233	Stockpile 11 B		174	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 23-37201
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2700230	Stockpile 10 A	None Supplied	None Supplied	Brown sand with gravel.
2700231	Stockpile 10 B	None Supplied	None Supplied	Brown sand with gravel.
2700232	Stockpile 11 A	None Supplied	None Supplied	Brown sand with gravel.
2700233	Stockpile 11 B	None Supplied	None Supplied	Brown sand with gravel and vegetation.

Analytical Report Number : 23-37201
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	NONE
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	NONE
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260	L073B-PL	W	NONE
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	NONE
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025

Analytical Report Number : 23-37201
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-37201

Project / Site name:	Don Street	**Samples received on:**	02/06/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	05/06/2023
Your order number:	005061	**Analysis completed by:**	12/06/2023
Report Issue Number:	1	**Report issued on:**	12/06/2023
Samples Analysed:	4 soil samples		

Signed:

Joanna Wawrzeczko
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Analytical Report Number: 23-37201
Project / Site name: Don Street
Your Order No: 005061

Lab Sample Number				2700230	2700231	2700232	2700233
Sample Reference				Stockpile 10 A	Stockpile 10 B	Stockpile 11 A	Stockpile 11 B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				31/05/2023	31/05/2023	31/05/2023	31/05/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	4.9	10	10	12
Total mass of sample received	kg	0.001	NONE	0.3	0.3	0.3	0.3

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile	Chrysotile	Amosite	Chrysotile
Asbestos in Soil	Type	N/A	ISO 17025	Detected	Detected	Detected	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	0.002	0.009	< 0.001	< 0.001
Asbestos Quantification Total	%	0.001	ISO 17025	0.002	0.009	< 0.001	< 0.001
Asbestos Analyst ID	N/A	N/A	N/A	SFS	SFS	ASE	LFT

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.5	7.7	8.3	8.2
Total Cyanide	mg/kg	1	MCERTS	1.3	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	1200	1200	710	740
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.38	0.4	0.17	0.2
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	750	810	340	400
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	377	405	173	202
Sulphide	mg/kg	1	NONE	32	14	4	3.1
Total Sulphur	mg/kg	50	MCERTS	940	840	410	390
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	2.3	1.8	1.2	1

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	20	18	13	12
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	3.5	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	26	22	28	15
Copper (aqua regia extractable)	mg/kg	1	MCERTS	79	55	37	42
Lead (aqua regia extractable)	mg/kg	1	MCERTS	130	150	73	62
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	0.4	< 0.3	0.4
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	26	25	17	15
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	350	340	130	120

Monoaromatics & Oxygenates

Benzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
p & m-xylene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
o-xylene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0

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Analytical Report Number: 23-37201
Project / Site name: Don Street
Your Order No: 005061

Lab Sample Number				2700230	2700231	2700232	2700233
Sample Reference				Stockpile 10 A	Stockpile 10 B	Stockpile 11 A	Stockpile 11 B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				31/05/2023	31/05/2023	31/05/2023	31/05/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Petroleum Hydrocarbons							
TPH-CWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	NONE	5	2.6	2.3	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	NONE	19	19	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	NONE	73	64	22	11
TPH-CWG - Aliphatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	97	85	32	14
TPH-CWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	NONE	3	3.1	4.5	3.2
TPH-CWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	NONE	26	27	12	13
TPH-CWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	NONE	61	79	25	32
TPH-CWG - Aromatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	90	110	43	49
VOCs							
Chloromethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Chloroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Bromomethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Vinyl Chloride	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Trichlorofluoromethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1-Dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Cis-1,2-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1-Dichloroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
2,2-Dichloropropane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Trichloromethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1,1-Trichloroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dichloroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1-Dichloropropene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Trans-1,2-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloromethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dichloropropane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Trichloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Dibromomethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Bromodichloromethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Cis-1,3-dichloropropene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Trans-1,3-dichloropropene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1,2-Trichloroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,3-Dichloropropane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Dibromochloromethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dibromoethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Chlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1,1,2-Tetrachloroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0

Analytical Report Number: 23-37201
Project / Site name: Don Street
Your Order No: 005061

Lab Sample Number				2700230	2700231	2700232	2700233
Sample Reference				Stockpile 10 A	Stockpile 10 B	Stockpile 11 A	Stockpile 11 B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				31/05/2023	31/05/2023	31/05/2023	31/05/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
p & m-Xylene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Styrene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Tribromomethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1,2,2-Tetrachloroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Isopropylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Bromobenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
n-Propylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
2-Chlorotoluene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
4-Chlorotoluene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,3,5-Trimethylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
tert-Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2,4-Trimethylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
sec-Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,3-Dichlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
p-Isopropyltoluene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dichlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,4-Dichlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dibromo-3-chloropropane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Hexachlorobutadiene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2,3-Trichlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0

SVOCs

Aniline	mg/kg	0.1	NONE	0.8	2	3.3	1.6
Phenol	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
2-Chlorophenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylphenol	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Hexachloroethane	mg/kg	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Isophorone	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
2-Nitrophenol	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Naphthalene	mg/kg	0.05	NONE	0.25	0.47	0.27	0.21
2,4-Dichlorophenol	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorobutadiene	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	0.3	0.4	0.2	0.1
2-Chloronaphthalene	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Dimethylphthalate	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-37201
Project / Site name: Don Street
Your Order No: 005061

Lab Sample Number				2700230	2700231	2700232	2700233
Sample Reference				Stockpile 10 A	Stockpile 10 B	Stockpile 11 A	Stockpile 11 B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				31/05/2023	31/05/2023	31/05/2023	31/05/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Acenaphthylene	mg/kg	0.05	NONE	0.1	0.08	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	NONE	1.1	0.82	0.64	0.32
2,4-Dinitrotoluene	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Dibenzofuran	mg/kg	0.2	NONE	0.4	0.4	0.3	< 0.2
4-Chlorophenyl phenyl ether	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Diethyl phthalate	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
4-Nitroaniline	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Fluorene	mg/kg	0.05	NONE	0.91	0.68	0.43	0.2
Azobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Hexachlorobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Phenanthrene	mg/kg	0.05	NONE	7.8	5.7	3.5	1.8
Anthracene	mg/kg	0.05	NONE	1.9	1.6	0.95	0.5
Carbazole	mg/kg	0.3	NONE	< 0.3	0.5	< 0.3	< 0.3
Dibutyl phthalate	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Anthraquinone	mg/kg	0.3	NONE	0.8	0.5	< 0.3	< 0.3
Fluoranthene	mg/kg	0.05	NONE	14	8.9	5.7	3.6
Pyrene	mg/kg	0.05	NONE	12	8	5	3.4
Butyl benzyl phthalate	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Benzo(a)anthracene	mg/kg	0.05	NONE	4.5	4.1	2.6	1.7
Chrysene	mg/kg	0.05	NONE	4	3.5	2.3	1.6
Benzo(b)fluoranthene	mg/kg	0.05	NONE	4.4	4.4	3.1	2
Benzo(k)fluoranthene	mg/kg	0.05	NONE	2.1	1.7	0.9	0.75
Benzo(a)pyrene	mg/kg	0.05	NONE	4.1	3.9	2.5	1.7
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	2.1	2.1	1.4	0.91
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	0.57	0.65	0.36	0.28
Benzo(ghi)perylene	mg/kg	0.05	NONE	2.3	2.3	1.5	1

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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The results included within the report relate only to the sample(s) submitted for testing.

UKAS TESTING
4041

Analytical i2 Environmental Science

Analytical Report Number: 23-37201
Project / Site name: Don Street
Your Order No: 005061

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2700230	Stockpile 10 A		188	Loose Fibrous Debris	**Chrysotile**	0.002	**0.002**
2700231	Stockpile 10 B		176	Loose Fibrous Debris	**Chrysotile**	0.009	**0.009**
2700232	Stockpile 11 A		148	Loose Fibres	**Amosite**	< 0.001	**< 0.001**
2700233	Stockpile 11 B		174	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 23-37201
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2700230	Stockpile 10 A	None Supplied	None Supplied	Brown sand with gravel.
2700231	Stockpile 10 B	None Supplied	None Supplied	Brown sand with gravel.
2700232	Stockpile 11 A	None Supplied	None Supplied	Brown sand with gravel.
2700233	Stockpile 11 B	None Supplied	None Supplied	Brown sand with gravel and vegetation.

Analytical Report Number : 23-37201
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	NONE
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	NONE
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260	L073B-PL	W	NONE
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	NONE
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025

Analytical Report Number : 23-37201
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-38013

Project / Site name:	Don Street	**Samples received on:**	07/06/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	07/06/2023
Your order number:	005116	**Analysis completed by:**	15/06/2023
Report Issue Number:	1	**Report issued on:**	15/06/2023
Samples Analysed:	2 soil samples		

Signed:

Joanna Wawrzeczko
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-38013
Project / Site name: Don Street
Your Order No: 005116

Lab Sample Number				2705646	2705647
Sample Reference				Stockpile 12 A	Stockpile 12 B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				06/06/2023	06/06/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	9.3	11
Total mass of sample received	kg	0.001	NONE	0.3	0.3

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	SFS	SFS

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.3	8.2
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	810	730
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.15	0.2
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	290	390
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	146	195
Sulphide	mg/kg	1	MCERTS	1.9	2.6
Total Sulphur	mg/kg	50	MCERTS	410	450
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.1	1.3

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	13	13
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	13	16
Copper (aqua regia extractable)	mg/kg	1	MCERTS	31	35
Lead (aqua regia extractable)	mg/kg	1	MCERTS	58	57
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	15	17
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	70	87

Monoaromatics & Oxygenates

Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0

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Analytical Report Number: 23-38013
Project / Site name: Don Street
Your Order No: 005116

Lab Sample Number				2705646	2705647
Sample Reference				Stockpile 12 A	Stockpile 12 B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				06/06/2023	06/06/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Petroleum Hydrocarbons					
TPH-CWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	< 2.0	3.6
TPH-CWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	< 8.0	14
TPH-CWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	29	48
TPH-CWG - Aliphatic >EC35 - EC40 $_{EH\_CU\_1D\_AL}$	mg/kg	10	NONE	< 10	< 10
TPH-CWG - Aliphatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	38	66
TPH-CWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	1.9
TPH-CWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	4.4	10
TPH-CWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	18	36
TPH-CWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	36	67
TPH-CWG - Aromatic >EC35 - EC40 $_{EH\_CU\_1D\_AR}$	mg/kg	10	NONE	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	59	120
VOCs					
Chloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Chloroethane	µg/kg	5	NONE	< 5.0	< 5.0
Bromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Vinyl Chloride	µg/kg	5	NONE	< 5.0	< 5.0
Trichlorofluoromethane	µg/kg	5	NONE	< 5.0	< 5.0
1,1-Dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	5	NONE	< 5.0	< 5.0
Cis-1,2-dichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0
1,1-Dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
2,2-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Trichloromethane	µg/kg	5	NONE	< 5.0	< 5.0
1,1,1-Trichloroethane##	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2-Dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,1-Dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Trans-1,2-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0
Tetrachloromethane	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Trichloroethene##	µg/kg	5	ISO 17025	< 5.0	< 5.0
Dibromomethane##	µg/kg	5	ISO 17025	< 5.0	< 5.0
Bromodichloromethane##	µg/kg	5	ISO 17025	< 5.0	< 5.0
Cis-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Trans-1,3-dichloropropene##	µg/kg	5	ISO 17025	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-38013
Project / Site name: Don Street
Your Order No: 005116

Lab Sample Number				2705646	2705647
Sample Reference				Stockpile 12 A	Stockpile 12 B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				06/06/2023	06/06/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
1,1,2-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,3-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Dibromochloromethane##	µg/kg	5	ISO 17025	< 5.0	< 5.0
Tetrachloroethene	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dibromoethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Chlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,1,1,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
Styrene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Tribromomethane	µg/kg	5	NONE	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
1,1,2,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Isopropylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Bromobenzene	µg/kg	5	NONE	< 5.0	< 5.0
n-Propylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
2-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0
4-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,3,5-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
tert-Butylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2,4-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
sec-Butylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,3-Dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
p-Isopropyltoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2-Dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,4-Dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dibromo-3-chloropropane##	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Hexachlorobutadiene	µg/kg	5	NONE	< 5.0	< 5.0
1,2,3-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0

SVOCs

Aniline	mg/kg	0.1	NONE	< 0.1	< 0.1
Phenol	mg/kg	0.2	ISO 17025	< 0.2	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Hexachloroethane	mg/kg	0.05	ISO 17025	< 0.05	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	< 0.2
Isophorone	mg/kg	0.2	MCERTS	< 0.2	< 0.2
2-Nitrophenol	mg/kg	0.3	NONE	< 0.3	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	1	1.5
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	< 0.1

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Analytical Report Number: 23-38013
Project / Site name: Don Street
Your Order No: 005116

Lab Sample Number				2705646	2705647
Sample Reference				Stockpile 12 A	Stockpile 12 B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				06/06/2023	06/06/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	NONE	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	NONE	< 0.2	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	0.6	1.2
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	< 0.1
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	NONE	< 0.1	< 0.1
Acenaphthylene	mg/kg	0.05	MCERTS	0.12	0.47
Acenaphthene	mg/kg	0.05	MCERTS	0.93	1.4
2,4-Dinitrotoluene	mg/kg	0.2	NONE	< 0.2	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	0.6	1.2
4-Chlorophenyl phenyl ether	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	< 0.2
4-Nitroaniline	mg/kg	0.2	NONE	< 0.2	< 0.2
Fluorene	mg/kg	0.05	MCERTS	0.81	1.7
Azobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	6.1	9
Anthracene	mg/kg	0.05	MCERTS	1.6	2.7
Carbazole	mg/kg	0.3	MCERTS	0.4	1
Dibutyl phthalate	mg/kg	0.2	NONE	< 0.2	< 0.2
Anthraquinone	mg/kg	0.3	NONE	< 0.3	< 0.3
Fluoranthene	mg/kg	0.05	MCERTS	7.6	9.9
Pyrene	mg/kg	0.05	MCERTS	6.8	8.6
Butyl benzyl phthalate	mg/kg	0.3	NONE	< 0.3	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	3.2	4.1
Chrysene	mg/kg	0.05	MCERTS	3.1	4.1
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	3.5	4.4
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	1.3	1.5
Benzo(a)pyrene	mg/kg	0.05	MCERTS	2.8	3.6
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	1.4	1.8
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.31	0.36
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	1.6	2

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-38013
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2705646	Stockpile 12 A	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2705647	Stockpile 12 B	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.

Analytical Report Number : 23-38013
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260	L073B-PL	W	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	NONE
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS

Analytical Report Number : 23-38013
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

- Quality control parameter has a high recovery (outside of limit); however the associated result is below the reporting limit, other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.

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Analytical Report Number : 23-37201

Project / Site name:	Don Street	**Samples received on:**	02/06/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	05/06/2023
Your order number:	005061	**Analysis completed by:**	12/06/2023
Report Issue Number:	1	**Report issued on:**	12/06/2023
Samples Analysed:	4 soil samples		

Signed:

Joanna Wawrzeczko
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Analytical Report Number: 23-37201
Project / Site name: Don Street
Your Order No: 005061

Lab Sample Number				2700230	2700231	2700232	2700233
Sample Reference				Stockpile 10 A	Stockpile 10 B	Stockpile 11 A	Stockpile 11 B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				31/05/2023	31/05/2023	31/05/2023	31/05/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	4.9	10	10	12
Total mass of sample received	kg	0.001	NONE	0.3	0.3	0.3	0.3

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile	Chrysotile	Amosite	Chrysotile
Asbestos in Soil	Type	N/A	ISO 17025	Detected	Detected	Detected	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	0.002	0.009	< 0.001	< 0.001
Asbestos Quantification Total	%	0.001	ISO 17025	0.002	0.009	< 0.001	< 0.001
Asbestos Analyst ID	N/A	N/A	N/A	SFS	SFS	ASE	LFT

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.5	7.7	8.3	8.2
Total Cyanide	mg/kg	1	MCERTS	1.3	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	1200	1200	710	740
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.38	0.4	0.17	0.2
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	750	810	340	400
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	377	405	173	202
Sulphide	mg/kg	1	NONE	32	14	4	3.1
Total Sulphur	mg/kg	50	MCERTS	940	840	410	390
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	2.3	1.8	1.2	1

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	20	18	13	12
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	3.5	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	26	22	28	15
Copper (aqua regia extractable)	mg/kg	1	MCERTS	79	55	37	42
Lead (aqua regia extractable)	mg/kg	1	MCERTS	130	150	73	62
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	0.4	< 0.3	0.4
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	26	25	17	15
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	350	340	130	120

Monoaromatics & Oxygenates

Benzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
p & m-xylene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
o-xylene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0

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Analytical Report Number: 23-37201
Project / Site name: Don Street
Your Order No: 005061

Lab Sample Number				2700230	2700231	2700232	2700233
Sample Reference				Stockpile 10 A	Stockpile 10 B	Stockpile 11 A	Stockpile 11 B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				31/05/2023	31/05/2023	31/05/2023	31/05/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Petroleum Hydrocarbons							
TPH-CWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	NONE	5	2.6	2.3	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	NONE	19	19	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	NONE	73	64	22	11
TPH-CWG - Aliphatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	97	85	32	14
TPH-CWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	NONE	3	3.1	4.5	3.2
TPH-CWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	NONE	26	27	12	13
TPH-CWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	NONE	61	79	25	32
TPH-CWG - Aromatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	90	110	43	49
VOCs							
Chloromethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Chloroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Bromomethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Vinyl Chloride	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Trichlorofluoromethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1-Dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Cis-1,2-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1-Dichloroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
2,2-Dichloropropane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Trichloromethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1,1-Trichloroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dichloroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1-Dichloropropene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Trans-1,2-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloromethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dichloropropane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Trichloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Dibromomethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Bromodichloromethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Cis-1,3-dichloropropene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Trans-1,3-dichloropropene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1,2-Trichloroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,3-Dichloropropane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Dibromochloromethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dibromoethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Chlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1,1,2-Tetrachloroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0

Analytical Report Number: 23-37201
Project / Site name: Don Street
Your Order No: 005061

Lab Sample Number				2700230	2700231	2700232	2700233
Sample Reference				Stockpile 10 A	Stockpile 10 B	Stockpile 11 A	Stockpile 11 B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				31/05/2023	31/05/2023	31/05/2023	31/05/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
p & m-Xylene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Styrene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Tribromomethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1,2,2-Tetrachloroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Isopropylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Bromobenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
n-Propylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
2-Chlorotoluene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
4-Chlorotoluene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,3,5-Trimethylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
tert-Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2,4-Trimethylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
sec-Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,3-Dichlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
p-Isopropyltoluene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dichlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,4-Dichlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dibromo-3-chloropropane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Hexachlorobutadiene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2,3-Trichlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0

SVOCs

Aniline	mg/kg	0.1	NONE	0.8	2	3.3	1.6
Phenol	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
2-Chlorophenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylphenol	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Hexachloroethane	mg/kg	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Isophorone	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
2-Nitrophenol	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Naphthalene	mg/kg	0.05	NONE	0.25	0.47	0.27	0.21
2,4-Dichlorophenol	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorobutadiene	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	0.3	0.4	0.2	0.1
2-Chloronaphthalene	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Dimethylphthalate	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-37201
Project / Site name: Don Street
Your Order No: 005061

Lab Sample Number				2700230	2700231	2700232	2700233
Sample Reference				Stockpile 10 A	Stockpile 10 B	Stockpile 11 A	Stockpile 11 B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				31/05/2023	31/05/2023	31/05/2023	31/05/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Acenaphthylene	mg/kg	0.05	NONE	0.1	0.08	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	NONE	1.1	0.82	0.64	0.32
2,4-Dinitrotoluene	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Dibenzofuran	mg/kg	0.2	NONE	0.4	0.4	0.3	< 0.2
4-Chlorophenyl phenyl ether	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Diethyl phthalate	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
4-Nitroaniline	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Fluorene	mg/kg	0.05	NONE	0.91	0.68	0.43	0.2
Azobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Hexachlorobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Phenanthrene	mg/kg	0.05	NONE	7.8	5.7	3.5	1.8
Anthracene	mg/kg	0.05	NONE	1.9	1.6	0.95	0.5
Carbazole	mg/kg	0.3	NONE	< 0.3	0.5	< 0.3	< 0.3
Dibutyl phthalate	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Anthraquinone	mg/kg	0.3	NONE	0.8	0.5	< 0.3	< 0.3
Fluoranthene	mg/kg	0.05	NONE	14	8.9	5.7	3.6
Pyrene	mg/kg	0.05	NONE	12	8	5	3.4
Butyl benzyl phthalate	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Benzo(a)anthracene	mg/kg	0.05	NONE	4.5	4.1	2.6	1.7
Chrysene	mg/kg	0.05	NONE	4	3.5	2.3	1.6
Benzo(b)fluoranthene	mg/kg	0.05	NONE	4.4	4.4	3.1	2
Benzo(k)fluoranthene	mg/kg	0.05	NONE	2.1	1.7	0.9	0.75
Benzo(a)pyrene	mg/kg	0.05	NONE	4.1	3.9	2.5	1.7
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	2.1	2.1	1.4	0.91
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	0.57	0.65	0.36	0.28
Benzo(ghi)perylene	mg/kg	0.05	NONE	2.3	2.3	1.5	1

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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The results included within the report relate only to the sample(s) submitted for testing.

UKAS TESTING
4041

Analytical i2 Environmental Science

Analytical Report Number: 23-37201
Project / Site name: Don Street
Your Order No: 005061

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2700230	Stockpile 10 A		188	Loose Fibrous Debris	**Chrysotile**	0.002	**0.002**
2700231	Stockpile 10 B		176	Loose Fibrous Debris	**Chrysotile**	0.009	**0.009**
2700232	Stockpile 11 A		148	Loose Fibres	**Amosite**	< 0.001	**< 0.001**
2700233	Stockpile 11 B		174	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 23-37201
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2700230	Stockpile 10 A	None Supplied	None Supplied	Brown sand with gravel.
2700231	Stockpile 10 B	None Supplied	None Supplied	Brown sand with gravel.
2700232	Stockpile 11 A	None Supplied	None Supplied	Brown sand with gravel.
2700233	Stockpile 11 B	None Supplied	None Supplied	Brown sand with gravel and vegetation.

Analytical Report Number : 23-37201
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	NONE
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	NONE
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260	L073B-PL	W	NONE
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	NONE
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025

Analytical Report Number : 23-37201
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-39718

Project / Site name:	Don Street	**Samples received on:**	14/06/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	15/06/2023
Your order number:	005215	**Analysis completed by:**	23/06/2023
Report Issue Number:	1	**Report issued on:**	23/06/2023
Samples Analysed:	2 soil samples		

Izabela Wójcik

Signed:

Izabela Wójcik
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-39718
Project / Site name: Don Street
Your Order No: 005215

Lab Sample Number				2716604	2716605
Sample Reference				Stockpile 13A	Stockpile 13B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				13/06/2023	13/06/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	32
Moisture Content	%	0.01	NONE	13	12
Total mass of sample received	kg	0.001	NONE	0.3	0.3

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile	-
Asbestos in Soil	Type	N/A	ISO 17025	Detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	< 0.001	-
Asbestos Quantification Total	%	0.001	ISO 17025	< 0.001	-
Asbestos Analyst ID	N/A	N/A	N/A	PDO	PDO

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.9	8
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	650	600
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.13	0.11
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	260	220
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	132	111
Sulphide	mg/kg	1	MCERTS	5.6	2.7
Total Sulphur	mg/kg	50	MCERTS	440	420
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.5	1.4

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	12	11
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	0.5
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	16	15
Copper (aqua regia extractable)	mg/kg	1	MCERTS	45	33
Lead (aqua regia extractable)	mg/kg	1	MCERTS	69	54
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	20	17
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	73	76

Monoaromatics & Oxygenates

Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0

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Analytical Report Number: 23-39718
Project / Site name: Don Street
Your Order No: 005215

Lab Sample Number				2716604	2716605
Sample Reference				Stockpile 13A	Stockpile 13B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				13/06/2023	13/06/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Petroleum Hydrocarbons					
TPH-CWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	33	34
TPH-CWG - Aliphatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	40	43
TPH-CWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	2.7	5.8
TPH-CWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	26	29
TPH-CWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	59	61
TPH-CWG - Aromatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	88	97
VOCs					
Chloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Chloroethane	µg/kg	5	NONE	< 5.0	< 5.0
Bromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Vinyl Chloride	µg/kg	5	NONE	< 5.0	< 5.0
Trichlorofluoromethane	µg/kg	5	NONE	< 5.0	< 5.0
1,1-Dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	5	NONE	< 5.0	< 5.0
Cis-1,2-dichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0
1,1-Dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
2,2-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Trichloromethane	µg/kg	5	NONE	< 5.0	< 5.0
1,1,1-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2-Dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,1-Dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Trans-1,2-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0
Tetrachloromethane	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Trichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Dibromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Bromodichloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Cis-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Trans-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0
1,1,2-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,3-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Dibromochloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Tetrachloroethene	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dibromoethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Chlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,1,1,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0

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Analytical Report Number: 23-39718
Project / Site name: Don Street
Your Order No: 005215

Lab Sample Number				2716604	2716605
Sample Reference				Stockpile 13A	Stockpile 13B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				13/06/2023	13/06/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
Styrene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Tribromomethane	µg/kg	5	NONE	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
1,1,2,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Isopropylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Bromobenzene	µg/kg	5	NONE	< 5.0	< 5.0
n-Propylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
2-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0
4-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,3,5-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
tert-Butylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2,4-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
sec-Butylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,3-Dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
p-Isopropyltoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2-Dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,4-Dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dibromo-3-chloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Hexachlorobutadiene	µg/kg	5	NONE	< 5.0	< 5.0
1,2,3-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0

SVOCs

Aniline	mg/kg	0.1	NONE	< 0.1	< 0.1
Phenol	mg/kg	0.2	ISO 17025	< 0.2	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Hexachloroethane	mg/kg	0.05	ISO 17025	< 0.05	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	< 0.2
Isophorone	mg/kg	0.2	MCERTS	< 0.2	< 0.2
2-Nitrophenol	mg/kg	0.3	NONE	< 0.3	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	0.41	0.44
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	NONE	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	NONE	< 0.2	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	0.3	0.3
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	< 0.1
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	NONE	< 0.1	< 0.1

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Analytical Report Number: 23-39718
Project / Site name: Don Street
Your Order No: 005215

Lab Sample Number				2716604	2716605
Sample Reference				Stockpile 13A	Stockpile 13B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				13/06/2023	13/06/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	0.87	0.72
2,4-Dinitrotoluene	mg/kg	0.2	NONE	< 0.2	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	0.5	0.3
4-Chlorophenyl phenyl ether	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	< 0.2
4-Nitroaniline	mg/kg	0.2	NONE	< 0.2	< 0.2
Fluorene	mg/kg	0.05	MCERTS	0.98	0.49
Azobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	6.2	3.2
Anthracene	mg/kg	0.05	MCERTS	1.9	1.1
Carbazole	mg/kg	0.3	MCERTS	0.5	< 0.3
Dibutyl phthalate	mg/kg	0.2	NONE	< 0.2	< 0.2
Anthraquinone	mg/kg	0.3	NONE	0.4	< 0.3
Fluoranthene	mg/kg	0.05	MCERTS	8.3	5.6
Pyrene	mg/kg	0.05	MCERTS	7.5	5.3
Butyl benzyl phthalate	mg/kg	0.3	NONE	< 0.3	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	3.2	2.2
Chrysene	mg/kg	0.05	MCERTS	3.2	2.1
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	3.4	2.4
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	1.5	0.91
Benzo(a)pyrene	mg/kg	0.05	MCERTS	2.9	1.9
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	1.6	1.1
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.44	0.28
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	1.8	1.2

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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UKAS TESTING
4041

Analytical i2 Environmental Science

Analytical Report Number: 23-39718
Project / Site name: Don Street
Your Order No: 005215

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2716604	Stockpile 13A		178	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 23-39718
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2716604	Stockpile 13A	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2716605	Stockpile 13B	None Supplied	None Supplied	Brown loam and sand with gravel and stones.

Analytical Report Number : 23-39718
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025

Analytical Report Number : 23-39718
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-40134

Project / Site name:	Don Street	**Samples received on:**	19/06/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	19/06/2023
Your order number:	005244	**Analysis completed by:**	26/06/2023
Report Issue Number:	1	**Report issued on:**	26/06/2023
Samples Analysed:	4 soil samples		

Signed:

Joanna Wawrzeczko
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-40134
Project / Site name: Don Street
Your Order No: 005244

Lab Sample Number				2719183	2719184	2719185	2719186
Sample Reference				Stockpile 14 A	Stockpile 14 B	Stockpile 15 A	Stockpile 15 B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				16/06/2023	16/06/2023	16/06/2023	16/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	6.5	6.3	5.1	5.6
Total mass of sample received	kg	0.001	NONE	0.3	0.3	0.3	0.3
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	< 0.001	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	< 0.001	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	SPU	SPU	SPU	SPU
General Inorganics							
pH - Automated	pH Units	N/A	MCERTS	7.5	8.2	8.3	8.1
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	1.4	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	330	650	600	610
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.0052	0.15	0.15	0.16
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	10	300	290	320
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	5.2	152	145	162
Sulphide	mg/kg	1	MCERTS	< 1.0	1.7	5.5	< 1.0
Total Sulphur	mg/kg	50	MCERTS	190	390	520	410
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1	1.3	1.4	1.5
Total Phenols							
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Heavy Metals / Metalloids							
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	12	11	17	11
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	17	14	18	14
Copper (aqua regia extractable)	mg/kg	1	MCERTS	13	31	52	32
Lead (aqua regia extractable)	mg/kg	1	MCERTS	21	54	45	54
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	12	15	25	15
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	46	83	70	76
Monoaromatics & Oxygenates							
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
o-xylene#	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0

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Analytical Report Number: 23-40134
Project / Site name: Don Street
Your Order No: 005244

Lab Sample Number				2719183	2719184	2719185	2719186
Sample Reference				Stockpile 14 A	Stockpile 14 B	Stockpile 15 A	Stockpile 15 B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				16/06/2023	16/06/2023	16/06/2023	16/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Petroleum Hydrocarbons							
TPH-CWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	< 1.0	< 1.0	1.4	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	< 2.0	< 2.0	7.2	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	< 8.0	8.2	13	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	< 8.0	26	48	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	< 10	36	69	< 10
TPH-CWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	< 2.0	2.4	2	< 2.0
TPH-CWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	< 10	10	15	< 10
TPH-CWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	< 10	26	67	20
TPH-CWG - Aromatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	< 10	38	84	28
VOCs							
Chloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Chloroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Bromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Vinyl Chloride	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Trichlorofluoromethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1-Dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Cis-1,2-dichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1-Dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
2,2-Dichloropropane#	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Trichloromethane	µg/kg	5	NONE	7.2	< 5.0	8.4	7.8
1,1,1-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dichloroethane##	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,1-Dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Trans-1,2-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloromethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Trichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Dibromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Bromodichloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Cis-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Trans-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
1,1,2-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,3-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Dibromochloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dibromoethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Chlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,1,1,2-Tetrachloroethane##	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0

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Analytical Report Number: 23-40134
Project / Site name: Don Street
Your Order No: 005244

Lab Sample Number				2719183	2719184	2719185	2719186
Sample Reference				Stockpile 14 A	Stockpile 14 B	Stockpile 15 A	Stockpile 15 B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				16/06/2023	16/06/2023	16/06/2023	16/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Styrene#	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Tribromomethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene#	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1,2,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Isopropylbenzene#	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Bromobenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
n-Propylbenzene#	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
2-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
4-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,3,5-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
tert-Butylbenzene#	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2,4-Trimethylbenzene#	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
sec-Butylbenzene#	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,3-Dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
p-Isopropyltoluene#	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,4-Dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dibromo-3-chloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Hexachlorobutadiene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2,3-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0

SVOCs

Aniline	mg/kg	0.1	NONE	3.4	3.3	4.2	4.6
Phenol	mg/kg	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Hexachloroethane	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Isophorone	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
2-Nitrophenol	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	0.32	0.57	0.3
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	< 0.1	0.2	0.2	0.2
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1

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Analytical Report Number: 23-40134
Project / Site name: Don Street
Your Order No: 005244

Lab Sample Number				2719183	2719184	2719185	2719186
Sample Reference				Stockpile 14 A	Stockpile 14 B	Stockpile 15 A	Stockpile 15 B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				16/06/2023	16/06/2023	16/06/2023	16/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.08	0.12
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	0.44	1.1	0.49
2,4-Dinitrotoluene	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	< 0.2	0.2	0.5	0.3
4-Chlorophenyl phenyl ether	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
4-Nitroaniline	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Fluorene	mg/kg	0.05	MCERTS	< 0.05	0.37	0.74	0.49
Azobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	0.16	2.7	5	3.5
Anthracene	mg/kg	0.05	MCERTS	< 0.05	0.76	1.6	0.84
Carbazole	mg/kg	0.3	MCERTS	< 0.3	< 0.3	0.4	< 0.3
Dibutyl phthalate	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Anthraquinone	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Fluoranthene	mg/kg	0.05	MCERTS	0.4	4.2	7.7	4.9
Pyrene	mg/kg	0.05	MCERTS	0.3	3.9	7.1	4.5
Butyl benzyl phthalate	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.13	1.8	2.9	2
Chrysene	mg/kg	0.05	MCERTS	0.15	1.6	3.1	1.9
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.2	2	3.6	2.2
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.08	0.82	1.5	0.97
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.14	1.5	2.9	1.8
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.09	0.95	1.8	1
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	0.2	0.36	0.26
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.11	1.1	2.2	1.2

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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The results included within the report relate only to the sample(s) submitted for testing.

UKAS TESTING
4041

Analytical i2 Environmental Science

Analytical Report Number: 23-40134
Project / Site name: Don Street
Your Order No: 005244

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2719183	Stockpile 14 A		177	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 23-40134
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2719183	Stockpile 14 A	None Supplied	None Supplied	Brown loam and sand with gravel.
2719184	Stockpile 14 B	None Supplied	None Supplied	Brown loam and sand with gravel.
2719185	Stockpile 15 A	None Supplied	None Supplied	Brown loam and sand with gravel.
2719186	Stockpile 15 B	None Supplied	None Supplied	Brown loam and sand with gravel.

Analytical Report Number : 23-40134
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025

Analytical Report Number : 23-40134
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

- Data reported unaccredited due to quality control parameter failure associated with this result; other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.
- Quality control parameter has a high recovery (outside of limit); however the associated result is below the reporting limit, other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.

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Analytical Report Number : 23-41466

Project / Site name:	Don Street	**Samples received on:**	26/06/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	26/06/2023
Your order number:	005303	**Analysis completed by:**	04/07/2023
Report Issue Number:	1	**Report issued on:**	04/07/2023
Samples Analysed:	2 soil samples		

Signed:

Joanna Wawrzeczko
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Analytical Report Number: 23-41466
Project / Site name: Don Street
Your Order No: 005303

Lab Sample Number				2727045	2727046
Sample Reference				Stockpile 16A	Stockpile 16B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				22/06/2023	22/06/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	9.9	8.1
Total mass of sample received	kg	0.001	NONE	0.3	0.3

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile	Chrysotile
Asbestos in Soil	Type	N/A	ISO 17025	Detected	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	< 0.001	< 0.001
Asbestos Quantification Total	%	0.001	ISO 17025	< 0.001	< 0.001
Asbestos Analyst ID	N/A	N/A	N/A	WEM	WEM

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.1	8
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	1200	840
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.39	0.26
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	780	530
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	389	265
Sulphide	mg/kg	1	MCERTS	160	5.9
Total Sulphur	mg/kg	50	MCERTS	1200	620
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.7	1.6

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	15	19
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	15	20
Copper (aqua regia extractable)	mg/kg	1	MCERTS	49	60
Lead (aqua regia extractable)	mg/kg	1	MCERTS	91	110
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	0.4
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	17	20
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	170	150

Monoaromatics & Oxygenates

Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0

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Analytical Report Number: 23-41466
Project / Site name: Don Street
Your Order No: 005303

Lab Sample Number				2727045	2727046
Sample Reference				Stockpile 16A	Stockpile 16B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				22/06/2023	22/06/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Petroleum Hydrocarbons					
TPH-CWG - Aliphatic >EC5 - EC6 HS_1D_AL	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8 HS_1D_AL	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10 HS_1D_AL	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12 EH_CU_1D_AL	mg/kg	1	MCERTS	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 EH_CU_1D_AL	mg/kg	2	MCERTS	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21 EH_CU_1D_AL	mg/kg	8	MCERTS	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35 EH_CU_1D_AL	mg/kg	8	MCERTS	12	13
TPH-CWG - Aliphatic (EC5 - EC35) EH_CU+HS_1D_AL	mg/kg	10	NONE	12	14
TPH-CWG - Aromatic >EC5 - EC7 HS_1D_AR	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8 HS_1D_AR	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10 HS_1D_AR	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12 EH_CU_1D_AR	mg/kg	1	MCERTS	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 EH_CU_1D_AR	mg/kg	2	MCERTS	2.1	< 2.0
TPH-CWG - Aromatic >EC16 - EC21 EH_CU_1D_AR	mg/kg	10	MCERTS	24	< 10
TPH-CWG - Aromatic >EC21 - EC35 EH_CU_1D_AR	mg/kg	10	MCERTS	55	24
TPH-CWG - Aromatic (EC5 - EC35) EH_CU+HS_1D_AR	mg/kg	10	NONE	81	30
VOCs					
Chloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Chloroethane	µg/kg	5	NONE	< 5.0	< 5.0
Bromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Vinyl Chloride	µg/kg	5	NONE	< 5.0	< 5.0
Trichlorofluoromethane	µg/kg	5	NONE	< 5.0	< 5.0
1,1-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	5	NONE	< 5.0	< 5.0
Cis-1,2-dichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0
1,1-dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
2,2-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Trichloromethane	µg/kg	5	NONE	< 5.0	< 5.0
1,1,1-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2-dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,1-Dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Trans-1,2-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0
Tetrachloromethane	µg/kg	5	NONE	< 5.0	< 5.0
1,2-dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Trichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Dibromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Bromodichloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Cis-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Trans-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0
1,1,2-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,3-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Dibromochloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Tetrachloroethene	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dibromoethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Chlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,1,1,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0

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Analytical Report Number: 23-41466
Project / Site name: Don Street
Your Order No: 005303

Lab Sample Number				2727045	2727046
Sample Reference				Stockpile 16A	Stockpile 16B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				22/06/2023	22/06/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
Styrene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Tribromomethane	µg/kg	5	NONE	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
1,1,2,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Isopropylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Bromobenzene	µg/kg	5	NONE	< 5.0	< 5.0
N-Propylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
2-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0
4-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,3,5-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Tert-Butylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2,4-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Sec-Butylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,3-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
P-Isopropyltoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,4-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dibromo-3-chloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Hexachlorobutadiene	µg/kg	5	NONE	< 5.0	< 5.0
1,2,3-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0

SVOCs

Aniline	mg/kg	0.1	NONE	< 0.1	< 0.1
Phenol	mg/kg	0.2	ISO 17025	< 0.2	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Hexachloroethane	mg/kg	0.05	ISO 17025	< 0.05	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	< 0.2
Isophorone	mg/kg	0.2	MCERTS	< 0.2	< 0.2
2-Nitrophenol	mg/kg	0.3	NONE	< 0.3	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	0.59	0.74
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	NONE	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	NONE	< 0.2	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	0.5	0.6
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	< 0.1

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Analytical Report Number: 23-41466
Project / Site name: Don Street
Your Order No: 005303

Lab Sample Number				2727045	2727046
Sample Reference				Stockpile 16A	Stockpile 16B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				22/06/2023	22/06/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	NONE	< 0.1	< 0.1
Acenaphthylene	mg/kg	0.05	MCERTS	0.15	0.12
Acenaphthene	mg/kg	0.05	MCERTS	1.5	1.3
2,4-Dinitrotoluene	mg/kg	0.2	NONE	< 0.2	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	0.8	0.6
4-Chlorophenyl phenyl ether	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	< 0.2
4-Nitroaniline	mg/kg	0.2	NONE	< 0.2	< 0.2
Fluorene	mg/kg	0.05	MCERTS	1.6	1.1
Azobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	13	7.8
Anthracene	mg/kg	0.05	MCERTS	5.1	2.6
Carbazole	mg/kg	0.3	MCERTS	0.9	0.7
Dibutyl phthalate	mg/kg	0.2	NONE	< 0.2	< 0.2
Anthraquinone	mg/kg	0.3	NONE	0.6	0.4
Fluoranthene	mg/kg	0.05	MCERTS	17	9
Pyrene	mg/kg	0.05	MCERTS	15	7.8
Butyl benzyl phthalate	mg/kg	0.3	NONE	< 0.3	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	7.8	3.4
Chrysene	mg/kg	0.05	MCERTS	7	3.2
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	7	3.6
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	3.2	1.3
Benzo(a)pyrene	mg/kg	0.05	MCERTS	5.9	2.8
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	3.3	1.5
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.95	0.46
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	3.8	1.8

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-41466
Project / Site name: Don Street
Your Order No: 005303

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2727045	Stockpile 16A		143	Loose Fibrous Debris	**Chrysotile**	< 0.001	**< 0.001**
2727046	Stockpile 16B		150	Loose Fibrous Debris	**Chrysotile**	< 0.001	**< 0.001**

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 23-41466
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2727045	Stockpile 16A	None Supplied	None Supplied	Brown loam and clay with gravel and vegetation.
2727046	Stockpile 16B	None Supplied	None Supplied	Brown loam and clay with gravel and vegetation.

Analytical Report Number : 23-41466
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS

Analytical Report Number : 23-41466
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-41964

Project / Site name:	Don Street	**Samples received on:**	28/06/2023
Your job number:	14 554	**Samples instructed on/ Analysis started on:**	28/06/2023
Your order number:	005329	**Analysis completed by:**	04/07/2023
Report Issue Number:	1	**Report issued on:**	04/07/2023
Samples Analysed:	8 soil samples		

Signed:

Anna Goc
PL Head of Reporting Team
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-41964
Project / Site name: Don Street
Your Order No: 005329

Lab Sample Number				2729963	2729964	2729965	2729966	2729967
Sample Reference				Stokpile 17 A	Stokpile 17 B	Stokpile 18 A	Stokpile 18 B	Stokpile 20 A
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				27/06/2023	27/06/2023	27/06/2023	27/06/2023	27/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	8.2	21	12	8	7.1
Total mass of sample received	kg	0.001	NONE	0.4	0.4	0.4	0.4	0.4
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	Chrysotile	Amosite
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Detected	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	< 0.001	< 0.001
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	< 0.001	< 0.001
Asbestos Analyst ID	N/A	N/A	N/A	KSZ	KSZ	KSZ	KSZ	WEM
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	7.9	7.8	9.2	8.6	8
Total Cyanide	mg/kg	1	MCERTS	< 1.0	11	< 1.0	< 1.0	3.1
Total Sulphate as SO4	mg/kg	50	MCERTS	820	760	1000	1000	930
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.1	0.17	0.16	0.18	0.25
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	210	340	320	360	500
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	103	171	159	181	250
Sulphide	mg/kg	1	MCERTS	4.5	2.1	2	< 1.0	9.1
Total Sulphur	mg/kg	50	MCERTS	510	530	510	490	710
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.6	1.5	1.3	1.3	1.4
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	64	62	13	14	36
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	67	62	15	15	46
Copper (aqua regia extractable)	mg/kg	1	MCERTS	130	120	34	32	92
Lead (aqua regia extractable)	mg/kg	1	MCERTS	290	260	76	65	190
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	4.9	4.1	< 0.3	< 0.3	2.5
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	24	20	14	14	24
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	280	230	100	96	200
Monoaromatics & Oxygenates								
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

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Analytical Report Number: 23-41964
Project / Site name: Don Street
Your Order No: 005329

Lab Sample Number				2729963	2729964	2729965	2729966	2729967
Sample Reference				Stokpile 17 A	Stokpile 17 B	Stokpile 18 A	Stokpile 18 B	Stokpile 20 A
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				27/06/2023	27/06/2023	27/06/2023	27/06/2023	27/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Petroleum Hydrocarbons								
TPH-CWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	< 1.0	1.7	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	< 2.0	4.6	5.2	5.6	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	14	12	20	15	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	46	42	58	45	32
TPH-CWG - Aliphatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	62	60	84	66	41
TPH-CWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	2.7	2.8	3.2	3	2
TPH-CWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	19	13	19	23	14
TPH-CWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	62	44	59	61	44
TPH-CWG - Aromatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	84	60	81	87	59
VOCs								
Chloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chloroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Bromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Vinyl Chloride	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Trichlorofluoromethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,1-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Trans-1,2-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,1-dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
2,2-Dichloropropane#	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chloroform	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,1,1-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,2-dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,1-Dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Cis-1,2-dichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Carbontetrachloride	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,2-dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Trichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Dibromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Bromodichloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Cis-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Trans-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,1,2-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,3-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Dibromochloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dibromoethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,1,1,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

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Analytical Report Number: 23-41964
Project / Site name: Don Street
Your Order No: 005329

Lab Sample Number				2729963	2729964	2729965	2729966	2729967
Sample Reference				Stokpile 17 A	Stokpile 17 B	Stokpile 18 A	Stokpile 18 B	Stokpile 20 A
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				27/06/2023	27/06/2023	27/06/2023	27/06/2023	27/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Styrene#	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Bromoform	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Isopropylbenzene#	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,1,2,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Bromobenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
N-Propylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
2-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
4-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,3,5-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Tert-Butylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,2,4-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Sec-Butylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,3-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
P-Isopropyltoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,4-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,2-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dibromo-3-chloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Hexachlorobutadiene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,2,3-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

SVOCs

Aniline	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Phenol	mg/kg	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Hexachloroethane	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Isophorone	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
2-Nitrophenol	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	0.1	0.28	0.15	0.31	0.76
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	< 0.1	0.2	0.1	0.3	0.3
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

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Analytical Report Number: 23-41964
Project / Site name: Don Street
Your Order No: 005329

Lab Sample Number				2729963	2729964	2729965	2729966	2729967
Sample Reference				Stokpile 17 A	Stokpile 17 B	Stokpile 18 A	Stokpile 18 B	Stokpile 20 A
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				27/06/2023	27/06/2023	27/06/2023	27/06/2023	27/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	0.11	< 0.05	< 0.05	0.37
Acenaphthene	mg/kg	0.05	MCERTS	0.19	0.44	0.34	0.91	0.65
2,4-Dinitrotoluene	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	0.3	0.5
4-Chlorophenyl phenyl ether	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
4-Nitroaniline	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Fluorene	mg/kg	0.05	MCERTS	0.16	0.4	0.22	0.62	0.88
Azobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	1.2	3.7	2.3	5.5	4.4
Anthracene	mg/kg	0.05	MCERTS	0.35	1	0.62	1.4	1.5
Carbazole	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	0.4	0.3
Dibutyl phthalate	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Anthraquinone	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Fluoranthene	mg/kg	0.05	MCERTS	2.1	7.6	4.7	8.9	7.5
Pyrene	mg/kg	0.05	MCERTS	2	7.4	4.5	8.2	7.2
Butyl benzyl phthalate	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	1	3.5	2.2	3.8	3.8
Chrysene	mg/kg	0.05	MCERTS	0.8	3.1	1.7	3.3	3.1
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	1.3	3.9	2.7	4.6	4.5
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.42	1.9	0.9	1.5	1.5
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.87	3.1	1.8	3.2	3.5
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.46	1.6	0.98	1.7	1.7
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.08	0.29	0.16	0.27	0.32
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.53	1.9	1.2	1.9	1.9

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 23-41964
Project / Site name: Don Street
Your Order No: 005329

Lab Sample Number				2729968	2729969	2729970
Sample Reference				Stokpile 20 B	Stokpile 21 A	Stokpile 21 B
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				27/06/2023	27/06/2023	27/06/2023
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	8.6	6.3	6.8
Total mass of sample received	kg	0.001	NONE	0.4	0.4	0.4

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile	Chrysotile	Chrysotile
Asbestos in Soil	Type	N/A	ISO 17025	Detected	Detected	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	< 0.001	< 0.001	< 0.001
Asbestos Quantification Total	%	0.001	ISO 17025	< 0.001	< 0.001	< 0.001
Asbestos Analyst ID	N/A	N/A	N/A	WEM	WEM	WEM

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.8	8	7.7
Total Cyanide	mg/kg	1	MCERTS	9.1	1.7	2.9
Total Sulphate as SO4	mg/kg	50	MCERTS	1400	570	670
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.31	0.08	0.12
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	620	160	230
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	312	79.6	116
Sulphide	mg/kg	1	MCERTS	13	2.6	14
Total Sulphur	mg/kg	50	MCERTS	920	350	520
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.4	1.3	1.4

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	31	19	32
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	49	22	48
Copper (aqua regia extractable)	mg/kg	1	MCERTS	86	55	85
Lead (aqua regia extractable)	mg/kg	1	MCERTS	190	100	160
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	2.9	0.9	3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	19	17	20
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	190	130	180

Monoaromatics & Oxygenates

Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0

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Analytical Report Number: 23-41964
Project / Site name: Don Street
Your Order No: 005329

Lab Sample Number				2729968	2729969	2729970
Sample Reference				Stokpile 20 B	Stokpile 21 A	Stokpile 21 B
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				27/06/2023	27/06/2023	27/06/2023
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Petroleum Hydrocarbons						
TPH-CWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	< 2.0	3.6	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	8.6	8.9	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	37	31	34
TPH-CWG - Aliphatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	46	43	43
TPH-CWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	5	4	5.3
TPH-CWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	30	19	28
TPH-CWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	82	66	76
TPH-CWG - Aromatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	120	90	110
VOCs						
Chloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0
Chloroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
Bromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0
Vinyl Chloride	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
Trichlorofluoromethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
1,1-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
Trans-1,2-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
1,1-dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0
2,2-Dichloropropane#	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
Chloroform	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
1,1,1-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0
1,2-dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0
1,1-Dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0
Cis-1,2-dichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0
Carbontetrachloride	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
1,2-dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0
Trichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0
Dibromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0
Bromodichloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0
Cis-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0
Trans-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0
1,1,2-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0
1,3-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0
Dibromochloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0
Tetrachloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
1,2-Dibromoethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0
Chlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0
1,1,1,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0

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Analytical Report Number: 23-41964
Project / Site name: Don Street
Your Order No: 005329

Lab Sample Number				2729968	2729969	2729970
Sample Reference				Stokpile 20 B	Stokpile 21 A	Stokpile 21 B
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				27/06/2023	27/06/2023	27/06/2023
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0
Styrene#	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
Bromoform	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0
Isopropylbenzene#	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
1,1,2,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0
Bromobenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
N-Propylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0
2-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0
4-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0
1,3,5-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0
Tert-Butylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0
1,2,4-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0
Sec-Butylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0
1,3-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0
P-Isopropyltoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0
1,4-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0
1,2-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0
Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
1,2-Dibromo-3-chloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0
Hexachlorobutadiene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
1,2,3-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0

SVOCs

Aniline	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1
Phenol	mg/kg	0.2	ISO 17025	< 0.2	< 0.2	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3
Hexachloroethane	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2
Isophorone	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2
2-Nitrophenol	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	1.3	0.2	0.57
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	0.7	0.1	0.3
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-41964
Project / Site name: Don Street
Your Order No: 005329

Lab Sample Number				2729968	2729969	2729970
Sample Reference				Stokpile 20 B	Stokpile 21 A	Stokpile 21 B
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				27/06/2023	27/06/2023	27/06/2023
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1
Acenaphthylene	mg/kg	0.05	MCERTS	0.63	0.13	0.49
Acenaphthene	mg/kg	0.05	MCERTS	1.1	0.48	0.77
2,4-Dinitrotoluene	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	1	0.2	0.5
4-Chlorophenyl phenyl ether	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2
4-Nitroaniline	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2
Fluorene	mg/kg	0.05	MCERTS	1.6	0.43	0.96
Azobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	8	3.8	6.4
Anthracene	mg/kg	0.05	MCERTS	4.2	1.1	2.2
Carbazole	mg/kg	0.3	MCERTS	0.7	< 0.3	0.4
Dibutyl phthalate	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2
Anthraquinone	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3
Fluoranthene	mg/kg	0.05	MCERTS	12	7.9	11
Pyrene	mg/kg	0.05	MCERTS	11	7.6	11
Butyl benzyl phthalate	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	5.7	3.6	5.4
Chrysene	mg/kg	0.05	MCERTS	5.6	3	4.2
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	6.2	3.9	6.4
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	2.2	1.8	1.9
Benzo(a)pyrene	mg/kg	0.05	MCERTS	4.5	3.2	4.5
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	2.3	1.7	2.4
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.43	0.31	0.4
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	2.5	1.9	2.6

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 23-41964
Project / Site name: Don Street
Your Order No: 005329

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2729966	Stokpile 18 B		172	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**
2729967	Stokpile 20 A		167	Loose Fibres	**Amosite**	< 0.001	**< 0.001**
2729968	Stokpile 20 B		162	Loose Fibrous Debris	**Chrysotile**	< 0.001	**< 0.001**
2729969	Stokpile 21 A		145	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**
2729970	Stokpile 21 B		152	Loose Fibrous Debris	**Chrysotile**	< 0.001	**< 0.001**

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 23-41964
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2729963	Stokpile 17 A	None Supplied	None Supplied	Brown sandy loam with gravel and vegetation.
2729964	Stokpile 17 B	None Supplied	None Supplied	Brown sandy loam with gravel and vegetation.
2729965	Stokpile 18 A	None Supplied	None Supplied	Brown sandy loam with gravel and vegetation.
2729966	Stokpile 18 B	None Supplied	None Supplied	Brown loam and clay with gravel and vegetation.
2729967	Stokpile 20 A	None Supplied	None Supplied	Brown loam and clay with gravel and vegetation.
2729968	Stokpile 20 B	None Supplied	None Supplied	Brown loam and clay with gravel and vegetation.
2729969	Stokpile 21 A	None Supplied	None Supplied	Brown loam and clay with gravel and vegetation.
2729970	Stokpile 21 B	None Supplied	None Supplied	Brown loam and clay with gravel and vegetation.

Analytical Report Number : 23-41964
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS

Analytical Report Number : 23-41964
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

- Data reported unaccredited due to quality control parameter failure associated with this result; other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.

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Analytical Report Number : 23-54571

Project / Site name:	Don Street	**Samples received on:**	04/09/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	04/09/2023
Your order number:	006015	**Analysis completed by:**	07/09/2023
Report Issue Number:	1	**Report issued on:**	08/09/2023
Samples Analysed:	1 leachate sample - 1 soil sample		

Izabela Wójcik
Signed:

Izabela Wójcik
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-54571
Project / Site name: Don Street
Your Order No: 006015

Lab Sample Number				2800479
Sample Reference				Stockpile 19 C
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				01/09/2023
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	17
Total mass of sample received	kg	0.001	NONE	0.9

General Inorganics

Total Cyanide	mg/kg	1	MCERTS	< 1.0

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	97
Barium (aqua regia extractable)	mg/kg	1	MCERTS	130
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.73
Boron (water soluble)	mg/kg	0.2	MCERTS	1.1
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8
Copper (aqua regia extractable)	mg/kg	1	MCERTS	57
Lead (aqua regia extractable)	mg/kg	1	MCERTS	160
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	19
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	26
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	120

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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UKAS TESTING
4041

Analytical i2 Environmental Science

Analytical Report Number: 23-54571
Project / Site name: Don Street

Your Order No: 006015

Lab Sample Number				2800480
Sample Reference				Stockpile 19 C
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				01/09/2023
Time Taken				None Supplied
Analytical Parameter (Leachate Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
General Inorganics				
pH (automated)	pH Units	N/A	ISO 17025	7.8
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	15
Total Phenols				
Total Phenols (monohydric)	µg/l	1	ISO 17025	1.7
Speciated PAHs				
Naphthalene	µg/l	0.01	ISO 17025	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	NONE	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	NONE	< 0.01
Benzo(ghi)perylene	µg/l	0.01	NONE	< 0.01
Total PAH				
Total EPA-16 PAHs	µg/l	0.2	NONE	< 0.2
Heavy Metals / Metalloids				
Arsenic (dissolved)	µg/l	1	ISO 17025	9.5
Cadmium (dissolved)	µg/l	0.08	ISO 17025	< 0.08
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0
Chromium (dissolved)	µg/l	0.4	ISO 17025	0.9
Copper (dissolved)	µg/l	0.7	ISO 17025	20
Lead (dissolved)	µg/l	1	ISO 17025	4.8
Mercury (dissolved)	µg/l	0.5	ISO 17025	< 0.5
Nickel (dissolved)	µg/l	0.3	ISO 17025	1.6
Selenium (dissolved)	µg/l	4	ISO 17025	< 4.0
Zinc (dissolved)	µg/l	0.4	ISO 17025	20
Monoaromatics & Oxygenates				
Benzene	µg/l	3	ISO 17025	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	10	NONE	< 10
Petroleum Hydrocarbons				
TPH1 (C10 - C40) EH_1D_TOTAL_MS	µg/l	10	NONE	< 10

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Analytical Report Number: 23-54571
Project / Site name: Don Street

Your Order No: 006015

Lab Sample Number				2800480
Sample Reference				Stockpile 19 C
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				01/09/2023
Time Taken				None Supplied
Analytical Parameter (Leachate Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
TPH-CWG - Aliphatic## >C5 - C6 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aliphatic## >C6 - C8 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aliphatic## >C8 - C10 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aliphatic >C10 - C12 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic >C12 - C16 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic >C16 - C21 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic >C21 - C35 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic (C5 - C35) $_{HS+EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10
TPH-CWG - Aromatic >C5 - C7 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aromatic >C7 - C8 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aromatic >C8 - C10 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aromatic >C10 - C12 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10
TPH-CWG - Aromatic >C12 - C16 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10
TPH-CWG - Aromatic >C16 - C21 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10
TPH-CWG - Aromatic >C21 - C35 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10
TPH-CWG - Aromatic (C5 - C35) $_{HS+EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10

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Analytical Report Number : 23-54571
Project / Site name: Don Street

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Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2800479	Stockpile 19 C	None Supplied	None Supplied	Brown clay and sand with gravel.

Analytical Report Number : 23-54571
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
BS EN 12457-1 (2:1) Leachate Prep	2:1 (as recieved, moisture adjusted) end over end extraction with water for 24 hours. Eluate filtered prior to analysis.	In-house method based on BSEN12457-1.	L043-PL	W	NONE
Metals by ICP-OES in leachate	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Hexavalent chromium in leachate	Determination of hexavalent chromium in leachate by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in leachate - LOW LEVEL 1 ug/l	Determination of phenols in leachate by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Speciated EPA-16 PAHs in leachate	Determination of PAH compounds in leachate by extraction in dichloromethane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
pH at 20oC in leachate (automated)	Determination of pH in leachate by electrometric measurement.	In house method.	L099B	W	ISO 17025
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
TPH1 (Leachates)	Determination of dichloromethane extractable hydrocarbons in leachate by GC-MS.	In-house method	L070-PL	W	NONE
TPHCWG (Leachates)	Determination of dichloromethane extractable hydrocarbons in leachate by GC-MS.	In-house method	L070-PL	W	ISO 17025
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
BTEX and MTBE in leachates (Monoaromatics)	Determination of BTEX and MTBE in leachates by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Total cyanide in leachate - 1µg/l	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS

Analytical Report Number : 23-54571
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

- Quality control parameter has a high recovery (outside of limit); however the associated result is below the reporting limit, other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.

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Analytical Report Number : 23-52298

Project / Site name:	Don Street	**Samples received on:**	21/08/2023
Your job number:	14 554	**Samples instructed on/ Analysis started on:**	22/08/2023
Your order number:	5881	**Analysis completed by:**	29/08/2023
Report Issue Number:	1	**Report issued on:**	29/08/2023
Samples Analysed:	2 soil samples		

Izabela Wójcik
Signed:

Izabela Wójcik
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-52298
Project / Site name: Don Street
Your Order No: 5881

Lab Sample Number				2788267	2788268
Sample Reference				SP-19-A	SP-19-B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				18/08/2023	18/08/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	12	15
Total mass of sample received	kg	0.001	NONE	0.4	0.3

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	Chrysotile
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	< 0.001
Asbestos Quantification Total	%	0.001	ISO 17025	-	< 0.001
Asbestos Analyst ID	N/A	N/A	N/A	MLO	MLO

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.1	8.8
Total Cyanide	mg/kg	1	MCERTS	1	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	1400	1300
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.4	0.37
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	790	730
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	396	367
Sulphide	mg/kg	1	MCERTS	8.8	18
Total Sulphur	mg/kg	50	MCERTS	920	980
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.5	1.8

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	120	87
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	19	110
Copper (aqua regia extractable)	mg/kg	1	MCERTS	79	71
Lead (aqua regia extractable)	mg/kg	1	MCERTS	140	130
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.4	0.4
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	20	19
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	120	180

Monoaromatics & Oxygenates

Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0

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Analytical Report Number: 23-52298
Project / Site name: Don Street
Your Order No: 5881

Lab Sample Number				2788267	2788268
Sample Reference				SP-19-A	SP-19-B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				18/08/2023	18/08/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Petroleum Hydrocarbons					
TPH-CWG - Aliphatic >EC5 - EC6 HS_1D_AL	mg/kg	0.1	NONE	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC6 - EC8 HS_1D_AL	mg/kg	0.1	NONE	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC8 - EC10 HS_1D_AL	mg/kg	0.1	NONE	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC10 - EC12 EH_CU_1D_AL	mg/kg	1	MCERTS	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 EH_CU_1D_AL	mg/kg	2	MCERTS	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21 EH_CU_1D_AL	mg/kg	8	MCERTS	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35 EH_CU_1D_AL	mg/kg	8	MCERTS	12	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35) EH_CU+HS_1D_AL	mg/kg	10	NONE	15	< 10
TPH-CWG - Aromatic >EC5 - EC7 HS_1D_AR	mg/kg	0.1	NONE	< 0.10	< 0.10
TPH-CWG - Aromatic >EC7 - EC8 HS_1D_AR	mg/kg	0.1	NONE	< 0.10	< 0.10
TPH-CWG - Aromatic >EC8 - EC10 HS_1D_AR	mg/kg	0.1	NONE	< 0.10	< 0.10
TPH-CWG - Aromatic >EC10 - EC12 EH_CU_1D_AR	mg/kg	1	MCERTS	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 EH_CU_1D_AR	mg/kg	2	MCERTS	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21 EH_CU_1D_AR	mg/kg	10	MCERTS	17	11
TPH-CWG - Aromatic >EC21 - EC35 EH_CU_1D_AR	mg/kg	10	MCERTS	36	26
TPH-CWG - Aromatic (EC5 - EC35) EH_CU+HS_1D_AR	mg/kg	10	NONE	55	38
VOCs					
Chloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Chloroethane	µg/kg	5	NONE	< 5.0	< 5.0
Bromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Vinyl Chloride	µg/kg	5	NONE	< 5.0	< 5.0
Trichlorofluoromethane	µg/kg	5	NONE	< 5.0	< 5.0
1,1-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	5	NONE	< 5.0	< 5.0
Trans 1,2-dichloroethylene	µg/kg	5	NONE	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0
1,1-dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
2,2-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Chloroform	µg/kg	5	NONE	< 5.0	< 5.0
1,1,1-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2-dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,1-Dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Cis-1,2-dichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0
Carbontetrachloride	µg/kg	5	NONE	< 5.0	< 5.0
1,2-dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Trichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Dibromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Bromodichloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Cis-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Trans-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0
1,1,2-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,3-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Dibromochloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Tetrachloroethene	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dibromoethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Chlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,1,1,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0

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Analytical Report Number: 23-52298
Project / Site name: Don Street
Your Order No: 5881

Lab Sample Number				2788267	2788268
Sample Reference				SP-19-A	SP-19-B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				18/08/2023	18/08/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
Styrene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Bromoform	µg/kg	5	NONE	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
Isopropylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,1,2,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Bromobenzene	µg/kg	5	NONE	< 5.0	< 5.0
N-Propylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
2-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0
4-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,3,5-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Tert-Butylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2,4-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Sec-Butylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,3-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
P-Isopropyltoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,4-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dibromo-3-chloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Hexachlorobutadiene	µg/kg	5	NONE	< 5.0	< 5.0
1,2,3-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0

SVOCs

Aniline	mg/kg	0.1	NONE	< 0.1	< 0.1
Phenol	mg/kg	0.2	ISO 17025	< 0.2	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Hexachloroethane	mg/kg	0.05	ISO 17025	< 0.05	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	< 0.2
Isophorone	mg/kg	0.2	MCERTS	< 0.2	< 0.2
2-Nitrophenol	mg/kg	0.3	NONE	< 0.3	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	0.51	0.48
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	NONE	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	NONE	< 0.2	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	0.4	0.3
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	< 0.1

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Analytical Report Number: 23-52298
Project / Site name: Don Street
Your Order No: 5881

Lab Sample Number				2788267	2788268
Sample Reference				SP-19-A	SP-19-B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				18/08/2023	18/08/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Dimethylphthalate	mg/kg	0.1	MCERTS	0.4	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	NONE	< 0.1	< 0.1
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	0.05
Acenaphthene	mg/kg	0.05	MCERTS	0.83	0.49
2,4-Dinitrotoluene	mg/kg	0.2	NONE	< 0.2	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	0.5	0.3
4-Chlorophenyl phenyl ether	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	< 0.2
4-Nitroaniline	mg/kg	0.2	NONE	< 0.2	< 0.2
Fluorene	mg/kg	0.05	MCERTS	0.71	0.39
Azobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	6.1	2.9
Anthracene	mg/kg	0.05	MCERTS	1.6	0.79
Carbazole	mg/kg	0.3	MCERTS	0.5	< 0.3
Dibutyl phthalate	mg/kg	0.2	NONE	< 0.2	< 0.2
Anthraquinone	mg/kg	0.3	NONE	< 0.3	< 0.3
Fluoranthene	mg/kg	0.05	MCERTS	7.8	5
Pyrene	mg/kg	0.05	MCERTS	7.2	4.7
Butyl benzyl phthalate	mg/kg	0.3	NONE	< 0.3	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	3.4	2.3
Chrysene	mg/kg	0.05	MCERTS	3.4	2.2
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	3.5	2.6
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	1.7	0.93
Benzo(a)pyrene	mg/kg	0.05	MCERTS	3.2	2.3
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	1.6	1.2
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.42	0.27
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	1.7	1.3

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 23-52298
Project / Site name: Don Street
Your Order No: 5881

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2788268	SP-19-B		217	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 23-52298
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2788267	SP-19-A	None Supplied	None Supplied	Brown loam and clay with gravel.
2788268	SP-19-B	None Supplied	None Supplied	Brown clay and loam with gravel and vegetation.

Analytical Report Number : 23-52298
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS

Analytical Report Number : 23-52298
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

Final Report

Report No.:	23-23402-1
Initial Date of Issue:	18-Jul-2023
Re-Issue Details:	
Client	E3P
Client Address:	Taylor Road Trafford Park Urmston Manchester M41 7JQ
Contact(s):	Georgia Calvert Matthew Dee
Project	14-554 Don Street

Quotation No.:		**Date Received:**	11-Jul-2023
Order No.:	5457	**Date Instructed:**	11-Jul-2023
No. of Samples:	4		
Turnaround (Wkdays):	5	**Results Due:**	17-Jul-2023
Date Approved:	18-Jul-2023		

Approved By:



Details: Simon Wicks, Specialist Chemist

Results - Soil

Project: 14-554 Don Street

Client: E3P			**Chemtest Job No.:**		23-23402	23-23402	23-23402	23-23402
Quotation No.:			**Chemtest Sample ID.:**		1672218	1672219	1672220	1672221
			Client Sample ID.:		SP20-A	SP20-B	SP23-A	SP23-B
			Sample Type:		SOIL	SOIL	SOIL	SOIL
			Date Sampled:		07-Jul-2023	07-Jul-2023	07-Jul-2023	07-Jul-2023
			Asbestos Lab:		NEW-ASB	NEW-ASB	NEW-ASB	NEW-ASB
Determinand	**Accred.**	**SOP**	**Units**	**LOD**				
ACM Type	U	2192		N/A	-	-	-	-
Asbestos Identification	U	2192		N/A	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
Moisture	N	2030	%	0.020	13	12	12	13
Soil Colour	N	2040		N/A	Brown	Brown	Brown	Brown
Other Material	N	2040		N/A	Stones	Stones	Stones	Stones
Soil Texture	N	2040		N/A	Sand	Sand	Clay	Clay
pH	M	2010		4.0	8.6	8.4	8.2	8.1
Sulphate (2:1 Water Soluble) as SO4	M	2120	g/l	0.010	0.053	0.27	0.057	0.27
Total Sulphur	U	2175	%	0.010	0.10	0.11	0.15	0.26
Cyanide (Total)	M	2300	mg/kg	0.50	6.8	7.5	5.0	7.3
Sulphide (Easily Liberatable)	N	2325	mg/kg	0.50	3.4	3.8	4.9	5.4
Sulphate (Total)	U	2430	%	0.010	0.16	0.19	0.23	0.32
Arsenic	M	2455	mg/kg	0.5	26	22	74	57
Cadmium	M	2455	mg/kg	0.10	0.20	0.36	0.21	0.30
Chromium	M	2455	mg/kg	0.5	22	38	21	22
Copper	M	2455	mg/kg	0.50	37	60	51	47
Mercury	M	2455	mg/kg	0.05	1.0	2.4	1.3	1.4
Nickel	M	2455	mg/kg	0.50	9.4	14	13	14
Lead	M	2455	mg/kg	0.50	96	170	120	150
Selenium	M	2455	mg/kg	0.25	0.25	0.42	0.38	0.40
Zinc	M	2455	mg/kg	0.50	98	170	110	150
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Total Organic Carbon	M	2625	%	0.20	1.9	1.9	1.9	2.0
TPH >C6-C8	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C8-C10	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C10-C12	N	2670	mg/kg	1.0	2.1	2.9	< 1.0	< 1.0
TPH >C12-C16	N	2670	mg/kg	1.0	11	8.5	11	6.1
TPH >C16-C21	N	2670	mg/kg	1.0	26	16	31	28
TPH >C21-C25	N	2670	mg/kg	1.0	20	18	29	28
TPH >C25-C35	N	2670	mg/kg	1.0	25	23	34	35
TPH >C35-C40	N	2670	mg/kg	1.0	1.5	1.9	1.8	< 1.0
Total TPH >C6-C40	M	2670	mg/kg	10	84	70	110	97
Dichlorodifluoromethane	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloromethane	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl Chloride	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromomethane	M	2760	µg/kg	20	< 20	< 20	< 20	< 20
Chloroethane	U	2760	µg/kg	2.0	< 2.0	< 2.0	< 2.0	< 2.0
Trichlorofluoromethane	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0

Results - Soil

Project: 14-554 Don Street

Client: E3P		**Chemtest Job No.:**			23-23402	23-23402	23-23402	23-23402
Quotation No.:		**Chemtest Sample ID.:**			1672218	1672219	1672220	1672221
		Client Sample ID.:			SP20-A	SP20-B	SP23-A	SP23-B
		Sample Type:			SOIL	SOIL	SOIL	SOIL
		Date Sampled:			07-Jul-2023	07-Jul-2023	07-Jul-2023	07-Jul-2023
		Asbestos Lab:			NEW-ASB	NEW-ASB	NEW-ASB	NEW-ASB
Determinand	**Accred.**	**SOP**	**Units**	**LOD**				
Dichloromethane	N	2760	µg/kg	50	< 50	< 50	< 50	< 50
Trans 1,2-Dichloroethene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis 1,2-Dichloroethene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromochloromethane	U	2760	µg/kg	5.0	< 5.0	< 5.0	< 5.0	< 5.0
Trichloromethane	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloromethane	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloropropene	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Benzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	M	2760	µg/kg	2.0	< 2.0	< 2.0	< 2.0	< 2.0
Trichloroethene	N	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dibromomethane	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	M	2760	µg/kg	5.0	< 5.0	< 5.0	< 5.0	< 5.0
cis-1,3-Dichloropropene	N	2760	µg/kg	10	< 10	< 10	< 10	< 10
Toluene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trans-1,3-Dichloropropene	N	2760	µg/kg	10	< 10	< 10	< 10	< 10
1,1,2-Trichloroethane	M	2760	µg/kg	10	< 10	< 10	< 10	< 10
Tetrachloroethene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichloropropane	U	2760	µg/kg	2.0	< 2.0	< 2.0	< 2.0	< 2.0
Dibromochloromethane	U	2760	µg/kg	10	< 10	< 10	< 10	< 10
1,2-Dibromoethane	M	2760	µg/kg	5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chlorobenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1,2-Tetrachloroethane	M	2760	µg/kg	2.0	< 2.0	< 2.0	< 2.0	< 2.0
Ethylbenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
m & p-Xylene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tribromomethane	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromobenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichloropropane	N	2760	µg/kg	50	< 50	< 50	< 50	< 50
N-Propylbenzene	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
2-Chlorotoluene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
4-Chlorotoluene	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tert-Butylbenzene	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Sec-Butylbenzene	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0

Results - Soil

Project: 14-554 Don Street

Client: E3P			Chemtest Job No.:		23-23402	23-23402	23-23402	23-23402
Quotation No.:			Chemtest Sample ID.:		1672218	1672219	1672220	1672221
			Client Sample ID.:		SP20-A	SP20-B	SP23-A	SP23-B
			Sample Type:		SOIL	SOIL	SOIL	SOIL
			Date Sampled:		07-Jul-2023	07-Jul-2023	07-Jul-2023	07-Jul-2023
			Asbestos Lab:		NEW-ASB	NEW-ASB	NEW-ASB	NEW-ASB
Determinand	**Accred.**	**SOP**	**Units**	**LOD**				
1,3-Dichlorobenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
4-Isopropyltoluene	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
N-Butylbenzene	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-Chloropropane	U	2760	µg/kg	50	< 50	< 50	< 50	< 50
1,2,4-Trichlorobenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Hexachlorobutadiene	N	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene	U	2760	µg/kg	2.0	< 2.0	< 2.0	< 2.0	< 2.0
Methyl Tert-Butyl Ether	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
N-Nitrosodimethylamine	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Phenol	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Chlorophenol	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bis-(2-Chloroethyl)Ether	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,3-Dichlorobenzene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,4-Dichlorobenzene	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-Dichlorobenzene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Methylphenol	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bis(2-Chloroisopropyl)Ether	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Hexachloroethane	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
N-Nitrosodi-n-propylamine	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Methylphenol	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Nitrobenzene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Isophorone	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Nitrophenol	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4-Dimethylphenol	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bis(2-Chloroethoxy)Methane	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4-Dichlorophenol	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2,4-Trichlorobenzene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Naphthalene	M	2790	mg/kg	0.50	0.57	< 0.50	< 0.50	< 0.50
4-Chloroaniline	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Hexachlorobutadiene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Chloro-3-Methylphenol	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Methylnaphthalene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Nitrophenol	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Hexachlorocyclopentadiene	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4,6-Trichlorophenol	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4,5-Trichlorophenol	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Chloronaphthalene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Nitroaniline	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50

Results - Soil

Project: 14-554 Don Street

Client: E3P		**Chemtest Job No.:**			23-23402	23-23402	23-23402	23-23402
Quotation No.:		**Chemtest Sample ID.:**			1672218	1672219	1672220	1672221
		Client Sample ID.:			SP20-A	SP20-B	SP23-A	SP23-B
		Sample Type:			SOIL	SOIL	SOIL	SOIL
		Date Sampled:			07-Jul-2023	07-Jul-2023	07-Jul-2023	07-Jul-2023
		Asbestos Lab:			NEW-ASB	NEW-ASB	NEW-ASB	NEW-ASB
Determinand	**Accred.**	**SOP**	**Units**	**LOD**				
Acenaphthylene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dimethylphthalate	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,6-Dinitrotoluene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Acenaphthene	M	2790	mg/kg	0.50	0.85	0.72	0.62	0.81
3-Nitroaniline	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dibenzofuran	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Chlorophenylphenylether	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4-Dinitrotoluene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Fluorene	M	2790	mg/kg	0.50	0.62	< 0.50	< 0.50	0.67
Diethyl Phthalate	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Nitroaniline	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Methyl-4,6-Dinitrophenol	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Azobenzene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Bromophenylphenyl Ether	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Hexachlorobenzene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Pentachlorophenol	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Phenanthrene	M	2790	mg/kg	0.50	3.5	3.8	3.8	4.4
Anthracene	M	2790	mg/kg	0.50	1.1	1.2	1.2	1.4
Carbazole	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Di-N-Butyl Phthalate	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Fluoranthene	M	2790	mg/kg	0.50	5.8	6.0	7.2	6.9
Pyrene	M	2790	mg/kg	0.50	5.0	5.0	6.5	6.0
Butylbenzyl Phthalate	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[a]anthracene	M	2790	mg/kg	0.50	2.5	2.5	3.1	2.9
Chrysene	M	2790	mg/kg	0.50	2.5	2.4	3.3	2.9
Bis(2-Ethylhexyl)Phthalate	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Di-N-Octyl Phthalate	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[b]fluoranthene	M	2790	mg/kg	0.50	3.0	1.0	3.7	1.2
Benzo[k]fluoranthene	M	2790	mg/kg	0.50	1.0	0.97	1.4	1.2
Benzo[a]pyrene	M	2790	mg/kg	0.50	2.5	2.4	3.1	2.8
Indeno(1,2,3-c,d)Pyrene	M	2790	mg/kg	0.50	1.2	1.1	1.4	1.3
Dibenz(a,h)Anthracene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[g,h,i]perylene	M	2790	mg/kg	0.50	1.4	1.2	1.7	1.6
Naphthalene	M	2800	mg/kg	0.10	1.3	2.2	2.4	1.9
Acenaphthylene	N	2800	mg/kg	0.10	0.20	0.32	0.25	0.26
Acenaphthene	M	2800	mg/kg	0.10	0.66	1.3	1.3	1.1
Fluorene	M	2800	mg/kg	0.10	0.61	1.0	1.1	1.0
Phenanthrene	M	2800	mg/kg	0.10	3.7	6.2	7.0	6.3
Anthracene	M	2800	mg/kg	0.10	1.2	1.8	1.9	1.9
Fluoranthene	M	2800	mg/kg	0.10	6.4	8.8	9.6	9.5

Results - Soil

Project: 14-554 Don Street

Client: E3P		**Chemtest Job No.:**			23-23402	23-23402	23-23402	23-23402
Quotation No.:		**Chemtest Sample ID.:**			1672218	1672219	1672220	1672221
		Client Sample ID.:			SP20-A	SP20-B	SP23-A	SP23-B
		Sample Type:			SOIL	SOIL	SOIL	SOIL
		Date Sampled:			07-Jul-2023	07-Jul-2023	07-Jul-2023	07-Jul-2023
		Asbestos Lab:			NEW-ASB	NEW-ASB	NEW-ASB	NEW-ASB
Determinand	**Accred.**	**SOP**	**Units**	**LOD**				
Pyrene	M	2800	mg/kg	0.10	5.5	7.3	8.3	8.0
Benzo[a]anthracene	M	2800	mg/kg	0.10	3.1	4.0	4.6	4.5
Chrysene	M	2800	mg/kg	0.10	3.3	4.4	5.3	4.9
Benzo[b]fluoranthene	M	2800	mg/kg	0.10	4.2	4.9	5.5	5.5
Benzo[k]fluoranthene	M	2800	mg/kg	0.10	1.6	1.9	2.2	2.0
Benzo[a]pyrene	M	2800	mg/kg	0.10	3.4	4.1	4.5	4.4
Indeno(1,2,3-c,d)Pyrene	M	2800	mg/kg	0.10	2.3	2.7	2.9	2.9
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.10	0.50	0.62	0.74	0.49
Benzo[g,h,i]perylene	M	2800	mg/kg	0.10	2.2	2.4	2.8	2.7
Total Of 16 PAH's	N	2800	mg/kg	2.0	40	54	60	57
Total Phenols	M	2920	mg/kg	0.10	< 0.10	0.11	< 0.10	< 0.10

Test Methods

SOP	Title	Parameters included	Method summary
2010	pH Value of Soils	pH	pH Meter
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES
2175	Total Sulphur in Soils	Total Sulphur	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Allkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N–dimethyl-p-phenylenediamine.
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.
2455	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID
2760	Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule	Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds.
2790	Semi-Volatile Organic Compounds (SVOCs) in Soils by GC-MS	Semi-volatile organic compounds(cf. USEPA Method 8270)	Acetone/Hexane extraction / GC-MS
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.

Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

Comments or interpretations are beyond the scope of UKAS accreditation
The results relate only to the items tested
Uncertainty of measurement for the determinands tested are available upon request
None of the results in this report have been recovery corrected
All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis
All Asbestos testing is performed at the indicated laboratory
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt
All water samples will be retained for 14 days from the date of receipt
Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com

Eurofins Chemtest Ltd
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

Amended Report

Report No.:	23-23716-5		
Initial Date of Issue:	18-Jul-2023	**Date of Re-Issue:**	19-Jul-2023
Re-Issue Details:	This report has been revised and directly supersedes 23-23716-4 in its entirety		
Client	E3P		
Client Address:	Taylor Road Trafford Park Urmston Manchester M41 7JQ		
Contact(s):	Georgia Calvert Matthew Dee		
Project	14-554 Don Street		
Quotation No.:	Q23-31749	**Date Received:**	13-Jul-2023
Order No.:	5486	**Date Instructed:**	13-Jul-2023
No. of Samples:	2		
Turnaround (Wkdays):	5	**Results Due:**	19-Jul-2023
Date Approved:	18-Jul-2023		
Approved By:			
Details:	Stuart Henderson, Technical Manager		

Results - Soil

Project: 14-554 Don Street

Client: E3P		**Chemtest Job No.:**			23-23716	23-23716
Quotation No.: Q23-31749		**Chemtest Sample ID.:**			1673657	1673658
			Client Sample ID.:		SP22-A	SP22-B
			Sample Type:		SOIL	SOIL
			Date Sampled:		11-Jul-2023	11-Jul-2023
			Asbestos Lab:		DURHAM	DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**		
ACM Type	U	2192		N/A	Fibres/Clumps	Fibres/Clumps
Asbestos Identification	U	2192		N/A	Chrysotile	Chrysotile
Asbestos by Gravimetry	U	2192	%	0.001	<0.001	<0.001
Total Asbestos	U	2192	%	0.001	<0.001	<0.001
Moisture	N	2030	%	0.020	16	16
Soil Colour	N	2040		N/A	Brown	Brown
Other Material	N	2040		N/A	None	Stones
Soil Texture	N	2040		N/A	Loam	Loam
pH	M	2010		4.0	8.1	7.9
Sulphate (2:1 Water Soluble) as SO4	M	2120	g/l	0.010	0.11	0.11
Total Sulphur	U	2175	%	0.010	0.17	0.10
Cyanide (Total)	M	2300	mg/kg	0.50	1.6	3.2
Sulphide (Easily Liberatable)	N	2325	mg/kg	0.50	5.3	5.9
Sulphate (Total)	U	2430	%	0.010	0.11	0.10
Arsenic	M	2455	mg/kg	0.5	16	18
Cadmium	M	2455	mg/kg	0.10	< 0.10	0.12
Chromium	M	2455	mg/kg	0.5	24	28
Copper	M	2455	mg/kg	0.50	41	59
Mercury	M	2455	mg/kg	0.05	0.48	0.91
Nickel	M	2455	mg/kg	0.50	20	16
Lead	M	2455	mg/kg	0.50	84	100
Selenium	M	2455	mg/kg	0.25	0.54	0.48
Zinc	M	2455	mg/kg	0.50	110	120
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50	< 0.50
Total Organic Carbon	M	2625	%	0.20	2.0	2.4
TPH >C6-C8	N	2670	mg/kg	1.0	< 1.0	< 1.0
TPH >C8-C10	N	2670	mg/kg	1.0	< 1.0	< 1.0
TPH >C10-C12	N	2670	mg/kg	1.0	1.8	< 1.0
TPH >C12-C16	N	2670	mg/kg	1.0	7.2	< 1.0
TPH >C16-C21	N	2670	mg/kg	1.0	8.2	< 1.0
TPH >C21-C25	N	2670	mg/kg	1.0	28	< 1.0
TPH >C25-C35	N	2670	mg/kg	1.0	9.3	< 1.0
TPH >C35-C40	N	2670	mg/kg	1.0	< 1.0	< 1.0
Total TPH >C6-C40	M	2670	mg/kg	10	55	< 10
Dichlorodifluoromethane	U	2760	µg/kg	1.0	< 1.0	< 1.0
Chloromethane	M	2760	µg/kg	1.0	< 1.0	< 1.0
Vinyl Chloride	M	2760	µg/kg	1.0	< 1.0	< 1.0
Bromomethane	M	2760	µg/kg	20	< 20	< 20
Chloroethane	U	2760	µg/kg	2.0	< 2.0	< 2.0
Trichlorofluoromethane	M	2760	µg/kg	1.0	< 1.0	< 1.0

Results - Soil

Project: 14-554 Don Street

Client: E3P		**Chemtest Job No.:**			23-23716	23-23716
Quotation No.: Q23-31749		**Chemtest Sample ID.:**			1673657	1673658
			Client Sample ID.:		SP22-A	SP22-B
			Sample Type:		SOIL	SOIL
			Date Sampled:		11-Jul-2023	11-Jul-2023
			Asbestos Lab:		DURHAM	DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**		
1,1-Dichloroethene	M	2760	µg/kg	1.0	< 1.0	< 1.0
Dichloromethane	N	2760	µg/kg	50	< 50	< 50
Trans 1,2-Dichloroethene	M	2760	µg/kg	1.0	< 1.0	< 1.0
1,1-Dichloroethane	M	2760	µg/kg	1.0	< 1.0	< 1.0
cis 1,2-Dichloroethene	M	2760	µg/kg	1.0	< 1.0	< 1.0
Bromochloromethane	U	2760	µg/kg	5.0	< 5.0	< 5.0
Trichloromethane	M	2760	µg/kg	1.0	< 1.0	< 1.0
1,1,1-Trichloroethane	M	2760	µg/kg	1.0	< 1.0	< 1.0
Tetrachloromethane	M	2760	µg/kg	1.0	< 1.0	< 1.0
1,1-Dichloropropene	U	2760	µg/kg	1.0	< 1.0	< 1.0
Benzene	M	2760	µg/kg	1.0	< 1.0	< 1.0
1,2-Dichloroethane	M	2760	µg/kg	2.0	< 2.0	< 2.0
Trichloroethene	N	2760	µg/kg	1.0	< 1.0	< 1.0
1,2-Dichloropropane	M	2760	µg/kg	1.0	< 1.0	< 1.0
Dibromomethane	M	2760	µg/kg	1.0	< 1.0	< 1.0
Bromodichloromethane	M	2760	µg/kg	5.0	< 5.0	< 5.0
cis-1,3-Dichloropropene	N	2760	µg/kg	10	< 10	< 10
Toluene	M	2760	µg/kg	1.0	< 1.0	< 1.0
Trans-1,3-Dichloropropene	N	2760	µg/kg	10	< 10	< 10
1,1,2-Trichloroethane	M	2760	µg/kg	10	< 10	< 10
Tetrachloroethene	M	2760	µg/kg	1.0	< 1.0	< 1.0
1,3-Dichloropropane	U	2760	µg/kg	2.0	< 2.0	< 2.0
Dibromochloromethane	U	2760	µg/kg	10	< 10	< 10
1,2-Dibromoethane	M	2760	µg/kg	5.0	< 5.0	< 5.0
Chlorobenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0
1,1,1,2-Tetrachloroethane	M	2760	µg/kg	2.0	< 2.0	< 2.0
Ethylbenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0
m & p-Xylene	M	2760	µg/kg	1.0	< 1.0	< 1.0
o-Xylene	M	2760	µg/kg	1.0	< 1.0	< 1.0
Styrene	M	2760	µg/kg	1.0	< 1.0	< 1.0
Tribromomethane	U	2760	µg/kg	1.0	< 1.0	< 1.0
Isopropylbenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0
Bromobenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0
1,2,3-Trichloropropane	N	2760	µg/kg	50	< 50	< 50
N-Propylbenzene	U	2760	µg/kg	1.0	< 1.0	< 1.0
2-Chlorotoluene	M	2760	µg/kg	1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0
4-Chlorotoluene	U	2760	µg/kg	1.0	< 1.0	< 1.0
Tert-Butylbenzene	U	2760	µg/kg	1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0

Results - Soil

Project: 14-554 Don Street

Client: E3P		**Chemtest Job No.:**			23-23716	23-23716
Quotation No.: Q23-31749		**Chemtest Sample ID.:**			1673657	1673658
		Client Sample ID.:			SP22-A	SP22-B
		Sample Type:			SOIL	SOIL
		Date Sampled:			11-Jul-2023	11-Jul-2023
		Asbestos Lab:			DURHAM	DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**		
Sec-Butylbenzene	U	2760	µg/kg	1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0
4-Isopropyltoluene	U	2760	µg/kg	1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0
N-Butylbenzene	U	2760	µg/kg	1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0
1,2-Dibromo-3-Chloropropane	U	2760	µg/kg	50	< 50	< 50
1,2,4-Trichlorobenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0
Hexachlorobutadiene	N	2760	µg/kg	1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene	U	2760	µg/kg	2.0	< 2.0	< 2.0
Methyl Tert-Butyl Ether	M	2760	µg/kg	1.0	< 1.0	< 1.0
N-Nitrosodimethylamine	M	2790	mg/kg	0.50	< 0.50	< 0.50
Phenol	M	2790	mg/kg	0.50	< 0.50	< 0.50
2-Chlorophenol	M	2790	mg/kg	0.50	< 0.50	< 0.50
Bis-(2-Chloroethyl)Ether	M	2790	mg/kg	0.50	< 0.50	< 0.50
1,3-Dichlorobenzene	M	2790	mg/kg	0.50	< 0.50	< 0.50
1,4-Dichlorobenzene	N	2790	mg/kg	0.50	< 0.50	< 0.50
1,2-Dichlorobenzene	M	2790	mg/kg	0.50	< 0.50	< 0.50
2-Methylphenol	M	2790	mg/kg	0.50	< 0.50	< 0.50
Bis(2-Chloroisopropyl)Ether	M	2790	mg/kg	0.50	< 0.50	< 0.50
Hexachloroethane	N	2790	mg/kg	0.50	< 0.50	< 0.50
N-Nitrosodi-n-propylamine	M	2790	mg/kg	0.50	< 0.50	< 0.50
4-Methylphenol	M	2790	mg/kg	0.50	< 0.50	< 0.50
Nitrobenzene	M	2790	mg/kg	0.50	< 0.50	< 0.50
Isophorone	M	2790	mg/kg	0.50	< 0.50	< 0.50
2-Nitrophenol	N	2790	mg/kg	0.50	< 0.50	< 0.50
2,4-Dimethylphenol	N	2790	mg/kg	0.50	< 0.50	< 0.50
Bis(2-Chloroethoxy)Methane	M	2790	mg/kg	0.50	< 0.50	< 0.50
2,4-Dichlorophenol	M	2790	mg/kg	0.50	< 0.50	< 0.50
1,2,4-Trichlorobenzene	M	2790	mg/kg	0.50	< 0.50	< 0.50
4-Chloroaniline	N	2790	mg/kg	0.50	< 0.50	< 0.50
Hexachlorobutadiene	M	2790	mg/kg	0.50	< 0.50	< 0.50
4-Chloro-3-Methylphenol	M	2790	mg/kg	0.50	< 0.50	< 0.50
2-Methylnaphthalene	M	2790	mg/kg	0.50	< 0.50	< 0.50
4-Nitrophenol	N	2790	mg/kg	0.50	< 0.50	< 0.50
Hexachlorocyclopentadiene	N	2790	mg/kg	0.50	< 0.50	< 0.50
2,4,6-Trichlorophenol	M	2790	mg/kg	0.50	< 0.50	< 0.50
2,4,5-Trichlorophenol	M	2790	mg/kg	0.50	< 0.50	< 0.50
2-Chloronaphthalene	M	2790	mg/kg	0.50	< 0.50	< 0.50
2-Nitroaniline	M	2790	mg/kg	0.50	< 0.50	< 0.50

Results - Soil

Project: 14-554 Don Street

Client: E3P			**Chemtest Job No.:**		23-23716	23-23716
Quotation No.: Q23-31749			**Chemtest Sample ID.:**		1673657	1673658
			Client Sample ID.:		SP22-A	SP22-B
			Sample Type:		SOIL	SOIL
			Date Sampled:		11-Jul-2023	11-Jul-2023
			Asbestos Lab:		DURHAM	DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**		
Dimethylphthalate	M	2790	mg/kg	0.50	< 0.50	< 0.50
2,6-Dinitrotoluene	M	2790	mg/kg	0.50	< 0.50	< 0.50
3-Nitroaniline	N	2790	mg/kg	0.50	< 0.50	< 0.50
Dibenzofuran	M	2790	mg/kg	0.50	< 0.50	< 0.50
4-Chlorophenylphenylether	M	2790	mg/kg	0.50	< 0.50	< 0.50
2,4-Dinitrotoluene	M	2790	mg/kg	0.50	< 0.50	< 0.50
Diethyl Phthalate	M	2790	mg/kg	0.50	< 0.50	< 0.50
4-Nitroaniline	M	2790	mg/kg	0.50	< 0.50	< 0.50
2-Methyl-4,6-Dinitrophenol	N	2790	mg/kg	0.50	< 0.50	< 0.50
Azobenzene	M	2790	mg/kg	0.50	< 0.50	< 0.50
4-Bromophenylphenyl Ether	M	2790	mg/kg	0.50	< 0.50	< 0.50
Hexachlorobenzene	M	2790	mg/kg	0.50	< 0.50	< 0.50
Pentachlorophenol	N	2790	mg/kg	0.50	< 0.50	< 0.50
Carbazole	M	2790	mg/kg	0.50	< 0.50	< 0.50
Di-N-Butyl Phthalate	M	2790	mg/kg	0.50	< 0.50	< 0.50
Naphthalene	M	2800	mg/kg	0.10	1.3	2.0
Acenaphthylene	N	2800	mg/kg	0.10	0.19	0.26
Acenaphthene	M	2800	mg/kg	0.10	1.0	1.0
Fluorene	M	2800	mg/kg	0.10	0.83	0.76
Phenanthrene	M	2800	mg/kg	0.10	4.9	3.3
Anthracene	M	2800	mg/kg	0.10	1.5	1.1
Fluoranthene	M	2800	mg/kg	0.10	7.6	5.2
Pyrene	M	2800	mg/kg	0.10	6.4	4.6
Benzo[a]anthracene	M	2800	mg/kg	0.10	3.3	2.3
Chrysene	M	2800	mg/kg	0.10	3.5	2.5
Benzo[b]fluoranthene	M	2800	mg/kg	0.10	4.0	3.0
Benzo[k]fluoranthene	M	2800	mg/kg	0.10	1.5	1.0
Benzo[a]pyrene	M	2800	mg/kg	0.10	3.6	2.6
Indeno(1,2,3-c,d)Pyrene	M	2800	mg/kg	0.10	2.3	1.7
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.10	0.46	0.33
Benzo[g,h,i]perylene	M	2800	mg/kg	0.10	2.0	1.6
Total Of 16 PAH's	N	2800	mg/kg	2.0	44	33
Total Phenols	M	2920	mg/kg	0.10	< 0.10	< 0.10

Test Methods

SOP	Title	Parameters included	Method summary
2010	pH Value of Soils	pH	pH Meter
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES
2175	Total Sulphur in Soils	Total Sulphur	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Allkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N–dimethyl-p-phenylenediamine.
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.
2455	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID
2760	Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule	Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds.
2790	Semi-Volatile Organic Compounds (SVOCs) in Soils by GC-MS	Semi-volatile organic compounds(cf. USEPA Method 8270)	Acetone/Hexane extraction / GC-MS
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.

Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

Comments or interpretations are beyond the scope of UKAS accreditation
The results relate only to the items tested
Uncertainty of measurement for the determinands tested are available upon request
None of the results in this report have been recovery corrected
All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis
All Asbestos testing is performed at the indicated laboratory
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt
All water samples will be retained for 14 days from the date of receipt
Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com

Eurofins Chemtest Ltd
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

Final Report

Report No.:	23-23402-1
Initial Date of Issue:	18-Jul-2023
Re-Issue Details:	
Client	E3P
Client Address:	Taylor Road Trafford Park Urmston Manchester M41 7JQ
Contact(s):	Georgia Calvert Matthew Dee
Project	14-554 Don Street

Quotation No.:		**Date Received:**	11-Jul-2023
Order No.:	5457	**Date Instructed:**	11-Jul-2023
No. of Samples:	4		
Turnaround (Wkdays):	5	**Results Due:**	17-Jul-2023
Date Approved:	18-Jul-2023		

Approved By:



Details: Simon Wicks, Specialist Chemist

Results - Soil

Project: 14-554 Don Street

Client: E3P			**Chemtest Job No.:**		23-23402	23-23402	23-23402	23-23402
Quotation No.:			**Chemtest Sample ID.:**		1672218	1672219	1672220	1672221
			Client Sample ID.:		SP20-A	SP20-B	SP23-A	SP23-B
			Sample Type:		SOIL	SOIL	SOIL	SOIL
			Date Sampled:		07-Jul-2023	07-Jul-2023	07-Jul-2023	07-Jul-2023
			Asbestos Lab:		NEW-ASB	NEW-ASB	NEW-ASB	NEW-ASB
Determinand	**Accred.**	**SOP**	**Units**	**LOD**				
ACM Type	U	2192		N/A	-	-	-	-
Asbestos Identification	U	2192		N/A	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
Moisture	N	2030	%	0.020	13	12	12	13
Soil Colour	N	2040		N/A	Brown	Brown	Brown	Brown
Other Material	N	2040		N/A	Stones	Stones	Stones	Stones
Soil Texture	N	2040		N/A	Sand	Sand	Clay	Clay
pH	M	2010		4.0	8.6	8.4	8.2	8.1
Sulphate (2:1 Water Soluble) as SO4	M	2120	g/l	0.010	0.053	0.27	0.057	0.27
Total Sulphur	U	2175	%	0.010	0.10	0.11	0.15	0.26
Cyanide (Total)	M	2300	mg/kg	0.50	6.8	7.5	5.0	7.3
Sulphide (Easily Liberatable)	N	2325	mg/kg	0.50	3.4	3.8	4.9	5.4
Sulphate (Total)	U	2430	%	0.010	0.16	0.19	0.23	0.32
Arsenic	M	2455	mg/kg	0.5	26	22	74	57
Cadmium	M	2455	mg/kg	0.10	0.20	0.36	0.21	0.30
Chromium	M	2455	mg/kg	0.5	22	38	21	22
Copper	M	2455	mg/kg	0.50	37	60	51	47
Mercury	M	2455	mg/kg	0.05	1.0	2.4	1.3	1.4
Nickel	M	2455	mg/kg	0.50	9.4	14	13	14
Lead	M	2455	mg/kg	0.50	96	170	120	150
Selenium	M	2455	mg/kg	0.25	0.25	0.42	0.38	0.40
Zinc	M	2455	mg/kg	0.50	98	170	110	150
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Total Organic Carbon	M	2625	%	0.20	1.9	1.9	1.9	2.0
TPH >C6-C8	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C8-C10	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C10-C12	N	2670	mg/kg	1.0	2.1	2.9	< 1.0	< 1.0
TPH >C12-C16	N	2670	mg/kg	1.0	11	8.5	11	6.1
TPH >C16-C21	N	2670	mg/kg	1.0	26	16	31	28
TPH >C21-C25	N	2670	mg/kg	1.0	20	18	29	28
TPH >C25-C35	N	2670	mg/kg	1.0	25	23	34	35
TPH >C35-C40	N	2670	mg/kg	1.0	1.5	1.9	1.8	< 1.0
Total TPH >C6-C40	M	2670	mg/kg	10	84	70	110	97
Dichlorodifluoromethane	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloromethane	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl Chloride	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromomethane	M	2760	µg/kg	20	< 20	< 20	< 20	< 20
Chloroethane	U	2760	µg/kg	2.0	< 2.0	< 2.0	< 2.0	< 2.0
Trichlorofluoromethane	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0

Results - Soil

Project: 14-554 Don Street

Client: E3P		**Chemtest Job No.:**			23-23402	23-23402	23-23402	23-23402
Quotation No.:		**Chemtest Sample ID.:**			1672218	1672219	1672220	1672221
		Client Sample ID.:			SP20-A	SP20-B	SP23-A	SP23-B
		Sample Type:			SOIL	SOIL	SOIL	SOIL
		Date Sampled:			07-Jul-2023	07-Jul-2023	07-Jul-2023	07-Jul-2023
		Asbestos Lab:			NEW-ASB	NEW-ASB	NEW-ASB	NEW-ASB
Determinand	**Accred.**	**SOP**	**Units**	**LOD**				
Dichloromethane	N	2760	µg/kg	50	< 50	< 50	< 50	< 50
Trans 1,2-Dichloroethene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis 1,2-Dichloroethene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromochloromethane	U	2760	µg/kg	5.0	< 5.0	< 5.0	< 5.0	< 5.0
Trichloromethane	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloromethane	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloropropene	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Benzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	M	2760	µg/kg	2.0	< 2.0	< 2.0	< 2.0	< 2.0
Trichloroethene	N	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dibromomethane	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	M	2760	µg/kg	5.0	< 5.0	< 5.0	< 5.0	< 5.0
cis-1,3-Dichloropropene	N	2760	µg/kg	10	< 10	< 10	< 10	< 10
Toluene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trans-1,3-Dichloropropene	N	2760	µg/kg	10	< 10	< 10	< 10	< 10
1,1,2-Trichloroethane	M	2760	µg/kg	10	< 10	< 10	< 10	< 10
Tetrachloroethene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichloropropane	U	2760	µg/kg	2.0	< 2.0	< 2.0	< 2.0	< 2.0
Dibromochloromethane	U	2760	µg/kg	10	< 10	< 10	< 10	< 10
1,2-Dibromoethane	M	2760	µg/kg	5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chlorobenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1,2-Tetrachloroethane	M	2760	µg/kg	2.0	< 2.0	< 2.0	< 2.0	< 2.0
Ethylbenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
m & p-Xylene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tribromomethane	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromobenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichloropropane	N	2760	µg/kg	50	< 50	< 50	< 50	< 50
N-Propylbenzene	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
2-Chlorotoluene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
4-Chlorotoluene	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tert-Butylbenzene	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Sec-Butylbenzene	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0

Results - Soil

Project: 14-554 Don Street

Client: E3P			Chemtest Job No.:		23-23402	23-23402	23-23402	23-23402
Quotation No.:			Chemtest Sample ID.:		1672218	1672219	1672220	1672221
			Client Sample ID.:		SP20-A	SP20-B	SP23-A	SP23-B
			Sample Type:		SOIL	SOIL	SOIL	SOIL
			Date Sampled:		07-Jul-2023	07-Jul-2023	07-Jul-2023	07-Jul-2023
			Asbestos Lab:		NEW-ASB	NEW-ASB	NEW-ASB	NEW-ASB
Determinand	**Accred.**	**SOP**	**Units**	**LOD**				
1,3-Dichlorobenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
4-Isopropyltoluene	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
N-Butylbenzene	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-Chloropropane	U	2760	µg/kg	50	< 50	< 50	< 50	< 50
1,2,4-Trichlorobenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Hexachlorobutadiene	N	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene	U	2760	µg/kg	2.0	< 2.0	< 2.0	< 2.0	< 2.0
Methyl Tert-Butyl Ether	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
N-Nitrosodimethylamine	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Phenol	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Chlorophenol	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bis-(2-Chloroethyl)Ether	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,3-Dichlorobenzene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,4-Dichlorobenzene	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-Dichlorobenzene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Methylphenol	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bis(2-Chloroisopropyl)Ether	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Hexachloroethane	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
N-Nitrosodi-n-propylamine	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Methylphenol	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Nitrobenzene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Isophorone	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Nitrophenol	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4-Dimethylphenol	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bis(2-Chloroethoxy)Methane	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4-Dichlorophenol	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2,4-Trichlorobenzene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Naphthalene	M	2790	mg/kg	0.50	0.57	< 0.50	< 0.50	< 0.50
4-Chloroaniline	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Hexachlorobutadiene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Chloro-3-Methylphenol	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Methylnaphthalene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Nitrophenol	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Hexachlorocyclopentadiene	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4,6-Trichlorophenol	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4,5-Trichlorophenol	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Chloronaphthalene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Nitroaniline	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50

Results - Soil

Project: 14-554 Don Street

Client: E3P		**Chemtest Job No.:**			23-23402	23-23402	23-23402	23-23402
Quotation No.:		**Chemtest Sample ID.:**			1672218	1672219	1672220	1672221
		Client Sample ID.:			SP20-A	SP20-B	SP23-A	SP23-B
		Sample Type:			SOIL	SOIL	SOIL	SOIL
		Date Sampled:			07-Jul-2023	07-Jul-2023	07-Jul-2023	07-Jul-2023
		Asbestos Lab:			NEW-ASB	NEW-ASB	NEW-ASB	NEW-ASB
Determinand	**Accred.**	**SOP**	**Units**	**LOD**				
Acenaphthylene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dimethylphthalate	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,6-Dinitrotoluene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Acenaphthene	M	2790	mg/kg	0.50	0.85	0.72	0.62	0.81
3-Nitroaniline	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dibenzofuran	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Chlorophenylphenylether	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4-Dinitrotoluene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Fluorene	M	2790	mg/kg	0.50	0.62	< 0.50	< 0.50	0.67
Diethyl Phthalate	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Nitroaniline	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Methyl-4,6-Dinitrophenol	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Azobenzene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Bromophenylphenyl Ether	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Hexachlorobenzene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Pentachlorophenol	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Phenanthrene	M	2790	mg/kg	0.50	3.5	3.8	3.8	4.4
Anthracene	M	2790	mg/kg	0.50	1.1	1.2	1.2	1.4
Carbazole	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Di-N-Butyl Phthalate	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Fluoranthene	M	2790	mg/kg	0.50	5.8	6.0	7.2	6.9
Pyrene	M	2790	mg/kg	0.50	5.0	5.0	6.5	6.0
Butylbenzyl Phthalate	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[a]anthracene	M	2790	mg/kg	0.50	2.5	2.5	3.1	2.9
Chrysene	M	2790	mg/kg	0.50	2.5	2.4	3.3	2.9
Bis(2-Ethylhexyl)Phthalate	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Di-N-Octyl Phthalate	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[b]fluoranthene	M	2790	mg/kg	0.50	3.0	1.0	3.7	1.2
Benzo[k]fluoranthene	M	2790	mg/kg	0.50	1.0	0.97	1.4	1.2
Benzo[a]pyrene	M	2790	mg/kg	0.50	2.5	2.4	3.1	2.8
Indeno(1,2,3-c,d)Pyrene	M	2790	mg/kg	0.50	1.2	1.1	1.4	1.3
Dibenz(a,h)Anthracene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[g,h,i]perylene	M	2790	mg/kg	0.50	1.4	1.2	1.7	1.6
Naphthalene	M	2800	mg/kg	0.10	1.3	2.2	2.4	1.9
Acenaphthylene	N	2800	mg/kg	0.10	0.20	0.32	0.25	0.26
Acenaphthene	M	2800	mg/kg	0.10	0.66	1.3	1.3	1.1
Fluorene	M	2800	mg/kg	0.10	0.61	1.0	1.1	1.0
Phenanthrene	M	2800	mg/kg	0.10	3.7	6.2	7.0	6.3
Anthracene	M	2800	mg/kg	0.10	1.2	1.8	1.9	1.9
Fluoranthene	M	2800	mg/kg	0.10	6.4	8.8	9.6	9.5

Results - Soil

Project: 14-554 Don Street

Client: E3P		**Chemtest Job No.:**			23-23402	23-23402	23-23402	23-23402
Quotation No.:		**Chemtest Sample ID.:**			1672218	1672219	1672220	1672221
		Client Sample ID.:			SP20-A	SP20-B	SP23-A	SP23-B
		Sample Type:			SOIL	SOIL	SOIL	SOIL
		Date Sampled:			07-Jul-2023	07-Jul-2023	07-Jul-2023	07-Jul-2023
		Asbestos Lab:			NEW-ASB	NEW-ASB	NEW-ASB	NEW-ASB
Determinand	**Accred.**	**SOP**	**Units**	**LOD**				
Pyrene	M	2800	mg/kg	0.10	5.5	7.3	8.3	8.0
Benzo[a]anthracene	M	2800	mg/kg	0.10	3.1	4.0	4.6	4.5
Chrysene	M	2800	mg/kg	0.10	3.3	4.4	5.3	4.9
Benzo[b]fluoranthene	M	2800	mg/kg	0.10	4.2	4.9	5.5	5.5
Benzo[k]fluoranthene	M	2800	mg/kg	0.10	1.6	1.9	2.2	2.0
Benzo[a]pyrene	M	2800	mg/kg	0.10	3.4	4.1	4.5	4.4
Indeno(1,2,3-c,d)Pyrene	M	2800	mg/kg	0.10	2.3	2.7	2.9	2.9
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.10	0.50	0.62	0.74	0.49
Benzo[g,h,i]perylene	M	2800	mg/kg	0.10	2.2	2.4	2.8	2.7
Total Of 16 PAH's	N	2800	mg/kg	2.0	40	54	60	57
Total Phenols	M	2920	mg/kg	0.10	< 0.10	0.11	< 0.10	< 0.10

Test Methods

SOP	Title	Parameters included	Method summary
2010	pH Value of Soils	pH	pH Meter
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES
2175	Total Sulphur in Soils	Total Sulphur	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Allkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N–dimethyl-p-phenylenediamine.
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.
2455	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID
2760	Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule	Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds.
2790	Semi-Volatile Organic Compounds (SVOCs) in Soils by GC-MS	Semi-volatile organic compounds(cf. USEPA Method 8270)	Acetone/Hexane extraction / GC-MS
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.

Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

Comments or interpretations are beyond the scope of UKAS accreditation
The results relate only to the items tested
Uncertainty of measurement for the determinands tested are available upon request
None of the results in this report have been recovery corrected
All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis
All Asbestos testing is performed at the indicated laboratory
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt
All water samples will be retained for 14 days from the date of receipt
Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com

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Analytical Report Number : 23-60537

Project / Site name:	Don Street	**Samples received on:**	04/10/2023
Your job number:	14 554	**Samples instructed on/ Analysis started on:**	04/10/2023
Your order number:	006369	**Analysis completed by:**	09/10/2023
Report Issue Number:	1	**Report issued on:**	09/10/2023
Samples Analysed:	2 leachate samples		

Signed:

Joanna Szwagrzak
Junior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report relate only to the sample(s) submitted for testing.

4041

Analytical Report Number: 23-60537
Project / Site name: Don Street

Your Order No: 006369

Lab Sample Number				2834654	2834655
Sample Reference				Stockpile 24	Stockpile 30
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				03/10/2023	03/10/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Leachate Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Heavy Metals / Metalloids					
Lead (dissolved)	µg/l	1	ISO 17025	2.1	2.2
Zinc (dissolved)	µg/l	0.4	ISO 17025	8.7	12

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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4041

Analytical Report Number : 23-60537
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
NRA Leachate Prep	10:1 extract with de-ionised water shaken for 24 hours then filtered.	In-house method based on National Rivers Authority	L020-PL	W	NONE
Metals by ICP-OES in leachate	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

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Analytical Report Number : 23-57174

Project / Site name:	Don Street	**Samples received on:**	18/09/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	18/09/2023
Your order number:	006189	**Analysis completed by:**	25/09/2023
Report Issue Number:	1	**Report issued on:**	25/09/2023
Samples Analysed:	4 soil samples		

Signed:

Anna Goc
PL Head of Reporting Team
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Analytical Report Number: 23-57174
Project / Site name: Don Street
Your Order No: 006189

Lab Sample Number				2815514	2815515	2815516	2815517
Sample Reference				Stockpile 24A	Stockpile 24B	Stockpile 30A	Stockpile 30B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				12/09/2023	12/09/2023	12/09/2023	12/09/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	12	12	9	11
Total mass of sample received	kg	0.001	NONE	0.2	0.2	0.3	0.2

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	Chrysotile	Chrysotile & Amosite	Chrysotile & Amosite
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Detected	Detected	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	0.012	0.009	< 0.001
Asbestos Quantification Total	%	0.001	ISO 17025	-	0.012	0.009	< 0.001
Asbestos Analyst ID	N/A	N/A	N/A	PDO	PDO	PDO	PDO

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8	8.1	8.5	8.4
Total Cyanide	mg/kg	1	MCERTS	1.9	< 1.0	1.9	1.4
Total Sulphate as SO4	mg/kg	50	MCERTS	1500	1000	1700	1500
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.59	0.34	0.59	0.47
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	1200	680	1200	940
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	593	342	585	470
Sulphide	mg/kg	1	MCERTS	12	11	4.8	12
Total Sulphur	mg/kg	50	MCERTS	940	630	1000	720
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.4	1.3	1.5	1.4

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	40	34	31	22
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	25	32	29	29
Copper (aqua regia extractable)	mg/kg	1	MCERTS	60	60	87	58
Lead (aqua regia extractable)	mg/kg	1	MCERTS	200	150	190	110
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.5	0.6	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	26	28	77	63
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	110	100	180	140

Monoaromatics & Oxygenates

Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0

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Analytical Report Number: 23-57174
Project / Site name: Don Street
Your Order No: 006189

Lab Sample Number				2815514	2815515	2815516	2815517
Sample Reference				Stockpile 24A	Stockpile 24B	Stockpile 30A	Stockpile 30B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				12/09/2023	12/09/2023	12/09/2023	12/09/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Petroleum Hydrocarbons							
TPH-CWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	< 2.0	3.5	4.2	3.2
TPH-CWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	< 8.0	9.3	12	10
TPH-CWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	< 8.0	32	29	43
TPH-CWG - Aliphatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	< 10	45	45	56
TPH-CWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	2.7	5.6	3.9	4.9
TPH-CWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	< 10	29	18	27
TPH-CWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	20	59	39	85
TPH-CWG - Aromatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	32	94	62	120

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Analytical Report Number: 23-57174
Project / Site name: Don Street
Your Order No: 006189

Lab Sample Number				2815514	2815515	2815516	2815517
Sample Reference				Stockpile 24A	Stockpile 24B	Stockpile 30A	Stockpile 30B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				12/09/2023	12/09/2023	12/09/2023	12/09/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
VOCs							
Chloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Chloroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Bromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Vinyl Chloride	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Trichlorofluoromethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Trans 1,2-dichloroethylene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1-dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
2,2-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Chloroform	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1,1-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,2-dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,1-Dichloropropene ##	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Cis-1,2-dichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Carbontetrachloride	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2-dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Trichloroethene ##	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Dibromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Bromodichloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Cis-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Trans-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
1,1,2-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,3-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Dibromochloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dibromoethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Chlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,1,1,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Styrene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Bromoform	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Isopropylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,1,2,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Bromobenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
N-Propylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
2-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
4-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,3,5-Trimethylbenzene ##	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Tert-Butylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,2,4-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Sec-Butylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,3-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
P-Isopropyltoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,4-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,2-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-57174
Project / Site name: Don Street
Your Order No: 006189

Lab Sample Number				2815514	2815515	2815516	2815517
Sample Reference				Stockpile 24A	Stockpile 24B	Stockpile 30A	Stockpile 30B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				12/09/2023	12/09/2023	12/09/2023	12/09/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dibromo-3-chloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Hexachlorobutadiene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2,3-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
SVOCs							
Aniline	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Phenol	mg/kg	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Hexachloroethane	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Isophorone	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
2-Nitrophenol	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	0.34	0.63	0.61	1.4
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	0.3	0.6	0.4	0.8
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthylene	mg/kg	0.05	MCERTS	0.14	0.09	0.1	0.09
Acenaphthene	mg/kg	0.05	MCERTS	0.64	1.2	1.3	1.7
2,4-Dinitrotoluene	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	0.3	0.6	0.7	0.8
4-Chlorophenyl phenyl ether	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
4-Nitroaniline	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Fluorene	mg/kg	0.05	MCERTS	0.53	0.91	0.97	1.1
Azobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	3.5	5.6	5.6	6.4
Anthracene	mg/kg	0.05	MCERTS	0.96	1.5	1.6	1.7
Carbazole	mg/kg	0.3	MCERTS	< 0.3	0.4	0.4	0.6
Dibutyl phthalate	mg/kg	0.2	NONE	< 0.2	< 0.2	0.2	< 0.2
Anthraquinone	mg/kg	0.3	NONE	< 0.3	0.3	< 0.3	< 0.3
Fluoranthene	mg/kg	0.05	MCERTS	5.7	8.6	7.7	8.4

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Analytical Report Number: 23-57174
Project / Site name: Don Street
Your Order No: 006189

Lab Sample Number				2815514	2815515	2815516	2815517
Sample Reference				Stockpile 24A	Stockpile 24B	Stockpile 30A	Stockpile 30B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				12/09/2023	12/09/2023	12/09/2023	12/09/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Pyrene	mg/kg	0.05	MCERTS	5.5	8.1	6.8	7.2
Butyl benzyl phthalate	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	3	4.2	3.4	3.8
Chrysene	mg/kg	0.05	MCERTS	3.1	4.1	3.4	3.4
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	3.5	4.9	4	4.3
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	1.5	1.8	1.6	1.5
Benzo(a)pyrene	mg/kg	0.05	MCERTS	3.2	4.3	3.4	3.7
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	1.7	2.1	1.8	1.9
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.46	0.59	0.47	0.51
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	1.7	2.2	1.8	2

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-57174
Project / Site name: Don Street
Your Order No: 006189

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2815515	Stockpile 24B		172	Loose Fibres & Loose Fibrous Debris	**Chrysotile**	0.012	**0.012**
2815516	Stockpile 30A		175	Loose Fibres & Loose Fibrous Debris	**Chrysotile & Amosite**	0.009	**0.009**
2815517	Stockpile 30B		185	Loose Fibres	**Chrysotile & Amosite**	< 0.001	**< 0.001**

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 23-57174
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2815514	Stockpile 24A	None Supplied	None Supplied	Brown clay and sand with gravel.
2815515	Stockpile 24B	None Supplied	None Supplied	Brown clay and sand with gravel.
2815516	Stockpile 30A	None Supplied	None Supplied	Brown clay and sand with gravel.
2815517	Stockpile 30B	None Supplied	None Supplied	Brown clay and sand with gravel.

Analytical Report Number : 23-57174
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.Refer to CoA for analyte specific accreditation.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260. Refer to CoA for analyte specific accreditation	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID. Refer to CoA for band specific accreditation.	In-house method with silica gel split/clean up.	L088/76-PL	D	MCERTS

Analytical Report Number : 23-57174
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

- Quality control parameter has a high recovery (outside of limit); however the associated result is below the reporting limit, other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.

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Analytical Report Number : 23-51249

Project / Site name:	Don Street	**Samples received on:**	14/08/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	16/08/2023
Your order number:	005827	**Analysis completed by:**	22/08/2023
Report Issue Number:	1	**Report issued on:**	23/08/2023
Samples Analysed:	2 soil samples		

Signed:

Dominika Warjan
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-51249
Project / Site name: Don Street
Your Order No: 005827

Lab Sample Number				2782563	2782564
Sample Reference				Stockpile 25 C	Stockpile 25 D
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				11/08/2023	11/08/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	12	11
Total mass of sample received	kg	0.001	NONE	0.3	0.3
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	MJN	MJN
General Inorganics					
pH - Automated	pH Units	N/A	MCERTS	9.2	8.1
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	690	440
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.16	0.13
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	320	260
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	162	128
Sulphide	mg/kg	1	MCERTS	4.7	3.5
Total Sulphur	mg/kg	50	MCERTS	540	480
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.5	1.4
Total Phenols					
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0
Heavy Metals / Metalloids					
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	14	13
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	22	26
Copper (aqua regia extractable)	mg/kg	1	MCERTS	41	39
Lead (aqua regia extractable)	mg/kg	1	MCERTS	59	60
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.4	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	21	20
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	90	90
Monoaromatics & Oxygenates					
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0
Petroleum Hydrocarbons					
TPH-CWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	< 2.0	2.6
TPH-CWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	17	16
TPH-CWG - Aliphatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	23	23

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Analytical Report Number: 23-51249
Project / Site name: Don Street
Your Order No: 005827

Lab Sample Number				2782563	2782564
Sample Reference				Stockpile 25 C	Stockpile 25 D
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				11/08/2023	11/08/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
TPH-CWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10
TPH-CWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10
TPH-CWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10
TPH-CWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	< 2.0	3.9
TPH-CWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	11	29
TPH-CWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	24	32
TPH-CWG - Aromatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	37	64
VOCs					
Chloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Chloroethane	µg/kg	5	NONE	< 5.0	< 5.0
Bromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Vinyl Chloride	µg/kg	5	NONE	< 5.0	< 5.0
Trichlorofluoromethane	µg/kg	5	NONE	< 5.0	< 5.0
1,1-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	5	NONE	< 5.0	< 5.0
Trans 1,2-dichloroethylene	µg/kg	5	NONE	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0
1,1-dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
2,2-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Chloroform	µg/kg	5	NONE	< 5.0	< 5.0
1,1,1-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2-dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,1-Dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Cis-1,2-dichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0
Carbontetrachloride	µg/kg	5	NONE	< 5.0	< 5.0
1,2-dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Trichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Dibromomethane#	µg/kg	5	NONE	< 5.0	< 5.0
Bromodichloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Cis-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Trans-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0
1,1,2-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,3-Dichloropropane#	µg/kg	5	NONE	< 5.0	< 5.0
Dibromochloromethane#	µg/kg	5	NONE	< 5.0	< 5.0
Tetrachloroethene	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dibromoethane#	µg/kg	5	NONE	< 5.0	< 5.0
Chlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,1,1,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
Styrene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Bromoform	µg/kg	5	NONE	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
Isopropylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,1,2,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Bromobenzene	µg/kg	5	NONE	< 5.0	< 5.0
N-Propylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0

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Analytical Report Number: 23-51249
Project / Site name: Don Street
Your Order No: 005827

Lab Sample Number				2782563	2782564
Sample Reference				Stockpile 25 C	Stockpile 25 D
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				11/08/2023	11/08/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
2-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0
4-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,3,5-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Tert-Butylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2,4-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Sec-Butylbenzene##	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,3-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
P-Isopropyltoluene##	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,4-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dibromo-3-chloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Hexachlorobutadiene	µg/kg	5	NONE	< 5.0	< 5.0
1,2,3-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0

SVOCs

Aniline	mg/kg	0.1	NONE	< 0.1	< 0.1
Phenol	mg/kg	0.2	ISO 17025	< 0.2	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Hexachloroethane	mg/kg	0.05	ISO 17025	< 0.05	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	< 0.2
Isophorone	mg/kg	0.2	MCERTS	< 0.2	< 0.2
2-Nitrophenol	mg/kg	0.3	NONE	< 0.3	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	0.57	1.1
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	NONE	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	NONE	< 0.2	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	0.3	0.7
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	< 0.1
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	NONE	< 0.1	< 0.1
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	0.11
Acenaphthene	mg/kg	0.05	MCERTS	0.75	3.2
2,4-Dinitrotoluene	mg/kg	0.2	NONE	< 0.2	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	0.4	1.6
4-Chlorophenyl phenyl ether	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	< 0.2
4-Nitroaniline	mg/kg	0.2	NONE	< 0.2	< 0.2

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Analytical Report Number: 23-51249
Project / Site name: Don Street
Your Order No: 005827

Lab Sample Number				2782563	2782564
Sample Reference				Stockpile 25 C	Stockpile 25 D
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				11/08/2023	11/08/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Fluorene	mg/kg	0.05	MCERTS	0.57	3.5
Azobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	4	25
Anthracene	mg/kg	0.05	MCERTS	1.1	7.9
Carbazole	mg/kg	0.3	MCERTS	< 0.3	1.3
Dibutyl phthalate	mg/kg	0.2	NONE	< 0.2	< 0.2
Anthraquinone	mg/kg	0.3	NONE	< 0.3	0.8
Fluoranthene	mg/kg	0.05	MCERTS	6.3	30
Pyrene	mg/kg	0.05	MCERTS	5.7	25
Butyl benzyl phthalate	mg/kg	0.3	NONE	< 0.3	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	2.8	12
Chrysene	mg/kg	0.05	MCERTS	2.6	9.8
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	3.6	12
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	1.1	3.7
Benzo(a)pyrene	mg/kg	0.05	MCERTS	3	9.5
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	1.4	4.6
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.33	1.3
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	1.6	4.8

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-51249
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2782563	Stockpile 25 C	None Supplied	None Supplied	Brown clay and loam with gravel and vegetation.
2782564	Stockpile 25 D	None Supplied	None Supplied	Brown clay and loam with gravel and vegetation.

Analytical Report Number : 23-51249
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS

Analytical Report Number : 23-51249
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

- Data reported unaccredited due to quality control parameter failure associated with this result; other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.
- Quality control parameter has a high recovery (outside of limit); however the associated result is below the reporting limit, other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.

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Analytical Report Number : 23-46404

Project / Site name:	Don Street	**Samples received on:**	21/07/2023
Your job number:	14 554	**Samples instructed on/ Analysis started on:**	21/07/2023
Your order number:	005573	**Analysis completed by:**	27/07/2023
Report Issue Number:	1	**Report issued on:**	27/07/2023
Samples Analysed:	2 soil samples		

Signed:

Joanna Wawrzeczko
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Analytical Report Number: 23-46404
Project / Site name: Don Street
Your Order No: 005573

Lab Sample Number				2756379	2756380
Sample Reference				Stockpile 25 A	Stockpile 25 B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				22/06/2023	22/06/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	13	12
Total mass of sample received	kg	0.001	NONE	0.4	0.4

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	IZJ	IZJ

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	9.2	8.1
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	640	340
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.13	0.091
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	260	180
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	132	90.9
Sulphide	mg/kg	1	MCERTS	6.5	2.9
Total Sulphur	mg/kg	50	MCERTS	230	240
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.3	1.1

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	14	12
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	37	20
Copper (aqua regia extractable)	mg/kg	1	MCERTS	44	33
Lead (aqua regia extractable)	mg/kg	1	MCERTS	76	57
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	20	21
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	100	75

Monoaromatics & Oxygenates

Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0

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Analytical Report Number: 23-46404
Project / Site name: Don Street
Your Order No: 005573

Lab Sample Number				2756379	2756380
Sample Reference				Stockpile 25 A	Stockpile 25 B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				22/06/2023	22/06/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Petroleum Hydrocarbons					
TPH-CWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	< 2.0	2.6
TPH-CWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	12	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	13	12
TPH-CWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10
TPH-CWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10
TPH-CWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10
TPH-CWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	2.1
TPH-CWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	2.2	10
TPH-CWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	18	35
TPH-CWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	42	61
TPH-CWG - Aromatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	61	110
VOCs					
Chloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Chloroethane	µg/kg	5	NONE	< 5.0	< 5.0
Bromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Vinyl Chloride	µg/kg	5	NONE	< 5.0	< 5.0
Trichlorofluoromethane	µg/kg	5	NONE	< 5.0	< 5.0
1,1-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	5	NONE	< 5.0	< 5.0
Trans 1,2-dichloroethylene	µg/kg	5	NONE	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0
1,1-dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
2,2-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Chloroform	µg/kg	5	NONE	< 5.0	< 5.0
1,1,1-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2-dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,1-Dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Cis-1,2-dichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0
Carbontetrachloride	µg/kg	5	NONE	< 5.0	< 5.0
1,2-dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Trichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Dibromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Bromodichloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Cis-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Trans-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0
1,1,2-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,3-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Dibromochloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Tetrachloroethene	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dibromoethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Chlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,1,1,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0

Analytical Report Number: 23-46404
Project / Site name: Don Street
Your Order No: 005573

Lab Sample Number				2756379	2756380
Sample Reference				Stockpile 25 A	Stockpile 25 B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				22/06/2023	22/06/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
Styrene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Bromoform	µg/kg	5	NONE	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
Isopropylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,1,2,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Bromobenzene	µg/kg	5	NONE	< 5.0	< 5.0
N-Propylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
2-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0
4-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,3,5-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Tert-Butylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2,4-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Sec-Butylbenzene	µg/kg	5	ISO 17025	< 5.0##	< 5.0##
1,3-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
P-Isopropyltoluene	µg/kg	5	ISO 17025	< 5.0##	< 5.0##
1,4-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dibromo-3-chloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Hexachlorobutadiene	µg/kg	5	NONE	< 5.0	< 5.0
1,2,3-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0

SVOCs

Aniline	mg/kg	0.1	NONE	< 0.1	< 0.1
Phenol	mg/kg	0.2	ISO 17025	< 0.2	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Hexachloroethane	mg/kg	0.05	ISO 17025	< 0.05	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	< 0.2
Isophorone	mg/kg	0.2	MCERTS	< 0.2	< 0.2
2-Nitrophenol	mg/kg	0.3	NONE	< 0.3	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	0.52	3.1
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	NONE	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	NONE	< 0.2	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	0.2	1.3
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	< 0.1
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	NONE	< 0.1	< 0.1

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Analytical Report Number: 23-46404
Project / Site name: Don Street
Your Order No: 005573

Lab Sample Number				2756379	2756380
Sample Reference				Stockpile 25 A	Stockpile 25 B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				22/06/2023	22/06/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Acenaphthylene	mg/kg	0.05	MCERTS	0.07	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	0.86	2.8
2,4-Dinitrotoluene	mg/kg	0.2	NONE	< 0.2	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	0.5	1.7
4-Chlorophenyl phenyl ether	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	< 0.2
4-Nitroaniline	mg/kg	0.2	NONE	< 0.2	< 0.2
Fluorene	mg/kg	0.05	MCERTS	0.67	2.3
Azobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	5.2	14
Anthracene	mg/kg	0.05	MCERTS	1.4	3.5
Carbazole	mg/kg	0.3	MCERTS	< 0.3	1.2
Dibutyl phthalate	mg/kg	0.2	NONE	< 0.2	< 0.2
Anthraquinone	mg/kg	0.3	NONE	< 0.3	< 0.3
Fluoranthene	mg/kg	0.05	MCERTS	8.8	18
Pyrene	mg/kg	0.05	MCERTS	7.6	15
Butyl benzyl phthalate	mg/kg	0.3	NONE	< 0.3	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	3.5	7.2
Chrysene	mg/kg	0.05	MCERTS	3.5	6.8
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	3.9	7.3
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	1.8	3.7
Benzo(a)pyrene	mg/kg	0.05	MCERTS	3.4	6.2
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	2.1	3.7
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.53	0.89
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	2.1	3.8

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-46404
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2756379	Stockpile 25 A	None Supplied	None Supplied	Brown sand with gravel.
2756380	Stockpile 25 B	None Supplied	None Supplied	Brown sand with gravel.

Analytical Report Number : 23-46404
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS

Analytical Report Number : 23-46404
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

- Quality control parameter has a high recovery (outside of limit); however the associated result is below the reporting limit, other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.

Sample Deviation Report

Analytical Report Number : 23-46404

Project / Site name: Don Street

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
Stockpile 25 A	None Supplied	S	2756379	c	Hexavalent chromium in soil	L080-PL	c
Stockpile 25 A	None Supplied	S	2756379	c	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	c
Stockpile 25 A	None Supplied	S	2756379	c	Monohydric phenols in soil	L080-PL	c
Stockpile 25 A	None Supplied	S	2756379	c	Organic matter (Automated) in soil	L009-PL	c
Stockpile 25 A	None Supplied	S	2756379	c	Semi-volatile organic compounds in soil	L064-PL	c
Stockpile 25 A	None Supplied	S	2756379	c	Sulphide in soil	L010-PL	c
Stockpile 25 A	None Supplied	S	2756379	c	TPHCWG (Soil)	L088/76-PL	c
Stockpile 25 A	None Supplied	S	2756379	c	Total cyanide in soil	L080-PL	c
Stockpile 25 A	None Supplied	S	2756379	c	Total organic carbon (Automated) in soil	L009-PL	c
Stockpile 25 A	None Supplied	S	2756379	c	Volatile organic compounds in soil	L073B-PL	c
Stockpile 25 A	None Supplied	S	2756379	c	pH in soil (automated)	L099-PL	c
Stockpile 25 B	None Supplied	S	2756380	c	Hexavalent chromium in soil	L080-PL	c
Stockpile 25 B	None Supplied	S	2756380	c	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	c
Stockpile 25 B	None Supplied	S	2756380	c	Monohydric phenols in soil	L080-PL	c
Stockpile 25 B	None Supplied	S	2756380	c	Organic matter (Automated) in soil	L009-PL	c
Stockpile 25 B	None Supplied	S	2756380	c	Semi-volatile organic compounds in soil	L064-PL	c
Stockpile 25 B	None Supplied	S	2756380	c	Sulphide in soil	L010-PL	c
Stockpile 25 B	None Supplied	S	2756380	c	TPHCWG (Soil)	L088/76-PL	c
Stockpile 25 B	None Supplied	S	2756380	c	Total cyanide in soil	L080-PL	c
Stockpile 25 B	None Supplied	S	2756380	c	Total organic carbon (Automated) in soil	L009-PL	c
Stockpile 25 B	None Supplied	S	2756380	c	Volatile organic compounds in soil	L073B-PL	c
Stockpile 25 B	None Supplied	S	2756380	c	pH in soil (automated)	L099-PL	c

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Analytical Report Number : 23-50909

Project / Site name:	Don Street	**Samples received on:**	14/08/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	14/08/2023
Your order number:	005798	**Analysis completed by:**	21/08/2023
Report Issue Number:	1	**Report issued on:**	21/08/2023
Samples Analysed:	2 soil samples		

Signed:

Dominika Warjan
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Analytical Report Number: 23-50909
Project / Site name: Don Street
Your Order No: 005798

Lab Sample Number				2780938	2780939
Sample Reference				Stockpile 26 A	Stockpile 26 B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				11/08/2023	11/08/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	14	14
Total mass of sample received	kg	0.001	NONE	0.4	0.3

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Amosite	-
Asbestos in Soil	Type	N/A	ISO 17025	Detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	< 0.001	-
Asbestos Quantification Total	%	0.001	ISO 17025	< 0.001	-
Asbestos Analyst ID	N/A	N/A	N/A	MWI	MWI

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.3	8.4
Total Cyanide	mg/kg	1	MCERTS	1.3	1.4
Total Sulphate as SO4	mg/kg	50	MCERTS	1700	2100
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.4	0.55
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	800	1100
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	400	549
Sulphide	mg/kg	1	MCERTS	23	12
Total Sulphur	mg/kg	50	MCERTS	1000	1200
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.3	1.3

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	47	37
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	22	24
Copper (aqua regia extractable)	mg/kg	1	MCERTS	61	59
Lead (aqua regia extractable)	mg/kg	1	MCERTS	120	120
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.6	0.5
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	24	23
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	230	120

Monoaromatics & Oxygenates

Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0
p & m-xylene##	µg/kg	5	MCERTS	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0

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Lab Sample Number				2780938	2780939
Sample Reference				Stockpile 26 A	Stockpile 26 B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				11/08/2023	11/08/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Petroleum Hydrocarbons					
TPH-CWG - Aliphatic >EC5 - EC6 HS_1D_AL	mg/kg	0.1	NONE	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC6 - EC8 HS_1D_AL	mg/kg	0.1	NONE	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC8 - EC10 HS_1D_AL	mg/kg	0.1	NONE	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC10 - EC12 EH_CU_1D_AL	mg/kg	1	MCERTS	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 EH_CU_1D_AL	mg/kg	2	MCERTS	< 2.0	2.5
TPH-CWG - Aliphatic >EC16 - EC21 EH_CU_1D_AL	mg/kg	8	MCERTS	< 8.0	8.9
TPH-CWG - Aliphatic >EC21 - EC35 EH_CU_1D_AL	mg/kg	8	MCERTS	20	28
TPH-CWG - Aliphatic (EC5 - EC35) EH_CU+HS_1D_AL	mg/kg	10	NONE	28	39
TPH-CWG - Aromatic >EC5 - EC7 HS_1D_AR	mg/kg	0.1	NONE	< 0.10	< 0.10
TPH-CWG - Aromatic >EC7 - EC8 HS_1D_AR	mg/kg	0.1	NONE	< 0.10	< 0.10
TPH-CWG - Aromatic >EC8 - EC10 HS_1D_AR	mg/kg	0.1	NONE	< 0.10	< 0.10
TPH-CWG - Aromatic >EC10 - EC12 EH_CU_1D_AR	mg/kg	1	MCERTS	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 EH_CU_1D_AR	mg/kg	2	MCERTS	2.6	5.5
TPH-CWG - Aromatic >EC16 - EC21 EH_CU_1D_AR	mg/kg	10	MCERTS	12	17
TPH-CWG - Aromatic >EC21 - EC35 EH_CU_1D_AR	mg/kg	10	MCERTS	22	26
TPH-CWG - Aromatic (EC5 - EC35) EH_CU+HS_1D_AR	mg/kg	10	NONE	37	48
VOCs					
Chloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Chloroethane	µg/kg	5	NONE	< 5.0	< 5.0
Bromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Vinyl Chloride	µg/kg	5	NONE	< 5.0	< 5.0
Trichlorofluoromethane	µg/kg	5	NONE	< 5.0	< 5.0
1,1-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	5	NONE	< 5.0	< 5.0
Trans 1,2-dichloroethylene	µg/kg	5	NONE	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0
1,1-dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
2,2-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Chloroform	µg/kg	5	NONE	< 5.0	< 5.0
1,1,1-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2-dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,1-Dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Cis-1,2-dichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0
Carbontetrachloride	µg/kg	5	NONE	< 5.0	< 5.0
1,2-dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Trichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Dibromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Bromodichloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Cis-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Trans-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0
1,1,2-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,3-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Dibromochloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Tetrachloroethene	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dibromoethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Chlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,1,1,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0

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Analytical Report Number: 23-50909
Project / Site name: Don Street
Your Order No: 005798

Lab Sample Number				2780938	2780939
Sample Reference				Stockpile 26 A	Stockpile 26 B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				11/08/2023	11/08/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0
p & m-xylene##	µg/kg	5	MCERTS	< 5.0	< 5.0
Styrene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Bromoform	µg/kg	5	NONE	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
Isopropylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,1,2,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Bromobenzene	µg/kg	5	NONE	< 5.0	< 5.0
N-Propylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
2-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0
4-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,3,5-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Tert-Butylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2,4-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Sec-Butylbenzene##	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,3-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
P-Isopropyltoluene##	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,4-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dibromo-3-chloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Hexachlorobutadiene	µg/kg	5	NONE	< 5.0	< 5.0
1,2,3-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0

SVOCs

Aniline	mg/kg	0.1	NONE	< 0.1	< 0.1
Phenol	mg/kg	0.2	ISO 17025	< 0.2	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Hexachloroethane	mg/kg	0.05	ISO 17025	< 0.05	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	< 0.2
Isophorone	mg/kg	0.2	MCERTS	< 0.2	< 0.2
2-Nitrophenol	mg/kg	0.3	NONE	< 0.3	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	1.7	1.2
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	NONE	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	NONE	< 0.2	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	0.5	0.4
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	< 0.1

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Analytical Report Number: 23-50909
Project / Site name: Don Street
Your Order No: 005798

Lab Sample Number				2780938	2780939
Sample Reference				Stockpile 26 A	Stockpile 26 B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				11/08/2023	11/08/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	NONE	< 0.1	< 0.1
Acenaphthylene	mg/kg	0.05	MCERTS	0.12	0.11
Acenaphthene	mg/kg	0.05	MCERTS	0.72	0.71
2,4-Dinitrotoluene	mg/kg	0.2	NONE	< 0.2	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	0.4	0.3
4-Chlorophenyl phenyl ether	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	< 0.2
4-Nitroaniline	mg/kg	0.2	NONE	< 0.2	< 0.2
Fluorene	mg/kg	0.05	MCERTS	0.71	0.59
Azobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	4.3	4.3
Anthracene	mg/kg	0.05	MCERTS	1.3	1.2
Carbazole	mg/kg	0.3	MCERTS	0.4	< 0.3
Dibutyl phthalate	mg/kg	0.2	NONE	< 0.2	< 0.2
Anthraquinone	mg/kg	0.3	NONE	0.3	0.3
Fluoranthene	mg/kg	0.05	MCERTS	6	6.9
Pyrene	mg/kg	0.05	MCERTS	5.4	6.3
Butyl benzyl phthalate	mg/kg	0.3	NONE	< 0.3	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	2.9	3.3
Chrysene	mg/kg	0.05	MCERTS	2.5	2.9
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	3.3	4
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	1.3	1.1
Benzo(a)pyrene	mg/kg	0.05	MCERTS	2.3	2.5
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	1.3	1.5
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.37	0.35
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	1.4	1.6

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 23-50909
Project / Site name: Don Street
Your Order No: 005798

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2780938	Stockpile 26 A		148	Loose Fibres	**Amosite**	< 0.001	**< 0.001**

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 23-50909
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2780938	Stockpile 26 A	None Supplied	None Supplied	Brown loam and clay with gravel.
2780939	Stockpile 26 B	None Supplied	None Supplied	Brown loam and clay with gravel and vegetation.

Analytical Report Number : 23-50909
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS

Analytical Report Number : 23-50909
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

- Quality control parameter has a high recovery (outside of limit); however the associated result is below the reporting limit, other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.

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Analytical Report Number : 23-63462

Project / Site name:	Don Street	**Samples received on:**	18/10/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	18/10/2023
Your order number:	006487	**Analysis completed by:**	24/10/2023
Report Issue Number:	1	**Report issued on:**	24/10/2023
Samples Analysed:	2 soil samples		

Signed:

Joanna Wawrzeczko
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-63462
Project / Site name: Don Street
Your Order No: 006487

Lab Sample Number				2850088	2850089
Sample Reference				Stockpile 27 A	Stockpile 27 B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				17/10/2023	17/10/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	15	14
Total mass of sample received	kg	0.001	NONE	0.3	0.3
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	SSZ	SSZ
General Inorganics					
pH - Automated	pH Units	N/A	MCERTS	9.6	7.5
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	740	560
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.16	0.13
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	320	260
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	159	129
Sulphide	mg/kg	1	MCERTS	8	5.1
Total Sulphur	mg/kg	50	MCERTS	650	500
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.1	1.5
Total Phenols					
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0
Heavy Metals / Metalloids					
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	11	11
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	23	17
Copper (aqua regia extractable)	mg/kg	1	MCERTS	32	37
Lead (aqua regia extractable)	mg/kg	1	MCERTS	56	70
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	18	20
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	85	90
Monoaromatics & Oxygenates					
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0

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Analytical Report Number: 23-63462
Project / Site name: Don Street
Your Order No: 006487

Lab Sample Number				2850088	2850089
Sample Reference				Stockpile 27 A	Stockpile 27 B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				17/10/2023	17/10/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Petroleum Hydrocarbons					
TPH-CWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	4.6	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	11	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	22	< 10
TPH-CWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10
TPH-CWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10
TPH-CWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10
TPH-CWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	5.2	< 2.0
TPH-CWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	18	< 10
TPH-CWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	38	13
TPH-CWG - Aromatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	62	24
VOCs					
Chloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Chloroethane	µg/kg	5	NONE	< 5.0	< 5.0
Bromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Vinyl Chloride	µg/kg	5	NONE	< 5.0	< 5.0
Trichlorofluoromethane	µg/kg	5	NONE	< 5.0	< 5.0
1,1-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	5	NONE	< 5.0	< 5.0
Trans 1,2-dichloroethylene	µg/kg	5	NONE	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0
1,1-dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
2,2-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Chloroform	µg/kg	5	NONE	< 5.0	< 5.0
1,1,1-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2-dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,1-Dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Cis-1,2-dichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0
Carbontetrachloride	µg/kg	5	NONE	< 5.0	< 5.0
1,2-dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Trichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Dibromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Bromodichloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Cis-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Trans-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0
1,1,2-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,3-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Dibromochloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Tetrachloroethene	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dibromoethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Chlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,1,1,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0

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Analytical Report Number: 23-63462
Project / Site name: Don Street
Your Order No: 006487

Lab Sample Number				2850088	2850089
Sample Reference				Stockpile 27 A	Stockpile 27 B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				17/10/2023	17/10/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
Styrene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Bromoform	µg/kg	5	NONE	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
Isopropylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,1,2,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Bromobenzene	µg/kg	5	NONE	< 5.0	< 5.0
N-Propylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
2-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0
4-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,3,5-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Tert-Butylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2,4-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Sec-Butylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,3-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
P-Isopropyltoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,4-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dibromo-3-chloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Hexachlorobutadiene	µg/kg	5	NONE	< 5.0	< 5.0
1,2,3-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0

SVOCs

Aniline	mg/kg	0.1	NONE	0.2	< 0.1
Phenol	mg/kg	0.2	ISO 17025	< 0.2	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Hexachloroethane	mg/kg	0.05	ISO 17025	< 0.05	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	< 0.2
Isophorone	mg/kg	0.2	MCERTS	< 0.2	< 0.2
2-Nitrophenol	mg/kg	0.3	NONE	< 0.3	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	0.84	0.46
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	NONE	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	NONE	< 0.2	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	0.6	0.3
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	< 0.1

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Analytical Report Number: 23-63462
Project / Site name: Don Street
Your Order No: 006487

Lab Sample Number				2850088	2850089
Sample Reference				Stockpile 27 A	Stockpile 27 B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				17/10/2023	17/10/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	NONE	< 0.1	< 0.1
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	0.08
Acenaphthene	mg/kg	0.05	MCERTS	1.7	0.75
2,4-Dinitrotoluene	mg/kg	0.2	NONE	< 0.2	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	0.9	0.4
4-Chlorophenyl phenyl ether	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	< 0.2
4-Nitroaniline	mg/kg	0.2	NONE	< 0.2	< 0.2
Fluorene	mg/kg	0.05	MCERTS	1.3	0.59
Azobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	7	3.8
Anthracene	mg/kg	0.05	MCERTS	2	1
Carbazole	mg/kg	0.3	MCERTS	0.5	< 0.3
Dibutyl phthalate	mg/kg	0.2	NONE	< 0.2	< 0.2
Anthraquinone	mg/kg	0.3	NONE	< 0.3	< 0.3
Fluoranthene	mg/kg	0.05	MCERTS	9.2	6.2
Pyrene	mg/kg	0.05	MCERTS	8.3	5.7
Butyl benzyl phthalate	mg/kg	0.3	NONE	< 0.3	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	4.4	3.1
Chrysene	mg/kg	0.05	MCERTS	4.7	2.8
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	5.6	3
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	2.1	1.6
Benzo(a)pyrene	mg/kg	0.05	MCERTS	5.1	3.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	2.4	1.5
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.77	0.41
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	2.8	1.6

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-63462
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2850088	Stockpile 27 A	None Supplied	None Supplied	Brown sandy clay with gravel.
2850089	Stockpile 27 B	None Supplied	None Supplied	Brown clay and sand with gravel.

Analytical Report Number : 23-63462
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.Refer to CoA for analyte specific accreditation.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260. Refer to CoA for analyte specific accreditation	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID. Refer to CoA for band specific accreditation.	In-house method with silica gel split/clean up.	L088/76-PL	D	MCERTS

Analytical Report Number : 23-63462
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-53528

Project / Site name:	Don Street	**Samples received on:**	29/08/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	29/08/2023
Your order number:	005940	**Analysis completed by:**	04/09/2023
Report Issue Number:	1	**Report issued on:**	04/09/2023
Samples Analysed:	4 soil samples		

Signed:

Anna Goc
PL Head of Reporting Team
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-53528
Project / Site name: Don Street
Your Order No: 005940

Lab Sample Number				2794728	2794729	2794730	2794731
Sample Reference				Stockpile 28 A	Stockpile 28 B	Stockpile 29 A	Stockpile 29 B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				25/08/2023	25/08/2023	25/08/2023	25/08/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	13	12	12	15
Total mass of sample received	kg	0.001	NONE	0.3	0.4	0.4	0.4

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile	-	Chrysotile	Chrysotile
Asbestos in Soil	Type	N/A	ISO 17025	Detected	Not-detected	Detected	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	< 0.001	-	0.003	< 0.001
Asbestos Quantification Total	%	0.001	ISO 17025	< 0.001	-	0.003	< 0.001
Asbestos Analyst ID	N/A	N/A	N/A	DSO	DSO	DSO	DSO

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.3	8.2	10.7	8.6
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	3.5	1.9
Total Sulphate as SO4	mg/kg	50	MCERTS	940	760	1500	1100
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.3	0.21	0.32	0.33
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	610	420	650	660
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	305	209	324	332
Sulphide	mg/kg	1	MCERTS	14	24	5.8	9.4
Total Sulphur	mg/kg	50	MCERTS	590	480	610	610
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1	1.2	1.3	1.3

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	12	11	18	19
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	19	24	23	25
Copper (aqua regia extractable)	mg/kg	1	MCERTS	36	39	50	59
Lead (aqua regia extractable)	mg/kg	1	MCERTS	61	65	91	120
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	0.7	0.7
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	22	22	19	24
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	84	100	110	210

Monoaromatics & Oxygenates

Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0

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Analytical Report Number: 23-53528
Project / Site name: Don Street
Your Order No: 005940

Lab Sample Number				2794728	2794729	2794730	2794731
Sample Reference				Stockpile 28 A	Stockpile 28 B	Stockpile 29 A	Stockpile 29 B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				25/08/2023	25/08/2023	25/08/2023	25/08/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Petroleum Hydrocarbons							
TPH-CWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	< 2.0	2.9	4.7	4.5
TPH-CWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	< 8.0	9.1	22	16
TPH-CWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	17	51	83	56
TPH-CWG - Aliphatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	20	63	110	77
TPH-CWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	1.4	2.6	2.5	2
TPH-CWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	7.4	10	18	9.1
TPH-CWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	21	31	74	33
TPH-CWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	36	77	140	85
TPH-CWG - Aromatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	66	120	240	130

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Analytical Report Number: 23-53528
Project / Site name: Don Street
Your Order No: 005940

Lab Sample Number				2794728	2794729	2794730	2794731
Sample Reference				Stockpile 28 A	Stockpile 28 B	Stockpile 29 A	Stockpile 29 B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				25/08/2023	25/08/2023	25/08/2023	25/08/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
VOCs							
Chloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Chloroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Bromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Vinyl Chloride	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Trichlorofluoromethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Trans 1,2-dichloroethylene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1-dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
2,2-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Chloroform	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1,1-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,2-dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,1-Dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Cis-1,2-dichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Carbontetrachloride	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2-dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Trichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Dibromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Bromodichloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Cis-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Trans-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
1,1,2-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,3-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Dibromochloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dibromoethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Chlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,1,1,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Styrene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Bromoform	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Isopropylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,1,2,2-Tetrachloroethane ##	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Bromobenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
N-Propylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
2-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
4-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,3,5-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Tert-Butylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,2,4-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Sec-Butylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,3-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
P-Isopropyltoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,4-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,2-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0

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Analytical Report Number: 23-53528
Project / Site name: Don Street
Your Order No: 005940

Lab Sample Number				2794728	2794729	2794730	2794731
Sample Reference				Stockpile 28 A	Stockpile 28 B	Stockpile 29 A	Stockpile 29 B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				25/08/2023	25/08/2023	25/08/2023	25/08/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dibromo-3-chloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Hexachlorobutadiene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2,3-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0

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Analytical Report Number: 23-53528
Project / Site name: Don Street
Your Order No: 005940

Lab Sample Number				2794728	2794729	2794730	2794731
Sample Reference				Stockpile 28 A	Stockpile 28 B	Stockpile 29 A	Stockpile 29 B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				25/08/2023	25/08/2023	25/08/2023	25/08/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
SVOCs							
Aniline	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Phenol	mg/kg	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Hexachloroethane	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	< 0.2	0.2	< 0.2
Isophorone	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
2-Nitrophenol	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	1.2	2	0.98	0.5
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	0.8	1.2	0.8	0.3
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthylene	mg/kg	0.05	MCERTS	0.07	0.07	0.49	0.1
Acenaphthene	mg/kg	0.05	MCERTS	2.1	1.3	1.1	0.59
2,4-Dinitrotoluene	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	0.9	0.7	1	0.3
4-Chlorophenyl phenyl ether	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
4-Nitroaniline	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Fluorene	mg/kg	0.05	MCERTS	1.6	0.9	1.3	0.56
Azobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	9	4.9	9.7	3.1
Anthracene	mg/kg	0.05	MCERTS	3.1	1.4	1.9	0.93
Carbazole	mg/kg	0.3	MCERTS	0.8	0.5	0.8	< 0.3
Dibutyl phthalate	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Anthraquinone	mg/kg	0.3	NONE	0.3	< 0.3	0.8	< 0.3
Fluoranthene	mg/kg	0.05	MCERTS	12	7	12	5.1
Pyrene	mg/kg	0.05	MCERTS	9.7	5.8	9.6	4.6
Butyl benzyl phthalate	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	4.3	2.8	4.1	2.3
Chrysene	mg/kg	0.05	MCERTS	4.8	2.7	4.2	2.3
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	4.5	3.5	4.4	2.6
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	2.1	0.97	1.9	1

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Analytical Report Number: 23-53528
Project / Site name: Don Street
Your Order No: 005940

Lab Sample Number				2794728	2794729	2794730	2794731
Sample Reference				Stockpile 28 A	Stockpile 28 B	Stockpile 29 A	Stockpile 29 B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				25/08/2023	25/08/2023	25/08/2023	25/08/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Benzo(a)pyrene	mg/kg	0.05	MCERTS	4	2.8	3.9	2.4
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	2.3	1.4	1.9	1.2
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.61	0.37	0.5	0.35
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	2.4	1.5	2	1.3

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-53528
Project / Site name: Don Street
Your Order No: 005940

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2794728	Stockpile 28 A		200	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**
2794730	Stockpile 29 A		123	Loose Fibres	**Chrysotile**	0.003	**0.003**
2794731	Stockpile 29 B		123	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 23-53528
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2794728	Stockpile 28 A	None Supplied	None Supplied	Brown clay with gravel.
2794729	Stockpile 28 B	None Supplied	None Supplied	Brown clay with gravel.
2794730	Stockpile 29 A	None Supplied	None Supplied	Brown clay with gravel.
2794731	Stockpile 29 B	None Supplied	None Supplied	Brown clay and sand with gravel.

Analytical Report Number : 23-53528
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS

Analytical Report Number : 23-53528
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

- Quality control parameter has a high recovery (outside of limit); however the associated result is below the reporting limit, other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.

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Analytical Report Number : 23-53528

Project / Site name:	Don Street	**Samples received on:**	29/08/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	29/08/2023
Your order number:	005940	**Analysis completed by:**	04/09/2023
Report Issue Number:	1	**Report issued on:**	04/09/2023
Samples Analysed:	4 soil samples		

Signed:

Anna Goc
PL Head of Reporting Team
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Analytical Report Number: 23-53528
Project / Site name: Don Street
Your Order No: 005940

Lab Sample Number				2794728	2794729	2794730	2794731
Sample Reference				Stockpile 28 A	Stockpile 28 B	Stockpile 29 A	Stockpile 29 B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				25/08/2023	25/08/2023	25/08/2023	25/08/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	13	12	12	15
Total mass of sample received	kg	0.001	NONE	0.3	0.4	0.4	0.4

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile	-	Chrysotile	Chrysotile
Asbestos in Soil	Type	N/A	ISO 17025	Detected	Not-detected	Detected	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	< 0.001	-	0.003	< 0.001
Asbestos Quantification Total	%	0.001	ISO 17025	< 0.001	-	0.003	< 0.001
Asbestos Analyst ID	N/A	N/A	N/A	DSO	DSO	DSO	DSO

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.3	8.2	10.7	8.6
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	3.5	1.9
Total Sulphate as SO4	mg/kg	50	MCERTS	940	760	1500	1100
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.3	0.21	0.32	0.33
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	610	420	650	660
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	305	209	324	332
Sulphide	mg/kg	1	MCERTS	14	24	5.8	9.4
Total Sulphur	mg/kg	50	MCERTS	590	480	610	610
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1	1.2	1.3	1.3

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	12	11	18	19
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	19	24	23	25
Copper (aqua regia extractable)	mg/kg	1	MCERTS	36	39	50	59
Lead (aqua regia extractable)	mg/kg	1	MCERTS	61	65	91	120
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	0.7	0.7
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	22	22	19	24
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	84	100	110	210

Monoaromatics & Oxygenates

Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0

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Analytical Report Number: 23-53528
Project / Site name: Don Street
Your Order No: 005940

Lab Sample Number				2794728	2794729	2794730	2794731
Sample Reference				Stockpile 28 A	Stockpile 28 B	Stockpile 29 A	Stockpile 29 B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				25/08/2023	25/08/2023	25/08/2023	25/08/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Petroleum Hydrocarbons							
TPH-CWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	< 2.0	2.9	4.7	4.5
TPH-CWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	< 8.0	9.1	22	16
TPH-CWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	17	51	83	56
TPH-CWG - Aliphatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	20	63	110	77
TPH-CWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	1.4	2.6	2.5	2
TPH-CWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	7.4	10	18	9.1
TPH-CWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	21	31	74	33
TPH-CWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	36	77	140	85
TPH-CWG - Aromatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	66	120	240	130

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Analytical Report Number: 23-53528
Project / Site name: Don Street
Your Order No: 005940

Lab Sample Number				2794728	2794729	2794730	2794731
Sample Reference				Stockpile 28 A	Stockpile 28 B	Stockpile 29 A	Stockpile 29 B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				25/08/2023	25/08/2023	25/08/2023	25/08/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
VOCs							
Chloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Chloroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Bromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Vinyl Chloride	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Trichlorofluoromethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Trans 1,2-dichloroethylene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1-dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
2,2-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Chloroform	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1,1-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,2-dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,1-Dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Cis-1,2-dichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Carbontetrachloride	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2-dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Trichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Dibromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Bromodichloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Cis-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Trans-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
1,1,2-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,3-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Dibromochloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dibromoethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Chlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,1,1,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Styrene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Bromoform	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Isopropylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,1,2,2-Tetrachloroethane ##	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Bromobenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
N-Propylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
2-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
4-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,3,5-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Tert-Butylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,2,4-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Sec-Butylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,3-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
P-Isopropyltoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,4-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,2-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0

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Analytical Report Number: 23-53528
Project / Site name: Don Street
Your Order No: 005940

Lab Sample Number				2794728	2794729	2794730	2794731
Sample Reference				Stockpile 28 A	Stockpile 28 B	Stockpile 29 A	Stockpile 29 B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				25/08/2023	25/08/2023	25/08/2023	25/08/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dibromo-3-chloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Hexachlorobutadiene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2,3-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-53528
Project / Site name: Don Street
Your Order No: 005940

Lab Sample Number				2794728	2794729	2794730	2794731
Sample Reference				Stockpile 28 A	Stockpile 28 B	Stockpile 29 A	Stockpile 29 B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				25/08/2023	25/08/2023	25/08/2023	25/08/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
SVOCs							
Aniline	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Phenol	mg/kg	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Hexachloroethane	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	< 0.2	0.2	< 0.2
Isophorone	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
2-Nitrophenol	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	1.2	2	0.98	0.5
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	0.8	1.2	0.8	0.3
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthylene	mg/kg	0.05	MCERTS	0.07	0.07	0.49	0.1
Acenaphthene	mg/kg	0.05	MCERTS	2.1	1.3	1.1	0.59
2,4-Dinitrotoluene	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	0.9	0.7	1	0.3
4-Chlorophenyl phenyl ether	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
4-Nitroaniline	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Fluorene	mg/kg	0.05	MCERTS	1.6	0.9	1.3	0.56
Azobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	9	4.9	9.7	3.1
Anthracene	mg/kg	0.05	MCERTS	3.1	1.4	1.9	0.93
Carbazole	mg/kg	0.3	MCERTS	0.8	0.5	0.8	< 0.3
Dibutyl phthalate	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Anthraquinone	mg/kg	0.3	NONE	0.3	< 0.3	0.8	< 0.3
Fluoranthene	mg/kg	0.05	MCERTS	12	7	12	5.1
Pyrene	mg/kg	0.05	MCERTS	9.7	5.8	9.6	4.6
Butyl benzyl phthalate	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	4.3	2.8	4.1	2.3
Chrysene	mg/kg	0.05	MCERTS	4.8	2.7	4.2	2.3
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	4.5	3.5	4.4	2.6
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	2.1	0.97	1.9	1

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Analytical Report Number: 23-53528
Project / Site name: Don Street
Your Order No: 005940

Lab Sample Number				2794728	2794729	2794730	2794731
Sample Reference				Stockpile 28 A	Stockpile 28 B	Stockpile 29 A	Stockpile 29 B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				25/08/2023	25/08/2023	25/08/2023	25/08/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Benzo(a)pyrene	mg/kg	0.05	MCERTS	4	2.8	3.9	2.4
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	2.3	1.4	1.9	1.2
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.61	0.37	0.5	0.35
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	2.4	1.5	2	1.3

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-53528
Project / Site name: Don Street
Your Order No: 005940

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2794728	Stockpile 28 A		200	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**
2794730	Stockpile 29 A		123	Loose Fibres	**Chrysotile**	0.003	**0.003**
2794731	Stockpile 29 B		123	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 23-53528
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2794728	Stockpile 28 A	None Supplied	None Supplied	Brown clay with gravel.
2794729	Stockpile 28 B	None Supplied	None Supplied	Brown clay with gravel.
2794730	Stockpile 29 A	None Supplied	None Supplied	Brown clay with gravel.
2794731	Stockpile 29 B	None Supplied	None Supplied	Brown clay and sand with gravel.

Analytical Report Number : 23-53528
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS

Analytical Report Number : 23-53528
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

- Quality control parameter has a high recovery (outside of limit); however the associated result is below the reporting limit, other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.

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Analytical Report Number : 23-60537

Project / Site name:	Don Street	**Samples received on:**	04/10/2023
Your job number:	14 554	**Samples instructed on/ Analysis started on:**	04/10/2023
Your order number:	006369	**Analysis completed by:**	09/10/2023
Report Issue Number:	1	**Report issued on:**	09/10/2023
Samples Analysed:	2 leachate samples		

Signed:

Joanna Szwagrzak
Junior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

4041

Analytical Report Number: 23-60537
Project / Site name: Don Street

Your Order No: 006369

Lab Sample Number				2834654	2834655
Sample Reference				Stockpile 24	Stockpile 30
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				03/10/2023	03/10/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Leachate Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Heavy Metals / Metalloids					
Lead (dissolved)	µg/l	1	ISO 17025	2.1	2.2
Zinc (dissolved)	µg/l	0.4	ISO 17025	8.7	12

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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The results included within the report relate only to the sample(s) submitted for testing.

4041

Analytical Report Number : 23-60537
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
NRA Leachate Prep	10:1 extract with de-ionised water shaken for 24 hours then filtered.	In-house method based on National Rivers Authority	L020-PL	W	NONE
Metals by ICP-OES in leachate	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

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Analytical Report Number : 23-57174

Project / Site name:	Don Street	**Samples received on:**	18/09/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	18/09/2023
Your order number:	006189	**Analysis completed by:**	25/09/2023
Report Issue Number:	1	**Report issued on:**	25/09/2023
Samples Analysed:	4 soil samples		

Signed:

Anna Goc
PL Head of Reporting Team
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Analytical Report Number: 23-57174
Project / Site name: Don Street
Your Order No: 006189

Lab Sample Number				2815514	2815515	2815516	2815517
Sample Reference				Stockpile 24A	Stockpile 24B	Stockpile 30A	Stockpile 30B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				12/09/2023	12/09/2023	12/09/2023	12/09/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	12	12	9	11
Total mass of sample received	kg	0.001	NONE	0.2	0.2	0.3	0.2

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	Chrysotile	Chrysotile & Amosite	Chrysotile & Amosite
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Detected	Detected	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	0.012	0.009	< 0.001
Asbestos Quantification Total	%	0.001	ISO 17025	-	0.012	0.009	< 0.001
Asbestos Analyst ID	N/A	N/A	N/A	PDO	PDO	PDO	PDO

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8	8.1	8.5	8.4
Total Cyanide	mg/kg	1	MCERTS	1.9	< 1.0	1.9	1.4
Total Sulphate as SO4	mg/kg	50	MCERTS	1500	1000	1700	1500
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.59	0.34	0.59	0.47
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	1200	680	1200	940
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	593	342	585	470
Sulphide	mg/kg	1	MCERTS	12	11	4.8	12
Total Sulphur	mg/kg	50	MCERTS	940	630	1000	720
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.4	1.3	1.5	1.4

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	40	34	31	22
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	25	32	29	29
Copper (aqua regia extractable)	mg/kg	1	MCERTS	60	60	87	58
Lead (aqua regia extractable)	mg/kg	1	MCERTS	200	150	190	110
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.5	0.6	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	26	28	77	63
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	110	100	180	140

Monoaromatics & Oxygenates

Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0

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Analytical Report Number: 23-57174
Project / Site name: Don Street
Your Order No: 006189

Lab Sample Number				2815514	2815515	2815516	2815517
Sample Reference				Stockpile 24A	Stockpile 24B	Stockpile 30A	Stockpile 30B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				12/09/2023	12/09/2023	12/09/2023	12/09/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Petroleum Hydrocarbons							
TPH-CWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	< 2.0	3.5	4.2	3.2
TPH-CWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	< 8.0	9.3	12	10
TPH-CWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	< 8.0	32	29	43
TPH-CWG - Aliphatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	< 10	45	45	56
TPH-CWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	2.7	5.6	3.9	4.9
TPH-CWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	< 10	29	18	27
TPH-CWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	20	59	39	85
TPH-CWG - Aromatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	32	94	62	120

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Analytical Report Number: 23-57174
Project / Site name: Don Street
Your Order No: 006189

Lab Sample Number				2815514	2815515	2815516	2815517
Sample Reference				Stockpile 24A	Stockpile 24B	Stockpile 30A	Stockpile 30B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				12/09/2023	12/09/2023	12/09/2023	12/09/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
VOCs							
Chloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Chloroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Bromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Vinyl Chloride	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Trichlorofluoromethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Trans 1,2-dichloroethylene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1-dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
2,2-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Chloroform	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1,1-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,2-dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,1-Dichloropropene ##	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Cis-1,2-dichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Carbontetrachloride	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2-dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Trichloroethene ##	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Dibromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Bromodichloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Cis-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Trans-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
1,1,2-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,3-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Dibromochloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dibromoethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Chlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,1,1,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Styrene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Bromoform	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Isopropylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,1,2,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Bromobenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
N-Propylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
2-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
4-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,3,5-Trimethylbenzene ##	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Tert-Butylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,2,4-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Sec-Butylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,3-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
P-Isopropyltoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,4-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,2-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0

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Analytical Report Number: 23-57174
Project / Site name: Don Street
Your Order No: 006189

Lab Sample Number				2815514	2815515	2815516	2815517
Sample Reference				Stockpile 24A	Stockpile 24B	Stockpile 30A	Stockpile 30B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				12/09/2023	12/09/2023	12/09/2023	12/09/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dibromo-3-chloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Hexachlorobutadiene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2,3-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
SVOCs							
Aniline	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Phenol	mg/kg	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Hexachloroethane	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Isophorone	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
2-Nitrophenol	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	0.34	0.63	0.61	1.4
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	0.3	0.6	0.4	0.8
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthylene	mg/kg	0.05	MCERTS	0.14	0.09	0.1	0.09
Acenaphthene	mg/kg	0.05	MCERTS	0.64	1.2	1.3	1.7
2,4-Dinitrotoluene	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	0.3	0.6	0.7	0.8
4-Chlorophenyl phenyl ether	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
4-Nitroaniline	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Fluorene	mg/kg	0.05	MCERTS	0.53	0.91	0.97	1.1
Azobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	3.5	5.6	5.6	6.4
Anthracene	mg/kg	0.05	MCERTS	0.96	1.5	1.6	1.7
Carbazole	mg/kg	0.3	MCERTS	< 0.3	0.4	0.4	0.6
Dibutyl phthalate	mg/kg	0.2	NONE	< 0.2	< 0.2	0.2	< 0.2
Anthraquinone	mg/kg	0.3	NONE	< 0.3	0.3	< 0.3	< 0.3
Fluoranthene	mg/kg	0.05	MCERTS	5.7	8.6	7.7	8.4

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Analytical Report Number: 23-57174
Project / Site name: Don Street
Your Order No: 006189

Lab Sample Number				2815514	2815515	2815516	2815517
Sample Reference				Stockpile 24A	Stockpile 24B	Stockpile 30A	Stockpile 30B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				12/09/2023	12/09/2023	12/09/2023	12/09/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Pyrene	mg/kg	0.05	MCERTS	5.5	8.1	6.8	7.2
Butyl benzyl phthalate	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	3	4.2	3.4	3.8
Chrysene	mg/kg	0.05	MCERTS	3.1	4.1	3.4	3.4
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	3.5	4.9	4	4.3
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	1.5	1.8	1.6	1.5
Benzo(a)pyrene	mg/kg	0.05	MCERTS	3.2	4.3	3.4	3.7
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	1.7	2.1	1.8	1.9
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.46	0.59	0.47	0.51
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	1.7	2.2	1.8	2

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 23-57174
Project / Site name: Don Street
Your Order No: 006189

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2815515	Stockpile 24B		172	Loose Fibres & Loose Fibrous Debris	**Chrysotile**	0.012	**0.012**
2815516	Stockpile 30A		175	Loose Fibres & Loose Fibrous Debris	**Chrysotile & Amosite**	0.009	**0.009**
2815517	Stockpile 30B		185	Loose Fibres	**Chrysotile & Amosite**	< 0.001	**< 0.001**

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 23-57174
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2815514	Stockpile 24A	None Supplied	None Supplied	Brown clay and sand with gravel.
2815515	Stockpile 24B	None Supplied	None Supplied	Brown clay and sand with gravel.
2815516	Stockpile 30A	None Supplied	None Supplied	Brown clay and sand with gravel.
2815517	Stockpile 30B	None Supplied	None Supplied	Brown clay and sand with gravel.

Analytical Report Number : 23-57174
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.Refer to CoA for analyte specific accreditation.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260. Refer to CoA for analyte specific accreditation	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID. Refer to CoA for band specific accreditation.	In-house method with silica gel split/clean up.	L088/76-PL	D	MCERTS

Analytical Report Number : 23-57174
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

- Quality control parameter has a high recovery (outside of limit); however the associated result is below the reporting limit, other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.

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Analytical Report Number : 23-59928

Project / Site name:	Don Street	**Samples received on:**	02/10/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	02/10/2023
Your order number:	006357	**Analysis completed by:**	06/10/2023
Report Issue Number:	1	**Report issued on:**	06/10/2023
Samples Analysed:	4 soil samples		

Signed:

Joanna Wawrzeczko
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-59928
Project / Site name: Don Street
Your Order No: 006357

Lab Sample Number				2831606	2831607	2831608	2831609
Sample Reference				Stockpile 31 A	Stockpile 31 B	Stockpile 34 A	Stockpile 34 B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				29/09/2023	29/09/2023	29/09/2023	29/09/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	11	12	13	14
Total mass of sample received	kg	0.001	NONE	0.5	0.3	0.4	0.4
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	MJN	MJN	MJN	MJN

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.2	7.8	8.1	8.1
Total Cyanide	mg/kg	1	MCERTS	1.3	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	400	550	470	480
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.081	0.17	0.1	0.1
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	160	330	210	200
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	80.5	165	105	102
Sulphide	mg/kg	1	MCERTS	6.4	69	7.1	10
Total Sulphur	mg/kg	50	MCERTS	310	620	440	460
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.2	1.5	1.5	1.3

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	9.5	13	13	16
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	21	20	16	18
Copper (aqua regia extractable)	mg/kg	1	MCERTS	21	44	39	39
Lead (aqua regia extractable)	mg/kg	1	MCERTS	37	81	52	60
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	20	22	18	21
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	65	120	93	98

Monoaromatics & Oxygenates

Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0

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Analytical Report Number: 23-59928
Project / Site name: Don Street
Your Order No: 006357

Lab Sample Number				2831606	2831607	2831608	2831609
Sample Reference				Stockpile 31 A	Stockpile 31 B	Stockpile 34 A	Stockpile 34 B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				29/09/2023	29/09/2023	29/09/2023	29/09/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Petroleum Hydrocarbons							
TPH-CWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	< 2.0	< 2.0	2.5	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	< 8.0	< 8.0	8.8	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	14	37	46	29
TPH-CWG - Aliphatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	14	44	57	36
TPH-CWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	1.1	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	4.4	2.2	6	2.5
TPH-CWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	16	16	16	< 10
TPH-CWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	32	38	26	12
TPH-CWG - Aromatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	53	57	48	19
VOCs							
Chloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Chloroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Bromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Vinyl Chloride	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Trichlorofluoromethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Trans 1,2-dichloroethylene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1-dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
2,2-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Chloroform	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1,1-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,2-dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,1-Dichloropropene##	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Cis-1,2-dichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Carbontetrachloride	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2-dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Trichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Dibromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Bromodichloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Cis-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Trans-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
1,1,2-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,3-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Dibromochloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dibromoethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Chlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,1,1,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0

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Analytical Report Number: 23-59928
Project / Site name: Don Street
Your Order No: 006357

Lab Sample Number				2831606	2831607	2831608	2831609
Sample Reference				Stockpile 31 A	Stockpile 31 B	Stockpile 34 A	Stockpile 34 B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				29/09/2023	29/09/2023	29/09/2023	29/09/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Styrene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Bromoform	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Isopropylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,1,2,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Bromobenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
N-Propylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
2-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
4-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,3,5-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Tert-Butylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,2,4-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Sec-Butylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,3-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
P-Isopropyltoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,4-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,2-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dibromo-3-chloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Hexachlorobutadiene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2,3-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0

SVOCs

Aniline	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Phenol	mg/kg	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Hexachloroethane	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Isophorone	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
2-Nitrophenol	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	0.81	0.98	0.66	0.97
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	0.5	0.5	0.6	0.6
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1

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Analytical Report Number: 23-59928
Project / Site name: Don Street
Your Order No: 006357

Lab Sample Number				2831606	2831607	2831608	2831609
Sample Reference				Stockpile 31 A	Stockpile 31 B	Stockpile 34 A	Stockpile 34 B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				29/09/2023	29/09/2023	29/09/2023	29/09/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	0.05	0.07	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	0.92	1.3	1.6	1.4
2,4-Dinitrotoluene	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	0.5	0.7	1.1	0.7
4-Chlorophenyl phenyl ether	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
4-Nitroaniline	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Fluorene	mg/kg	0.05	MCERTS	0.71	1.1	1.4	1.1
Azobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	4.1	5.7	8.4	5.9
Anthracene	mg/kg	0.05	MCERTS	1.3	1.9	2.3	1.8
Carbazole	mg/kg	0.3	MCERTS	0.3	0.4	0.3	0.4
Dibutyl phthalate	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Anthraquinone	mg/kg	0.3	NONE	< 0.3	0.4	0.5	0.4
Fluoranthene	mg/kg	0.05	MCERTS	5.4	7.7	9.9	8.9
Pyrene	mg/kg	0.05	MCERTS	4.8	7.3	8.9	8.3
Butyl benzyl phthalate	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	2.2	3.6	4.2	3.9
Chrysene	mg/kg	0.05	MCERTS	2.4	3.2	4.2	4
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	2.2	4	4.5	4.1
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	1.2	1.3	1.8	2
Benzo(a)pyrene	mg/kg	0.05	MCERTS	2.1	3.3	3.8	3.8
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	1	1.6	1.8	1.8
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.24	0.47	0.45	0.52
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	1.1	1.9	2.1	2.1

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-59928
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2831606	Stockpile 31 A	None Supplied	None Supplied	Brown clay with gravel.
2831607	Stockpile 31 B	None Supplied	None Supplied	Brown clay with gravel and rubble.
2831608	Stockpile 34 A	None Supplied	None Supplied	Brown clay with gravel and rubble.
2831609	Stockpile 34 B	None Supplied	None Supplied	Brown clay with vegetation.

Analytical Report Number : 23-59928
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.Refer to CoA for analyte specific accreditation.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260. Refer to CoA for analyte specific accreditation	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID. Refer to CoA for band specific accreditation.	In-house method with silica gel split/clean up.	L088/76-PL	D	MCERTS

Analytical Report Number : 23-59928
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-54566

Project / Site name:	Don Street	**Samples received on:**	04/09/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	04/09/2023
Your order number:	006014	**Analysis completed by:**	08/09/2023
Report Issue Number:	1	**Report issued on:**	08/09/2023
Samples Analysed:	2 soil samples		

Signed:

Anna Goc
PL Head of Reporting Team
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Analytical Report Number: 23-54566
Project / Site name: Don Street
Your Order No: 006014

Lab Sample Number				2800419	2800420
Sample Reference				Stockpile 32 A	Stockpile 32 B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				01/09/2023	01/09/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	6.2	7.2
Total mass of sample received	kg	0.001	NONE	0.3	0.2
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	DSA	DSA
General Inorganics					
pH - Automated	pH Units	N/A	MCERTS	8.3	8.1
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	880	1300
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.27	0.63
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	540	1300
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	270	626
Sulphide	mg/kg	1	MCERTS	5.4	10
Total Sulphur	mg/kg	50	MCERTS	590	620
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.1	1.2
Total Phenols					
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0
Heavy Metals / Metalloids					
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	11	11
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	21	31
Copper (aqua regia extractable)	mg/kg	1	MCERTS	28	35
Lead (aqua regia extractable)	mg/kg	1	MCERTS	41	51
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	19	21
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	62	89
Monoaromatics & Oxygenates					
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0
Petroleum Hydrocarbons					
TPH-CWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	4.2	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	32	22
TPH-CWG - Aliphatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	44	26

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Analytical Report Number: 23-54566
Project / Site name: Don Street
Your Order No: 006014

Lab Sample Number				2800419	2800420
Sample Reference				Stockpile 32 A	Stockpile 32 B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				01/09/2023	01/09/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
TPH-CWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10
TPH-CWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10
TPH-CWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10
TPH-CWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	4.6	3
TPH-CWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	19	21
TPH-CWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	79	48
TPH-CWG - Aromatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	100	72
VOCs					
Chloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Chloroethane	µg/kg	5	NONE	< 5.0	< 5.0
Bromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Vinyl Chloride	µg/kg	5	NONE	< 5.0	< 5.0
Trichlorofluoromethane	µg/kg	5	NONE	< 5.0	< 5.0
1,1-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	5	NONE	< 5.0	< 5.0
Trans 1,2-dichloroethylene	µg/kg	5	NONE	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0
1,1-dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
2,2-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Chloroform	µg/kg	5	NONE	< 5.0	< 5.0
1,1,1-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2-dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,1-Dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Cis-1,2-dichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0
Carbontetrachloride	µg/kg	5	NONE	< 5.0	< 5.0
1,2-dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Trichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Dibromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Bromodichloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Cis-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Trans-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0
1,1,2-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,3-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Dibromochloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Tetrachloroethene	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dibromoethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Chlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,1,1,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
Styrene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Bromoform	µg/kg	5	NONE	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
Isopropylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,1,2,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Bromobenzene	µg/kg	5	NONE	< 5.0	< 5.0
N-Propylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
2-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0

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Analytical Report Number: 23-54566
Project / Site name: Don Street
Your Order No: 006014

Lab Sample Number				2800419	2800420
Sample Reference				Stockpile 32 A	Stockpile 32 B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				01/09/2023	01/09/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
4-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,3,5-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Tert-Butylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2,4-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Sec-Butylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,3-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
P-Isopropyltoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,4-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dibromo-3-chloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Hexachlorobutadiene	µg/kg	5	NONE	< 5.0	< 5.0
1,2,3-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0

SVOCs

Aniline	mg/kg	0.1	NONE	< 0.1	< 0.1
Phenol	mg/kg	0.2	ISO 17025	< 0.2	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Hexachloroethane	mg/kg	0.05	ISO 17025	< 0.05	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	< 0.2
Isophorone	mg/kg	0.2	MCERTS	< 0.2	< 0.2
2-Nitrophenol	mg/kg	0.3	NONE	< 0.3	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	1.8	2.7
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	NONE	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	NONE	< 0.2	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	0.9	1.2
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	< 0.1
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	NONE	< 0.1	< 0.1
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	1.9	2
2,4-Dinitrotoluene	mg/kg	0.2	NONE	< 0.2	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	1	1.2
4-Chlorophenyl phenyl ether	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	< 0.2
4-Nitroaniline	mg/kg	0.2	NONE	< 0.2	< 0.2
Fluorene	mg/kg	0.05	MCERTS	1.2	1.4

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-54566
Project / Site name: Don Street
Your Order No: 006014

Lab Sample Number				2800419	2800420
Sample Reference				Stockpile 32 A	Stockpile 32 B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				01/09/2023	01/09/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Azobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	7	7.3
Anthracene	mg/kg	0.05	MCERTS	2.1	1.9
Carbazole	mg/kg	0.3	MCERTS	0.6	0.4
Dibutyl phthalate	mg/kg	0.2	NONE	< 0.2	< 0.2
Anthraquinone	mg/kg	0.3	NONE	< 0.3	< 0.3
Fluoranthene	mg/kg	0.05	MCERTS	10	9.9
Pyrene	mg/kg	0.05	MCERTS	8.9	8.5
Butyl benzyl phthalate	mg/kg	0.3	NONE	< 0.3	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	4.5	4.1
Chrysene	mg/kg	0.05	MCERTS	4	4.4
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	4.9	4.1
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	1.6	2.3
Benzo(a)pyrene	mg/kg	0.05	MCERTS	4.1	3.6
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	2	2
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.49	0.49
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	2	2.2

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-54566
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2800419	Stockpile 32 A	None Supplied	None Supplied	Brown clay and sand with gravel.
2800420	Stockpile 32 B	None Supplied	None Supplied	Brown clay and sand with gravel.

Analytical Report Number : 23-54566
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS

Analytical Report Number : 23-54566
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-58048

Project / Site name:	Don Street	**Samples received on:**	22/09/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	22/09/2023
Your order number:	006263	**Analysis completed by:**	27/09/2023
Report Issue Number:	1	**Report issued on:**	28/09/2023
Samples Analysed:	2 soil samples		

Signed:

Anna Goc
PL Head of Reporting Team
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Analytical Report Number: 23-58048
Project / Site name: Don Street
Your Order No: 006263

Lab Sample Number				2820661	2820662
Sample Reference				Stockpile 32 C	Stockpile 32 D
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				20/09/2023	20/09/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	12	14
Total mass of sample received	kg	0.001	NONE	0.3	0.3

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	WEM	WEM

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.3	8.4
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	460	460
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.0087	0.28
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	17	550
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	8.7	276
Sulphide	mg/kg	1	MCERTS	5.1	20
Total Sulphur	mg/kg	50	MCERTS	530	490
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.5	1.4

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	12	13
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	26	18
Copper (aqua regia extractable)	mg/kg	1	MCERTS	33	38
Lead (aqua regia extractable)	mg/kg	1	MCERTS	46	45
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	25	25
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	74	68

Monoaromatics & Oxygenates

Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0

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Analytical Report Number: 23-58048
Project / Site name: Don Street
Your Order No: 006263

Lab Sample Number				2820661	2820662
Sample Reference				Stockpile 32 C	Stockpile 32 D
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				20/09/2023	20/09/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Petroleum Hydrocarbons					
TPH-CWG - Aliphatic >EC5 - EC6 HS_1D_AL	mg/kg	0.1	NONE	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC6 - EC8 HS_1D_AL	mg/kg	0.1	NONE	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC8 - EC10 HS_1D_AL	mg/kg	0.1	NONE	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC10 - EC12 EH_CU_1D_AL	mg/kg	1	MCERTS	1.4	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 EH_CU_1D_AL	mg/kg	2	MCERTS	5.7	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21 EH_CU_1D_AL	mg/kg	8	MCERTS	11	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35 EH_CU_1D_AL	mg/kg	8	MCERTS	63	26
TPH-CWG - Aliphatic (EC5 - EC35) EH_CU+HS_1D_AL	mg/kg	10	NONE	81	35
TPH-CWG - Aromatic >EC5 - EC7 HS_1D_AR	mg/kg	0.1	NONE	< 0.10	< 0.10
TPH-CWG - Aromatic >EC7 - EC8 HS_1D_AR	mg/kg	0.1	NONE	< 0.10	< 0.10
TPH-CWG - Aromatic >EC8 - EC10 HS_1D_AR	mg/kg	0.1	NONE	< 0.10	< 0.10
TPH-CWG - Aromatic >EC10 - EC12 EH_CU_1D_AR	mg/kg	1	MCERTS	1.3	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 EH_CU_1D_AR	mg/kg	2	MCERTS	11	2.5
TPH-CWG - Aromatic >EC16 - EC21 EH_CU_1D_AR	mg/kg	10	MCERTS	52	18
TPH-CWG - Aromatic >EC21 - EC35 EH_CU_1D_AR	mg/kg	10	MCERTS	96	47
TPH-CWG - Aromatic (EC5 - EC35) EH_CU+HS_1D_AR	mg/kg	10	NONE	160	68
VOCs					
Chloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Chloroethane	µg/kg	5	NONE	< 5.0	< 5.0
Bromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Vinyl Chloride	µg/kg	5	NONE	< 5.0	< 5.0
Trichlorofluoromethane	µg/kg	5	NONE	< 5.0	< 5.0
1,1-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	5	NONE	< 5.0	< 5.0
Trans 1,2-dichloroethylene	µg/kg	5	NONE	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0
1,1-dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
2,2-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Chloroform	µg/kg	5	NONE	< 5.0	< 5.0
1,1,1-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2-dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,1-Dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Cis-1,2-dichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0
Carbontetrachloride	µg/kg	5	NONE	< 5.0	< 5.0
1,2-dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Trichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Dibromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Bromodichloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Cis-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Trans-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0
1,1,2-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,3-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Dibromochloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Tetrachloroethene	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dibromoethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Chlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,1,1,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0

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Analytical Report Number: 23-58048
Project / Site name: Don Street
Your Order No: 006263

Lab Sample Number				2820661	2820662
Sample Reference				Stockpile 32 C	Stockpile 32 D
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				20/09/2023	20/09/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
Styrene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Bromoform	µg/kg	5	NONE	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
Isopropylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,1,2,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Bromobenzene	µg/kg	5	NONE	< 5.0	< 5.0
N-Propylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
2-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0
4-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,3,5-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Tert-Butylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2,4-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Sec-Butylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,3-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
P-Isopropyltoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,4-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dibromo-3-chloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Hexachlorobutadiene	µg/kg	5	NONE	< 5.0	< 5.0
1,2,3-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0

SVOCs

Aniline	mg/kg	0.1	NONE	< 0.1	< 0.1
Phenol	mg/kg	0.2	ISO 17025	< 0.2	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Hexachloroethane	mg/kg	0.05	ISO 17025	< 0.05	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	< 0.2
Isophorone	mg/kg	0.2	MCERTS	< 0.2	< 0.2
2-Nitrophenol	mg/kg	0.3	NONE	< 0.3	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	1.3	1
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	NONE	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	NONE	< 0.2	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	2.3	0.5
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	< 0.1

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Analytical Report Number: 23-58048
Project / Site name: Don Street
Your Order No: 006263

Lab Sample Number				2820661	2820662
Sample Reference				Stockpile 32 C	Stockpile 32 D
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				20/09/2023	20/09/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	NONE	< 0.1	< 0.1
Acenaphthylene	mg/kg	0.05	MCERTS	0.12	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	7	1
2,4-Dinitrotoluene	mg/kg	0.2	NONE	< 0.2	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	4.1	0.5
4-Chlorophenyl phenyl ether	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	< 0.2
4-Nitroaniline	mg/kg	0.2	NONE	< 0.2	< 0.2
Fluorene	mg/kg	0.05	MCERTS	5.3	0.69
Azobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	25	3.5
Anthracene	mg/kg	0.05	MCERTS	6	1.2
Carbazole	mg/kg	0.3	MCERTS	1.6	0.3
Dibutyl phthalate	mg/kg	0.2	NONE	< 0.2	< 0.2
Anthraquinone	mg/kg	0.3	NONE	0.8	< 0.3
Fluoranthene	mg/kg	0.05	MCERTS	22	5.8
Pyrene	mg/kg	0.05	MCERTS	19	5.3
Butyl benzyl phthalate	mg/kg	0.3	NONE	< 0.3	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	8.6	2.6
Chrysene	mg/kg	0.05	MCERTS	7.4	2.7
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	8	3.3
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	3.6	1.1
Benzo(a)pyrene	mg/kg	0.05	MCERTS	7.7	2.8
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	3.7	1.5
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.83	0.34
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	3.8	1.5

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-58048
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2820661	Stockpile 32 C	None Supplied	None Supplied	Brown clay and sand with gravel.
2820662	Stockpile 32 D	None Supplied	None Supplied	Brown clay and sand with gravel.

Analytical Report Number : 23-58048
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.Refer to CoA for analyte specific accreditation.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260. Refer to CoA for analyte specific accreditation	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID. Refer to CoA for band specific accreditation.	In-house method with silica gel split/clean up.	L088/76-PL	D	MCERTS

Analytical Report Number : 23-58048
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-62548

Project / Site name:	Don Street	**Samples received on:**	13/10/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	13/10/2023
Your order number:	006436	**Analysis completed by:**	19/10/2023
Report Issue Number:	1	**Report issued on:**	19/10/2023
Samples Analysed:	2 soil samples		

Signed:

Dominika Liana
Junior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Analytical Report Number: 23-62548
Project / Site name: Don Street
Your Order No: 006436

Lab Sample Number				2845101	2845102
Sample Reference				Stockpile 33 A	Stockpile 33 B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				10/10/2023	10/10/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	14	17
Total mass of sample received	kg	0.001	NONE	0.2	0.3

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	Chrysotile
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	< 0.001
Asbestos Quantification Total	%	0.001	ISO 17025	-	< 0.001
Asbestos Analyst ID	N/A	N/A	N/A	DSO	DSO

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.2	8.2
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	520	640
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.05	0.15
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	99	310
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	49.7	153
Sulphide	mg/kg	1	MCERTS	3.1	2.5
Total Sulphur	mg/kg	50	MCERTS	320	420
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.5	1.6

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	24	30
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	24	26
Copper (aqua regia extractable)	mg/kg	1	MCERTS	45	52
Lead (aqua regia extractable)	mg/kg	1	MCERTS	140	110
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.5	0.8
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	23	25
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	140	150

Petroleum Hydrocarbons

TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	2.3	< 2.0
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	< 4.0	7.9
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	14	36
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	40	95
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	< 10	26
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	62	170

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Analytical Report Number: 23-62548
Project / Site name: Don Street
Your Order No: 006436

Lab Sample Number				2845101	2845102
Sample Reference				Stockpile 33 A	Stockpile 33 B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				10/10/2023	10/10/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
VOCs					
Chloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Chloroethane	µg/kg	5	NONE	< 5.0	< 5.0
Bromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Vinyl Chloride	µg/kg	5	NONE	< 5.0	< 5.0
Trichlorofluoromethane	µg/kg	5	NONE	< 5.0	< 5.0
1,1-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	5	NONE	< 5.0	< 5.0
Trans 1,2-dichloroethylene	µg/kg	5	NONE	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0
1,1-dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
2,2-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Chloroform	µg/kg	5	NONE	< 5.0	< 5.0
1,1,1-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2-dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,1-Dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Cis-1,2-dichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0
Carbontetrachloride	µg/kg	5	NONE	< 5.0	< 5.0
1,2-dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Trichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Dibromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Bromodichloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Cis-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Trans-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0
1,1,2-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,3-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Dibromochloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Tetrachloroethene	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dibromoethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Chlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,1,1,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
Styrene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Bromoform	µg/kg	5	NONE	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
Isopropylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,1,2,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Bromobenzene	µg/kg	5	NONE	< 5.0	< 5.0
N-Propylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
2-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0
4-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,3,5-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Tert-Butylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2,4-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Sec-Butylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,3-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
P-Isopropyltoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,4-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0

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Analytical Report Number: 23-62548
Project / Site name: Don Street
Your Order No: 006436

Lab Sample Number				2845101	2845102
Sample Reference				Stockpile 33 A	Stockpile 33 B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				10/10/2023	10/10/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dibromo-3-chloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Hexachlorobutadiene	µg/kg	5	NONE	< 5.0	< 5.0
1,2,3-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0

SVOCs

Aniline	mg/kg	0.1	NONE	< 0.1	< 0.1
Phenol	mg/kg	0.2	ISO 17025	< 0.2	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Hexachloroethane	mg/kg	0.05	ISO 17025	< 0.05	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	< 0.2
Isophorone	mg/kg	0.2	MCERTS	< 0.2	< 0.2
2-Nitrophenol	mg/kg	0.3	NONE	< 0.3	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	0.55	0.53
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	NONE	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	NONE	< 0.2	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	0.4	0.3
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	< 0.1
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	NONE	< 0.1	< 0.1
Acenaphthylene	mg/kg	0.05	MCERTS	0.09	0.09
Acenaphthene	mg/kg	0.05	MCERTS	0.68	0.89
2,4-Dinitrotoluene	mg/kg	0.2	NONE	< 0.2	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	0.4	0.4
4-Chlorophenyl phenyl ether	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	< 0.2
4-Nitroaniline	mg/kg	0.2	NONE	< 0.2	< 0.2
Fluorene	mg/kg	0.05	MCERTS	0.61	0.76
Azobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	4.3	5.3
Anthracene	mg/kg	0.05	MCERTS	1.5	1.6
Carbazole	mg/kg	0.3	MCERTS	0.4	0.4
Dibutyl phthalate	mg/kg	0.2	NONE	< 0.2	< 0.2
Anthraquinone	mg/kg	0.3	NONE	< 0.3	0.4
Fluoranthene	mg/kg	0.05	MCERTS	6.4	8.3

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Analytical Report Number: 23-62548
Project / Site name: Don Street
Your Order No: 006436

Lab Sample Number				2845101	2845102
Sample Reference				Stockpile 33 A	Stockpile 33 B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				10/10/2023	10/10/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Pyrene	mg/kg	0.05	MCERTS	6.2	7.6
Butyl benzyl phthalate	mg/kg	0.3	NONE	< 0.3	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	3	3.9
Chrysene	mg/kg	0.05	MCERTS	3.1	3.4
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	3.6	4.2
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	1.4	1.7
Benzo(a)pyrene	mg/kg	0.05	MCERTS	3.1	3.6
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	1.6	1.8
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.43	0.53
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	1.9	2.1

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-62548
Project / Site name: Don Street
Your Order No: 006436

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2845102	Stockpile 33 B		192	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 23-62548
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2845101	Stockpile 33 A	None Supplied	None Supplied	Brown clay and sand with gravel.
2845102	Stockpile 33 B	None Supplied	None Supplied	Brown sandy clay.

Analytical Report Number : 23-62548
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.Refer to CoA for analyte specific accreditation.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025

Analytical Report Number : 23-62548
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-59928

Project / Site name:	Don Street	**Samples received on:**	02/10/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	02/10/2023
Your order number:	006357	**Analysis completed by:**	06/10/2023
Report Issue Number:	1	**Report issued on:**	06/10/2023
Samples Analysed:	4 soil samples		

Signed:

Joanna Wawrzeczko
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Analytical Report Number: 23-59928
Project / Site name: Don Street
Your Order No: 006357

Lab Sample Number				2831606	2831607	2831608	2831609
Sample Reference				Stockpile 31 A	Stockpile 31 B	Stockpile 34 A	Stockpile 34 B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				29/09/2023	29/09/2023	29/09/2023	29/09/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	11	12	13	14
Total mass of sample received	kg	0.001	NONE	0.5	0.3	0.4	0.4
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	MJN	MJN	MJN	MJN

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.2	7.8	8.1	8.1
Total Cyanide	mg/kg	1	MCERTS	1.3	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	400	550	470	480
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.081	0.17	0.1	0.1
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	160	330	210	200
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	80.5	165	105	102
Sulphide	mg/kg	1	MCERTS	6.4	69	7.1	10
Total Sulphur	mg/kg	50	MCERTS	310	620	440	460
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.2	1.5	1.5	1.3

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	9.5	13	13	16
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	21	20	16	18
Copper (aqua regia extractable)	mg/kg	1	MCERTS	21	44	39	39
Lead (aqua regia extractable)	mg/kg	1	MCERTS	37	81	52	60
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	20	22	18	21
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	65	120	93	98

Monoaromatics & Oxygenates

Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0

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Analytical Report Number: 23-59928
Project / Site name: Don Street
Your Order No: 006357

Lab Sample Number				2831606	2831607	2831608	2831609
Sample Reference				Stockpile 31 A	Stockpile 31 B	Stockpile 34 A	Stockpile 34 B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				29/09/2023	29/09/2023	29/09/2023	29/09/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Petroleum Hydrocarbons							
TPH-CWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	< 2.0	< 2.0	2.5	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	< 8.0	< 8.0	8.8	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	14	37	46	29
TPH-CWG - Aliphatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	14	44	57	36
TPH-CWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	1.1	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	4.4	2.2	6	2.5
TPH-CWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	16	16	16	< 10
TPH-CWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	32	38	26	12
TPH-CWG - Aromatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	53	57	48	19
VOCs							
Chloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Chloroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Bromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Vinyl Chloride	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Trichlorofluoromethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Trans 1,2-dichloroethylene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1-dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
2,2-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Chloroform	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1,1-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,2-dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,1-Dichloropropene##	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Cis-1,2-dichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Carbontetrachloride	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2-dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Trichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Dibromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Bromodichloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Cis-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Trans-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
1,1,2-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,3-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Dibromochloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dibromoethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Chlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,1,1,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0

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Analytical Report Number: 23-59928
Project / Site name: Don Street
Your Order No: 006357

Lab Sample Number				2831606	2831607	2831608	2831609
Sample Reference				Stockpile 31 A	Stockpile 31 B	Stockpile 34 A	Stockpile 34 B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				29/09/2023	29/09/2023	29/09/2023	29/09/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Styrene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Bromoform	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Isopropylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,1,2,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Bromobenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
N-Propylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
2-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
4-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,3,5-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Tert-Butylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,2,4-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Sec-Butylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,3-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
P-Isopropyltoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,4-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,2-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dibromo-3-chloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Hexachlorobutadiene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2,3-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0

SVOCs

Aniline	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Phenol	mg/kg	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Hexachloroethane	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Isophorone	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
2-Nitrophenol	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	0.81	0.98	0.66	0.97
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	0.5	0.5	0.6	0.6
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1

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Analytical Report Number: 23-59928
Project / Site name: Don Street
Your Order No: 006357

Lab Sample Number				2831606	2831607	2831608	2831609
Sample Reference				Stockpile 31 A	Stockpile 31 B	Stockpile 34 A	Stockpile 34 B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				29/09/2023	29/09/2023	29/09/2023	29/09/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	0.05	0.07	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	0.92	1.3	1.6	1.4
2,4-Dinitrotoluene	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	0.5	0.7	1.1	0.7
4-Chlorophenyl phenyl ether	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
4-Nitroaniline	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Fluorene	mg/kg	0.05	MCERTS	0.71	1.1	1.4	1.1
Azobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	4.1	5.7	8.4	5.9
Anthracene	mg/kg	0.05	MCERTS	1.3	1.9	2.3	1.8
Carbazole	mg/kg	0.3	MCERTS	0.3	0.4	0.3	0.4
Dibutyl phthalate	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Anthraquinone	mg/kg	0.3	NONE	< 0.3	0.4	0.5	0.4
Fluoranthene	mg/kg	0.05	MCERTS	5.4	7.7	9.9	8.9
Pyrene	mg/kg	0.05	MCERTS	4.8	7.3	8.9	8.3
Butyl benzyl phthalate	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	2.2	3.6	4.2	3.9
Chrysene	mg/kg	0.05	MCERTS	2.4	3.2	4.2	4
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	2.2	4	4.5	4.1
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	1.2	1.3	1.8	2
Benzo(a)pyrene	mg/kg	0.05	MCERTS	2.1	3.3	3.8	3.8
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	1	1.6	1.8	1.8
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.24	0.47	0.45	0.52
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	1.1	1.9	2.1	2.1

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-59928
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2831606	Stockpile 31 A	None Supplied	None Supplied	Brown clay with gravel.
2831607	Stockpile 31 B	None Supplied	None Supplied	Brown clay with gravel and rubble.
2831608	Stockpile 34 A	None Supplied	None Supplied	Brown clay with gravel and rubble.
2831609	Stockpile 34 B	None Supplied	None Supplied	Brown clay with vegetation.

Analytical Report Number : 23-59928
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.Refer to CoA for analyte specific accreditation.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260. Refer to CoA for analyte specific accreditation	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID. Refer to CoA for band specific accreditation.	In-house method with silica gel split/clean up.	L088/76-PL	D	MCERTS

Analytical Report Number : 23-59928
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-65157

Project / Site name:	Don Street	**Samples received on:**	26/10/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	26/10/2023
Your order number:	006587	**Analysis completed by:**	01/11/2023
Report Issue Number:	1	**Report issued on:**	01/11/2023
Samples Analysed:	2 soil samples		

Signed:

Joanna Wawrzeczko
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Analytical Report Number: 23-65157
Project / Site name: Don Street
Your Order No: 006587

Lab Sample Number				2859221	2859222
Sample Reference				Stockpile 35 A	Stockpile 35 B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				25/10/2023	25/10/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	15	16
Total mass of sample received	kg	0.001	NONE	0.4	0.4
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile & Crocidolite	Amosite
Asbestos in Soil	Type	N/A	ISO 17025	Detected	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	< 0.001	< 0.001
Asbestos Quantification Total	%	0.001	ISO 17025	< 0.001	< 0.001
Asbestos Analyst ID	N/A	N/A	N/A	EWS	WEM
General Inorganics					
pH - Automated	pH Units	N/A	MCERTS	8.3	7.8
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	500	590
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.076	0.11
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	150	220
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	75.5	112
Sulphide	mg/kg	1	MCERTS	11	7.4
Total Sulphur	mg/kg	50	MCERTS	460	500
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1	1.1
Total Phenols					
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0
Heavy Metals / Metalloids					
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	48	16
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	18	25
Copper (aqua regia extractable)	mg/kg	1	MCERTS	67	36
Lead (aqua regia extractable)	mg/kg	1	MCERTS	65	69
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	20	24
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	87	93
Monoaromatics & Oxygenates					
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0

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Analytical Report Number: 23-65157
Project / Site name: Don Street
Your Order No: 006587

Lab Sample Number				2859221	2859222
Sample Reference				Stockpile 35 A	Stockpile 35 B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				25/10/2023	25/10/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Petroleum Hydrocarbons					
TPH-CWG - Aliphatic >EC5 - EC6 HS_1D_AL	mg/kg	0.02	NONE	< 0.020	< 0.020
TPH-CWG - Aliphatic >EC6 - EC8 HS_1D_AL	mg/kg	0.02	NONE	< 0.020	< 0.020
TPH-CWG - Aliphatic >EC8 - EC10 HS_1D_AL	mg/kg	0.05	NONE	< 0.050	< 0.050
TPH-CWG - Aliphatic >EC10 - EC12 EH_CU_1D_AL	mg/kg	1	MCERTS	4.6	2.4
TPH-CWG - Aliphatic >EC12 - EC16 EH_CU_1D_AL	mg/kg	2	MCERTS	6.9	4.3
TPH-CWG - Aliphatic >EC16 - EC21 EH_CU_1D_AL	mg/kg	8	MCERTS	11	11
TPH-CWG - Aliphatic >EC21 - EC35 EH_CU_1D_AL	mg/kg	8	MCERTS	37	50
TPH-CWG - Aliphatic (EC5 - EC35) EH_CU+HS_1D_AL	mg/kg	10	NONE	59	68
TPH-CWG - Aromatic >EC5 - EC7 HS_1D_AR	mg/kg	0.01	NONE	< 0.010	< 0.010
TPH-CWG - Aromatic >EC7 - EC8 HS_1D_AR	mg/kg	0.01	NONE	< 0.010	< 0.010
TPH-CWG - Aromatic >EC8 - EC10 HS_1D_AR	mg/kg	0.05	NONE	< 0.050	< 0.050
TPH-CWG - Aromatic >EC10 - EC12 EH_CU_1D_AR	mg/kg	1	MCERTS	1.6	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 EH_CU_1D_AR	mg/kg	2	MCERTS	5.8	2.9
TPH-CWG - Aromatic >EC16 - EC21 EH_CU_1D_AR	mg/kg	10	MCERTS	23	16
TPH-CWG - Aromatic >EC21 - EC35 EH_CU_1D_AR	mg/kg	10	MCERTS	45	27
TPH-CWG - Aromatic (EC5 - EC35) EH_CU+HS_1D_AR	mg/kg	10	NONE	75	47
VOCs					
Chloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Chloroethane	µg/kg	5	NONE	< 5.0	< 5.0
Bromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Vinyl Chloride	µg/kg	5	NONE	< 5.0	< 5.0
Trichlorofluoromethane	µg/kg	5	NONE	< 5.0	< 5.0
1,1-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	5	NONE	< 5.0	< 5.0
Trans 1,2-dichloroethylene	µg/kg	5	NONE	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0
1,1-dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
2,2-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Chloroform	µg/kg	5	NONE	< 5.0	< 5.0
1,1,1-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2-dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,1-Dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Cis-1,2-dichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0
Carbontetrachloride	µg/kg	5	NONE	< 5.0	< 5.0
1,2-dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Trichloroethene	µg/kg	5	ISO 17025	< 5.0##	< 5.0##
Dibromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Bromodichloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Cis-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Trans-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0
1,1,2-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,3-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Dibromochloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Tetrachloroethene	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dibromoethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Chlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,1,1,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0

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Analytical Report Number: 23-65157
Project / Site name: Don Street
Your Order No: 006587

Lab Sample Number				2859221	2859222
Sample Reference				Stockpile 35 A	Stockpile 35 B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				25/10/2023	25/10/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
Styrene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Bromoform	µg/kg	5	NONE	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
Isopropylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,1,2,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Bromobenzene	µg/kg	5	NONE	< 5.0	< 5.0
N-Propylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
2-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0
4-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,3,5-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Tert-Butylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2,4-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Sec-Butylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,3-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
P-Isopropyltoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,4-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dibromo-3-chloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Hexachlorobutadiene	µg/kg	5	NONE	< 5.0	< 5.0
1,2,3-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0

SVOCs

Aniline	mg/kg	0.1	NONE	< 0.1	< 0.1
Phenol	mg/kg	0.2	ISO 17025	< 0.2	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Hexachloroethane	mg/kg	0.05	ISO 17025	< 0.05	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	< 0.2
Isophorone	mg/kg	0.2	MCERTS	< 0.2	< 0.2
2-Nitrophenol	mg/kg	0.3	NONE	< 0.3	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	1.5	0.92
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	NONE	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	NONE	< 0.2	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	0.7	0.4
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	< 0.1
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	NONE	< 0.1	< 0.1

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Analytical Report Number: 23-65157
Project / Site name: Don Street
Your Order No: 006587

Lab Sample Number				2859221	2859222
Sample Reference				Stockpile 35 A	Stockpile 35 B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				25/10/2023	25/10/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Acenaphthylene	mg/kg	0.05	MCERTS	0.06	0.06
Acenaphthene	mg/kg	0.05	MCERTS	2.4	1.1
2,4-Dinitrotoluene	mg/kg	0.2	NONE	< 0.2	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	1.1	0.6
4-Chlorophenyl phenyl ether	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	< 0.2
4-Nitroaniline	mg/kg	0.2	NONE	< 0.2	< 0.2
Fluorene	mg/kg	0.05	MCERTS	1.6	0.83
Azobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	9.8	4.7
Anthracene	mg/kg	0.05	MCERTS	2.6	1.2
Carbazole	mg/kg	0.3	MCERTS	0.7	0.3
Dibutyl phthalate	mg/kg	0.2	NONE	< 0.2	< 0.2
Anthraquinone	mg/kg	0.3	NONE	0.4	0.3
Fluoranthene	mg/kg	0.05	MCERTS	14	6.9
Pyrene	mg/kg	0.05	MCERTS	12	6.3
Butyl benzyl phthalate	mg/kg	0.3	NONE	< 0.3	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	6.4	3.3
Chrysene	mg/kg	0.05	MCERTS	5.4	2.9
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	6.8	3.5
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	2.7	1.5
Benzo(a)pyrene	mg/kg	0.05	MCERTS	6.2	3.2
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	2.9	1.5
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.7	0.41
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	3.2	1.7

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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The results included within the report relate only to the sample(s) submitted for testing.

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Analytical Report Number: 23-65157
Project / Site name: Don Street
Your Order No: 006587

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2859221	Stockpile 35 A		125	Loose Fibres	**Chrysotile & Crocidolite**	< 0.001	**< 0.001**
2859222	Stockpile 35 B		134	Loose Fibres	**Amosite**	< 0.001	**< 0.001**

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 23-65157
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2859221	Stockpile 35 A	None Supplied	None Supplied	Brown clay and sand with gravel.
2859222	Stockpile 35 B	None Supplied	None Supplied	Brown clay and sand with gravel and vegetation.

Analytical Report Number : 23-65157
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.Refer to CoA for analyte specific accreditation.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260. Refer to CoA for analyte specific accreditation	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID. Refer to CoA for band specific accreditation.	In-house method with silica gel split/clean up.	L088/76-PL	D	MCERTS
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025

Analytical Report Number : 23-65157
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

- Quality control parameter has a high recovery (outside of limit); however the associated result is below the reporting limit, other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.

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Analytical Report Number : 23-71252

Project / Site name:	Don Street	**Samples received on:**	24/11/2023
Your job number:	14 554	**Samples instructed on/ Analysis started on:**	24/11/2023
Your order number:	006836	**Analysis completed by:**	30/11/2023
Report Issue Number:	1	**Report issued on:**	30/11/2023
Samples Analysed:	4 soil samples		

Signed:

Anna Goc
PL Head of Reporting Team
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Analytical Report Number: 23-71252
Project / Site name: Don Street
Your Order No: 006836

Lab Sample Number				2890771	2890772	2890773	2890774
Sample Reference				Stockpile 36 A	Stockpile 36 B	Stockpile 37 A	Stockpile 37 B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				23/11/2023	23/11/2023	23/11/2023	23/11/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	17	22	16	17
Total mass of sample received	kg	0.001	NONE	0.3	0.3	0.3	0.4

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	Chrysotile & Amosite	Chrysotile	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Detected	Detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	< 0.001	< 0.001	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	< 0.001	< 0.001	-
Asbestos Analyst ID	N/A	N/A	N/A	EWS	EWS	EWS	EWS

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.7	7.8	7.9	10.2
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	1
Total Sulphate as SO4	mg/kg	50	MCERTS	1300	360	370	710
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.38	0.025	0.064	0.052
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	770	49	130	100
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	384	24.7	64.2	52.4
Sulphide	mg/kg	1	MCERTS	8.4	3.8	11	6.3
Total Sulphur	mg/kg	50	MCERTS	960	460	460	580
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	2.4	2.2	1.2	1.7

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	12	16	12	12
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	19	16	19	18
Copper (aqua regia extractable)	mg/kg	1	MCERTS	32	45	37	37
Lead (aqua regia extractable)	mg/kg	1	MCERTS	46	73	69	64
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.6	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	26	17	21	20
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	60	88	97	100

Monoaromatics & Oxygenates

Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0

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Analytical Report Number: 23-71252
Project / Site name: Don Street
Your Order No: 006836

Lab Sample Number				2890771	2890772	2890773	2890774
Sample Reference				Stockpile 36 A	Stockpile 36 B	Stockpile 37 A	Stockpile 37 B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				23/11/2023	23/11/2023	23/11/2023	23/11/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Petroleum Hydrocarbons							
TPH-CWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020
TPH-CWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020
TPH-CWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050
TPH-CWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	< 2.0	3.2	4.2	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	< 8.0	< 8.0	13	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	< 8.0	28	34	39
TPH-CWG - Aliphatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	< 10	38	51	47
TPH-CWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010
TPH-CWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010
TPH-CWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050
TPH-CWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0	2.5	2.1
TPH-CWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	< 2.0	< 2.0	7.7	5.4
TPH-CWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	< 10	< 10	22	18
TPH-CWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	48	24	38	32
TPH-CWG - Aromatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	56	31	70	58
VOCs							
Chloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Chloroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Bromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Vinyl Chloride	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Trichlorofluoromethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Trans 1,2-dichloroethylene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1-dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
2,2-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Chloroform	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1,1-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,2-dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,1-Dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Cis-1,2-dichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Carbontetrachloride	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2-dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Trichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Dibromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Bromodichloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Cis-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Trans-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
1,1,2-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,3-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Dibromochloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dibromoethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Chlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,1,1,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Styrene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0

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Analytical Report Number: 23-71252
Project / Site name: Don Street
Your Order No: 006836

Lab Sample Number				2890771	2890772	2890773	2890774
Sample Reference				Stockpile 36 A	Stockpile 36 B	Stockpile 37 A	Stockpile 37 B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				23/11/2023	23/11/2023	23/11/2023	23/11/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Bromoform	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Isopropylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,1,2,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Bromobenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
N-Propylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
2-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
4-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,3,5-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Tert-Butylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,2,4-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Sec-Butylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,3-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
P-Isopropyltoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,4-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,2-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dibromo-3-chloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Hexachlorobutadiene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2,3-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0

SVOCs

Aniline	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Phenol	mg/kg	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Hexachloroethane	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Isophorone	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
2-Nitrophenol	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	0.63	1.1	4.5	4.6
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	0.2	0.2	1.4	1.7
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthylene	mg/kg	0.05	MCERTS	0.25	0.12	0.76	0.11
Acenaphthene	mg/kg	0.05	MCERTS	0.38	0.29	2.3	2.5
2,4-Dinitrotoluene	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	0.3	0.2	1.6	1.3

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Analytical Report Number: 23-71252
Project / Site name: Don Street
Your Order No: 006836

Lab Sample Number				2890771	2890772	2890773	2890774
Sample Reference				Stockpile 36 A	Stockpile 36 B	Stockpile 37 A	Stockpile 37 B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				23/11/2023	23/11/2023	23/11/2023	23/11/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
4-Chlorophenyl phenyl ether	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
4-Nitroaniline	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Fluorene	mg/kg	0.05	MCERTS	0.51	0.3	2.5	1.9
Azobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	4.2	1.9	13	8.7
Anthracene	mg/kg	0.05	MCERTS	0.89	0.53	3.5	2.8
Carbazole	mg/kg	0.3	MCERTS	< 0.3	< 0.3	0.8	0.8
Dibutyl phthalate	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Anthraquinone	mg/kg	0.3	NONE	0.4	< 0.3	0.6	0.4
Fluoranthene	mg/kg	0.05	MCERTS	7.2	3.9	14	10
Pyrene	mg/kg	0.05	MCERTS	6.3	3.7	13	9
Butyl benzyl phthalate	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	3.2	1.9	5.6	4
Chrysene	mg/kg	0.05	MCERTS	3.2	1.9	5.2	4.6
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	4.2	2.5	6.4	4.7
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	1.9	0.92	2	1.9
Benzo(a)pyrene	mg/kg	0.05	MCERTS	3.7	2.2	5.8	4
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	1.9	0.99	2.7	2
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.48	0.29	0.67	0.58
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	2.2	1.1	2.7	2.4

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 23-71252
Project / Site name: Don Street
Your Order No: 006836

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2890772	Stockpile 36 B		137	Loose Fibres	**Chrysotile & Amosite**	< 0.001	**< 0.001**
2890773	Stockpile 37 A		130	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

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Analytical Report Number : 23-71252
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2890771	Stockpile 36 A	None Supplied	None Supplied	Brown clay and sand with gravel.
2890772	Stockpile 36 B	None Supplied	None Supplied	Brown clay and sand with gravel.
2890773	Stockpile 37 A	None Supplied	None Supplied	Brown clay and sand with gravel.
2890774	Stockpile 37 B	None Supplied	None Supplied	Brown clay and sand with gravel.

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Analytical Report Number : 23-71252
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.Refer to CoA for analyte specific accreditation.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260. Refer to CoA for analyte specific accreditation	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID. Refer to CoA for band specific accreditation.	In-house method with silica gel split/clean up.	L088/76-PL	D	MCERTS
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025

Analytical Report Number : 23-71252
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-73588

Project / Site name:	Don Street	**Samples received on:**	07/12/2023
Your job number:	14 554	**Samples instructed on/ Analysis started on:**	07/12/2023
Your order number:	006952	**Analysis completed by:**	14/12/2023
Report Issue Number:	1	**Report issued on:**	14/12/2023
Samples Analysed:	2 soil samples		

Signed: A. Czerwińska

Agnieszka Czerwińska
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Analytical Report Number: 23-73588
Project / Site name: Don Street
Your Order No: 006952

Lab Sample Number				2903525	2903526
Sample Reference				Stockpile 37 C	Stockpile 37 D
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				07/12/2023	07/12/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	16	18
Total mass of sample received	kg	0.001	NONE	0.4	0.5

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	IZJ	IZJ

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.3	8.3
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	700	560
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.029	0.053
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	58	110
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	28.9	53.4
Sulphide	mg/kg	1	MCERTS	18	10
Total Sulphur	mg/kg	50	MCERTS	470	430
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.3	1.6

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	11	13
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	18	17
Copper (aqua regia extractable)	mg/kg	1	MCERTS	49	36
Lead (aqua regia extractable)	mg/kg	1	MCERTS	110	68
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	20	21
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	130	110

Monoaromatics & Oxygenates

Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0

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Analytical Report Number: 23-73588
Project / Site name: Don Street
Your Order No: 006952

Lab Sample Number				2903525	2903526
Sample Reference				Stockpile 37 C	Stockpile 37 D
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				07/12/2023	07/12/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Petroleum Hydrocarbons					
TPH-CWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020
TPH-CWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020
TPH-CWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.05	NONE	< 0.050	< 0.050
TPH-CWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	4.1	4.4
TPH-CWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	3.2	6
TPH-CWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	14	10
TPH-CWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	77	61
TPH-CWG - Aliphatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	98	82
TPH-CWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010
TPH-CWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010
TPH-CWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.05	NONE	< 0.050	< 0.050
TPH-CWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	1.9
TPH-CWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	3.2	7.3
TPH-CWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	23	32
TPH-CWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	61	59
TPH-CWG - Aromatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	86	99

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Analytical Report Number: 23-73588
Project / Site name: Don Street
Your Order No: 006952

Lab Sample Number				2903525	2903526
Sample Reference				Stockpile 37 C	Stockpile 37 D
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				07/12/2023	07/12/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
VOCs					
Chloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Chloroethane	µg/kg	5	NONE	< 5.0	< 5.0
Bromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Vinyl Chloride	µg/kg	5	NONE	< 5.0	< 5.0
Trichlorofluoromethane	µg/kg	5	NONE	< 5.0	< 5.0
1,1-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	5	NONE	< 5.0	< 5.0
Trans 1,2-dichloroethylene	µg/kg	5	NONE	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0
1,1-dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
2,2-Dichloropropane	µg/kg	5	NONE	< 5.0#	< 5.0#
Chloroform	µg/kg	5	NONE	< 5.0	< 5.0
1,1,1-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2-dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,1-Dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Cis-1,2-dichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0
Carbontetrachloride	µg/kg	5	NONE	< 5.0	< 5.0
1,2-dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Trichloroethene	µg/kg	5	NONE	< 5.0#	< 5.0#
Dibromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Bromodichloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Cis-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Trans-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0
1,1,2-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,3-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Dibromochloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Tetrachloroethene	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dibromoethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Chlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,1,1,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
Styrene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Bromoform	µg/kg	5	NONE	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
Isopropylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,1,2,2-Tetrachloroethane	µg/kg	5	NONE	< 5.0^	< 5.0^
Bromobenzene	µg/kg	5	NONE	< 5.0	< 5.0
N-Propylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
2-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0
4-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,3,5-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Tert-Butylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2,4-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Sec-Butylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,3-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
P-Isopropyltoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,4-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0

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Analytical Report Number: 23-73588
Project / Site name: Don Street
Your Order No: 006952

Lab Sample Number				2903525	2903526
Sample Reference				Stockpile 37 C	Stockpile 37 D
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				07/12/2023	07/12/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dibromo-3-chloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Hexachlorobutadiene	µg/kg	5	NONE	< 5.0	< 5.0
1,2,3-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0

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Analytical Report Number: 23-73588
Project / Site name: Don Street
Your Order No: 006952

Lab Sample Number				2903525	2903526
Sample Reference				Stockpile 37 C	Stockpile 37 D
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				07/12/2023	07/12/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
SVOCs					
Aniline	mg/kg	0.1	NONE	< 0.1	< 0.1
Phenol	mg/kg	0.2	ISO 17025	< 0.2	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Hexachloroethane	mg/kg	0.05	ISO 17025	< 0.05	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	< 0.2
Isophorone	mg/kg	0.2	MCERTS	< 0.2	< 0.2
2-Nitrophenol	mg/kg	0.3	NONE	< 0.3	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	1.7	1.7
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	NONE	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	NONE	< 0.2	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	0.6	0.6
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	< 0.1
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	NONE	< 0.1	< 0.1
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	0.06
Acenaphthene	mg/kg	0.05	MCERTS	2	2
2,4-Dinitrotoluene	mg/kg	0.2	NONE	< 0.2	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	1.1	1.1
4-Chlorophenyl phenyl ether	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	< 0.2
4-Nitroaniline	mg/kg	0.2	NONE	< 0.2	< 0.2
Fluorene	mg/kg	0.05	MCERTS	1.5	1.7
Azobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	9.4	9.2
Anthracene	mg/kg	0.05	MCERTS	2.6	2.6
Carbazole	mg/kg	0.3	MCERTS	0.8	0.6
Dibutyl phthalate	mg/kg	0.2	NONE	0.3	< 0.2
Anthraquinone	mg/kg	0.3	NONE	< 0.3	< 0.3
Fluoranthene	mg/kg	0.05	MCERTS	13	12
Pyrene	mg/kg	0.05	MCERTS	12	10
Butyl benzyl phthalate	mg/kg	0.3	NONE	< 0.3	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	5.7	5.1
Chrysene	mg/kg	0.05	MCERTS	5.5	4.7
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	6.1	5.3
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	3.2	2.4

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Analytical Report Number: 23-73588
Project / Site name: Don Street
Your Order No: 006952

Lab Sample Number				2903525	2903526
Sample Reference				Stockpile 37 C	Stockpile 37 D
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				07/12/2023	07/12/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Benzo(a)pyrene	mg/kg	0.05	MCERTS	6.2	5.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	3.2	2.5
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.54	0.43
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	3.6	2.7

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-73588
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2903525	Stockpile 37 C	None Supplied	None Supplied	Brown clay and sand with gravel.
2903526	Stockpile 37 D	None Supplied	None Supplied	Brown clay and sand with gravel.

Analytical Report Number : 23-73588
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.Refer to CoA for analyte specific accreditation.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260. Refer to CoA for analyte specific accreditation	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID. Refer to CoA for band specific accreditation.	In-house method with silica gel split/clean up.	L088/76-PL	D	MCERTS

Analytical Report Number : 23-73588
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

- Data reported unaccredited due to quality control parameter failure associated with this result; other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised

^ - Data reported unaccredited due to quality control parameter failure associated with this result; The result should be considered as being deviating and may be compromised

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Analytical Report Number : 23-71252

Project / Site name:	Don Street	**Samples received on:**	24/11/2023
Your job number:	14 554	**Samples instructed on/ Analysis started on:**	24/11/2023
Your order number:	006836	**Analysis completed by:**	30/11/2023
Report Issue Number:	1	**Report issued on:**	30/11/2023
Samples Analysed:	4 soil samples		

Signed:

Anna Goc
PL Head of Reporting Team
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Analytical Report Number: 23-71252
Project / Site name: Don Street
Your Order No: 006836

Lab Sample Number				2890771	2890772	2890773	2890774
Sample Reference				Stockpile 36 A	Stockpile 36 B	Stockpile 37 A	Stockpile 37 B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				23/11/2023	23/11/2023	23/11/2023	23/11/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	17	22	16	17
Total mass of sample received	kg	0.001	NONE	0.3	0.3	0.3	0.4

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	Chrysotile & Amosite	Chrysotile	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Detected	Detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	< 0.001	< 0.001	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	< 0.001	< 0.001	-
Asbestos Analyst ID	N/A	N/A	N/A	EWS	EWS	EWS	EWS

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.7	7.8	7.9	10.2
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	1
Total Sulphate as SO4	mg/kg	50	MCERTS	1300	360	370	710
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.38	0.025	0.064	0.052
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	770	49	130	100
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	384	24.7	64.2	52.4
Sulphide	mg/kg	1	MCERTS	8.4	3.8	11	6.3
Total Sulphur	mg/kg	50	MCERTS	960	460	460	580
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	2.4	2.2	1.2	1.7

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	12	16	12	12
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	19	16	19	18
Copper (aqua regia extractable)	mg/kg	1	MCERTS	32	45	37	37
Lead (aqua regia extractable)	mg/kg	1	MCERTS	46	73	69	64
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.6	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	26	17	21	20
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	60	88	97	100

Monoaromatics & Oxygenates

Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0

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Analytical Report Number: 23-71252
Project / Site name: Don Street
Your Order No: 006836

Lab Sample Number				2890771	2890772	2890773	2890774
Sample Reference				Stockpile 36 A	Stockpile 36 B	Stockpile 37 A	Stockpile 37 B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				23/11/2023	23/11/2023	23/11/2023	23/11/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Petroleum Hydrocarbons							
TPH-CWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020
TPH-CWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020
TPH-CWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050
TPH-CWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	< 2.0	3.2	4.2	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	< 8.0	< 8.0	13	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	< 8.0	28	34	39
TPH-CWG - Aliphatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	< 10	38	51	47
TPH-CWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010
TPH-CWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010
TPH-CWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050
TPH-CWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0	2.5	2.1
TPH-CWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	< 2.0	< 2.0	7.7	5.4
TPH-CWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	< 10	< 10	22	18
TPH-CWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	48	24	38	32
TPH-CWG - Aromatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	56	31	70	58
VOCs							
Chloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Chloroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Bromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Vinyl Chloride	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Trichlorofluoromethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Trans 1,2-dichloroethylene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1-dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
2,2-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Chloroform	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,1,1-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,2-dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,1-Dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Cis-1,2-dichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Carbontetrachloride	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2-dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Trichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Dibromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Bromodichloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Cis-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Trans-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
1,1,2-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,3-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Dibromochloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dibromoethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Chlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,1,1,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Styrene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0

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Analytical Report Number: 23-71252
Project / Site name: Don Street
Your Order No: 006836

Lab Sample Number				2890771	2890772	2890773	2890774
Sample Reference				Stockpile 36 A	Stockpile 36 B	Stockpile 37 A	Stockpile 37 B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				23/11/2023	23/11/2023	23/11/2023	23/11/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Bromoform	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Isopropylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,1,2,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Bromobenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
N-Propylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
2-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
4-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,3,5-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Tert-Butylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,2,4-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Sec-Butylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,3-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
P-Isopropyltoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,4-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,2-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dibromo-3-chloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Hexachlorobutadiene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
1,2,3-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0

SVOCs

Aniline	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Phenol	mg/kg	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Hexachloroethane	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Isophorone	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
2-Nitrophenol	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	0.63	1.1	4.5	4.6
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	0.2	0.2	1.4	1.7
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthylene	mg/kg	0.05	MCERTS	0.25	0.12	0.76	0.11
Acenaphthene	mg/kg	0.05	MCERTS	0.38	0.29	2.3	2.5
2,4-Dinitrotoluene	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	0.3	0.2	1.6	1.3

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Analytical Report Number: 23-71252
Project / Site name: Don Street
Your Order No: 006836

Lab Sample Number				2890771	2890772	2890773	2890774
Sample Reference				Stockpile 36 A	Stockpile 36 B	Stockpile 37 A	Stockpile 37 B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				23/11/2023	23/11/2023	23/11/2023	23/11/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
4-Chlorophenyl phenyl ether	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
4-Nitroaniline	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Fluorene	mg/kg	0.05	MCERTS	0.51	0.3	2.5	1.9
Azobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	4.2	1.9	13	8.7
Anthracene	mg/kg	0.05	MCERTS	0.89	0.53	3.5	2.8
Carbazole	mg/kg	0.3	MCERTS	< 0.3	< 0.3	0.8	0.8
Dibutyl phthalate	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2
Anthraquinone	mg/kg	0.3	NONE	0.4	< 0.3	0.6	0.4
Fluoranthene	mg/kg	0.05	MCERTS	7.2	3.9	14	10
Pyrene	mg/kg	0.05	MCERTS	6.3	3.7	13	9
Butyl benzyl phthalate	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	3.2	1.9	5.6	4
Chrysene	mg/kg	0.05	MCERTS	3.2	1.9	5.2	4.6
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	4.2	2.5	6.4	4.7
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	1.9	0.92	2	1.9
Benzo(a)pyrene	mg/kg	0.05	MCERTS	3.7	2.2	5.8	4
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	1.9	0.99	2.7	2
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.48	0.29	0.67	0.58
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	2.2	1.1	2.7	2.4

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 23-71252
Project / Site name: Don Street
Your Order No: 006836

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2890772	Stockpile 36 B		137	Loose Fibres	**Chrysotile & Amosite**	< 0.001	**< 0.001**
2890773	Stockpile 37 A		130	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

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Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2890771	Stockpile 36 A	None Supplied	None Supplied	Brown clay and sand with gravel.
2890772	Stockpile 36 B	None Supplied	None Supplied	Brown clay and sand with gravel.
2890773	Stockpile 37 A	None Supplied	None Supplied	Brown clay and sand with gravel.
2890774	Stockpile 37 B	None Supplied	None Supplied	Brown clay and sand with gravel.

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Analytical Report Number : 23-71252
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.Refer to CoA for analyte specific accreditation.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260. Refer to CoA for analyte specific accreditation	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID. Refer to CoA for band specific accreditation.	In-house method with silica gel split/clean up.	L088/76-PL	D	MCERTS
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025

Analytical Report Number : 23-71252
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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The results included within the report relate only to the sample(s) submitted for testing.

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Analytical Report Number : 23-28846

Project / Site name:	Don Street	**Samples received on:**	17/04/2023
Your job number:	14 554	**Samples instructed on/ Analysis started on:**	18/04/2023
Your order number:	004597	**Analysis completed by:**	25/04/2023
Report Issue Number:	1	**Report issued on:**	25/04/2023
Samples Analysed:	10 soil samples		

Signed:

Elżbieta Suchy
Junior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-28846
Project / Site name: Don Street
Your Order No: 004597

Lab Sample Number				2650701	2650702	2650703	2650704	2650705
Sample Reference				D1	D2	D4	D4	D5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.00	1.30	0.80	3.20	1.10
Date Sampled				14/04/2023	14/04/2023	14/04/2023	14/04/2023	14/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	17	19	15	21	15
Total mass of sample received	kg	0.001	NONE	0.3	0.3	0.3	0.3	0.3

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	Chrysotile & Amosite	Chrysotile	Amosite
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Detected	Detected	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	0.002	< 0.001	< 0.001
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	0.002	< 0.001	< 0.001
Asbestos Analyst ID	N/A	N/A	N/A	PDO	PDO	PDO	PDO	PDO

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.1	7.7	10.7	7.8	7.8
Total Cyanide	mg/kg	1	MCERTS	5	< 1.0	13	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	510	280	1600	360	950
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.12	0.053	0.21	0.041	0.22
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	230	110	420	82	440
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	115	52.8	210	41	219
Sulphide	mg/kg	1	MCERTS	7.7	14	32	3.4	78
Total Sulphur	mg/kg	50	MCERTS	380	3000	1000	440	960
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1	2.5	1.8	2.4	1.9

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	0.11	4.7	< 0.05	1.2
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.56	< 0.05	0.21
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	0.09	3.1	12	1.1
Fluorene	mg/kg	0.05	MCERTS	< 0.05	0.14	3.1	7.7	1.1
Phenanthrene	mg/kg	0.05	MCERTS	0.43	0.73	22	76	6.9
Anthracene	mg/kg	0.05	MCERTS	0.11	0.17	6.3	19	1.9
Fluoranthene	mg/kg	0.05	MCERTS	0.71	0.65	24	100	8.9
Pyrene	mg/kg	0.05	MCERTS	0.71	0.72	22	92	8.4
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.33	0.3	11	42	4.4
Chrysene	mg/kg	0.05	MCERTS	0.42	0.45	9.4	38	3.7
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.38	0.29	9.1	47	5.1
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.21	0.16	4	13	0.89
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.33	< 0.05	6.6	36	3.7
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.2	0.06	3.4	17	2.3
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.41	5	0.33
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.24	0.21	4.3	20	2.1

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	4.07	4.08	134	527	52.3

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Analytical Report Number: 23-28846
Project / Site name: Don Street
Your Order No: 004597

Lab Sample Number				2650701	2650702	2650703	2650704	2650705
Sample Reference				D1	D2	D4	D4	D5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.00	1.30	0.80	3.20	1.10
Date Sampled				14/04/2023	14/04/2023	14/04/2023	14/04/2023	14/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	19	7.1	15	23	24
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	0.4	< 0.2	0.5	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	17	32	16	16	21
Copper (aqua regia extractable)	mg/kg	1	MCERTS	42	37	57	63	60
Lead (aqua regia extractable)	mg/kg	1	MCERTS	79	24	130	55	130
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	22	47	20	28	26
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	240	93	400	64	1400
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	< 2.0	2.3	< 2.0	3	< 2.0
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	< 4.0	5.8	15	37	8.5
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	1.9	6	78	210	38
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	4.4	12	230	290	110
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	< 10	< 10	31	24	< 10
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	< 10	28	350	560	160

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-28846
Project / Site name: Don Street
Your Order No: 004597

Lab Sample Number				2650706	2650707	2650708	2650709	2650710
Sample Reference				E1	E3	C1	C2	C3
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.90	1.20	0.90	1.10	1.30
Date Sampled				14/04/2023	14/04/2023	14/04/2023	14/04/2023	14/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	36	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	22	22	14	12	18
Total mass of sample received	kg	0.001	NONE	0.3	0.3	0.3	0.3	0.3

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	Chrysotile	Chrysotile	-	Amosite
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Detected	Detected	Not-detected	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	< 0.001	< 0.001	-	< 0.001
Asbestos Quantification Total	%	0.001	ISO 17025	-	< 0.001	< 0.001	-	< 0.001
Asbestos Analyst ID	N/A	N/A	N/A	EC	EC	EC	EC	EC

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8	7.4	9.3	11.5	10.8
Total Cyanide	mg/kg	1	MCERTS	< 1.0	1.5	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	670	1700	780	3300	1700
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.041	0.53	0.2	0.16	0.13
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	82	1100	410	320	250
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	41	530	204	158	125
Sulphide	mg/kg	1	MCERTS	11	26	22	17	40
Total Sulphur	mg/kg	50	MCERTS	520	950	780	1500	1800
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	3.3	3.2	1.3	1.3	2.5

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.38	0.42	0.23	0.84	0.55
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	0.09	0.08	0.11	0.11
Acenaphthene	mg/kg	0.05	MCERTS	2.7	1.6	0.33	1.1	1.4
Fluorene	mg/kg	0.05	MCERTS	2	0.98	0.33	0.94	1.2
Phenanthrene	mg/kg	0.05	MCERTS	18	9.7	2.6	7.3	10
Anthracene	mg/kg	0.05	MCERTS	4.5	2.2	0.67	1.9	2.8
Fluoranthene	mg/kg	0.05	MCERTS	19	13	4.8	9.4	15
Pyrene	mg/kg	0.05	MCERTS	17	12	4.3	8.8	14
Benzo(a)anthracene	mg/kg	0.05	MCERTS	6.9	6	2.1	4	6.7
Chrysene	mg/kg	0.05	MCERTS	6.5	5.6	1.9	3.7	5.2
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	7.9	5.4	2.3	4.1	7
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	1.8	3.4	0.98	1.8	2.7
Benzo(a)pyrene	mg/kg	0.05	MCERTS	5.9	5.2	1.8	3.6	5.8
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	3.3	2.5	0.97	1.7	3
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.15	0.34	0.38
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	3.1	2.8	1.1	2	3.2

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	98.5	71.2	24.6	51.6	79.2

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Analytical Report Number: 23-28846
Project / Site name: Don Street
Your Order No: 004597

Lab Sample Number				2650706	2650707	2650708	2650709	2650710
Sample Reference				E1	E3	C1	C2	C3
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.90	1.20	0.90	1.10	1.30
Date Sampled				14/04/2023	14/04/2023	14/04/2023	14/04/2023	14/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	15	16	13	8.8	20
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.7	0.6	< 0.2	0.7	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	28	17	15	15	23
Copper (aqua regia extractable)	mg/kg	1	MCERTS	69	54	30	33	63
Lead (aqua regia extractable)	mg/kg	1	MCERTS	140	180	62	68	100
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	20	16	14	12	26
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	250	190	70	94	210
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	10	5.1	4.8	4.5	7.4
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	30	31	13	24	48
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	77	84	57	120	170
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	11	15	14	37	35
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	130	140	89	180	260

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-28846
Project / Site name: Don Street
Your Order No: 004597

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2650703	D4	0.80	131	Loose Fibres	**Chrysotile & Amosite**	0.002	**0.002**
2650704	D4	3.20	107	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**
2650705	D5	1.10	135	Loose Fibres	**Amosite**	< 0.001	**< 0.001**
2650707	E3	1.20	120	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**
2650708	C1	0.90	126	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**
2650710	C3	1.30	126	Loose Fibres	**Amosite**	< 0.001	**< 0.001**

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number : 23-28846
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2650701	D1	None Supplied	1	Brown clay and sand with gravel.
2650702	D2	None Supplied	1.3	Brown clay with gravel.
2650703	D4	None Supplied	0.8	Brown sand with gravel and brick.
2650704	D4	None Supplied	3.2	Brown sand with gravel.
2650705	D5	None Supplied	1.1	Brown clay and sand with gravel and brick.
2650706	E1	None Supplied	0.9	Brown loam and sand with gravel and vegetation.
2650707	E3	None Supplied	1.2	Brown clay and loam with gravel and vegetation.
2650708	C1	None Supplied	0.9	Brown clay and sand with gravel and stones.
2650709	C2	None Supplied	1.1	Brown clay and sand with gravel and vegetation.
2650710	C3	None Supplied	1.3	Brown clay and sand with gravel and vegetation.

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number : 23-28846
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

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Analytical Report Number : 23-28846
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 22-14722-2

Replaces Analytical Report Number: 22-14722, issue no. 1
Additional analysis undertaken.

Project / Site name:	Don Street	**Samples received on:**	20/12/2022
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	23/12/2022
Your order number:	003749	**Analysis completed by:**	10/01/2023
Report Issue Number:	2	**Report issued on:**	11/01/2023
Samples Analysed:	3 soil samples		

Signed:

Adam Fenwick
Technical Reviewer
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 22-14722
Project / Site name: Don Street
Your Order No: 003749

Lab Sample Number				2542479	2542480	2542481
Sample Reference				SW-MG Parcel A 001	SW-MG Parcel A 002	SW-MG Parcel A 005
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				19/12/2022	19/12/2022	19/12/2022
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Stone Content	%	0.1	NONE	< 0.1	37	19
Moisture Content	%	0.01	NONE	21	20	14
Total mass of sample received	kg	0.001	NONE	0.3	0.3	0.6

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Amosite	Amosite & Chrysotile	Chrysotile
Asbestos in Soil	Type	N/A	ISO 17025	Detected	Detected	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	< 0.001	0.03	< 0.001
Asbestos Quantification Total	%	0.001	ISO 17025	< 0.001	0.03	< 0.001
Asbestos Analyst ID	N/A	N/A	N/A	PDO	PDO	PDO

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.8	9.7	8.5
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	2500	2000	1900
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.29	0.27	0.039
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	590	540	78
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	294	268	39
Sulphide	mg/kg	1	MCERTS	69	66	6.6
Total Sulphur	mg/kg	50	MCERTS	2100	2900	560
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	2.5	2	2.2

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.91	0.58	0.62
Acenaphthylene	mg/kg	0.05	MCERTS	0.07	< 0.05	0.33*
Acenaphthene	mg/kg	0.05	MCERTS	0.85	0.58	1.2
Fluorene	mg/kg	0.05	MCERTS	0.75	0.52	0.99*
Phenanthrene	mg/kg	0.05	MCERTS	6.8	5.5	13
Anthracene	mg/kg	0.05	MCERTS	2.1	1.7	3.8
Fluoranthene	mg/kg	0.05	MCERTS	10	8.2	31
Pyrene	mg/kg	0.05	MCERTS	9.8	7.7	31
Benzo(a)anthracene	mg/kg	0.05	MCERTS	5.2	4.1	17
Chrysene	mg/kg	0.05	MCERTS	4.7	3.8	16*
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	5.5	3.9	16
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	2*	1.9*	9.3*
Benzo(a)pyrene	mg/kg	0.05	MCERTS	5.4	4.2	19*
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	2.7	1.9	8.1
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.8	0.51	1.8
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	3.2	2.3	9.3

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	60.9*	47.4*	179*

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	20	22	26
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	1.1	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	23	15	18

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Analytical Report Number: 22-14722
Project / Site name: Don Street
Your Order No: 003749

Lab Sample Number				2542479	2542480	2542481
Sample Reference				SW-MG Parcel A 001	SW-MG Parcel A 002	SW-MG Parcel A 005
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				19/12/2022	19/12/2022	19/12/2022
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Copper (aqua regia extractable)	mg/kg	1	MCERTS	200	82	110
Lead (aqua regia extractable)	mg/kg	1	MCERTS	220	120	160
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.5	< 0.3	0.5
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	29	19	25
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	580	300	280
Petroleum Hydrocarbons						
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	13	18	38
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	78	60	270
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	330	190	570
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	55	36	80
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	470	300	960

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected
*Data reported unaccredited due to quality control parameter failure associated with this result; other checks applied prior to reporting the data have been accepted and the failure justified as having no significant impact on sample data reported.

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The results included within the report relate only to the sample(s) submitted for testing.

UKAS TESTING
4041

Analytical i2 Environmental Science

Analytical Report Number: 22-14722
Project / Site name: Don Street
Your Order No: 003749

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2542479	SW-MG Parcel A 001		118	Loose Fibres	**Amosite**	< 0.001	**< 0.001**
2542480	SW-MG Parcel A 002		115	Loose Fibrous Debris & Sheeting/Board Debris	**Amosite & Chrysotile**	0.030	**0.030**
2542481	SW-MG Parcel A 005		130	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 22-14722
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2542479	V-MG Parcel A 0	None Supplied	None Supplied	Brown sand with gravel and vegetation.
2542480	V-MG Parcel A 0	None Supplied	None Supplied	Brown sand with gravel and stones.
2542481	V-MG Parcel A 0	None Supplied	None Supplied	Brown sand with gravel and stones.

Analytical Report Number : 22-14722
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

Analytical Report Number : 22-14722
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 22-14849-2

Replaces Analytical Report Number: 22-14849, issue no. 1
Additional analysis undertaken.

Project / Site name:	Don Street	**Samples received on:**	20/12/2022
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	23/12/2022
Your order number:	003749	**Analysis completed by:**	10/01/2023
Report Issue Number:	2	**Report issued on:**	11/01/2023
Samples Analysed:	2 soil samples		

Signed:

Joanna Wawrzeczko
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 22-14849
Project / Site name: Don Street
Your Order No: 003749

Lab Sample Number				2543292	2543293
Sample Reference				SW-MG Parcel A 003	SW-MG Parcel A 004
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				19/12/2022	19/12/2022
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	27	25
Total mass of sample received	kg	0.001	NONE	0.3	0.3

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	Chrysotile & Amosite
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	< 0.001
Asbestos Quantification Total	%	0.001	ISO 17025	-	< 0.001
Asbestos Analyst ID	N/A	N/A	N/A	WEM	MJN

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.2	9.4
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	770	2100
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.058	0.16
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	120	320
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	58.3	159
Sulphide	mg/kg	1	MCERTS	17	27
Total Sulphur	mg/kg	50	MCERTS	710	1200
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	3.4	2.2

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.16*	0.41*
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	0.05
Acenaphthene	mg/kg	0.05	MCERTS	0.11*	0.45*
Fluorene	mg/kg	0.05	MCERTS	0.1*	0.36*
Phenanthrene	mg/kg	0.05	MCERTS	1.4*	4.5*
Anthracene	mg/kg	0.05	MCERTS	0.36*	1.2*
Fluoranthene	mg/kg	0.05	MCERTS	2.5*	6.6*
Pyrene	mg/kg	0.05	MCERTS	2.5*	6.5*
Benzo(a)anthracene	mg/kg	0.05	MCERTS	1.4	3.6
Chrysene	mg/kg	0.05	MCERTS	1.3	2.8
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	1.4*	3.7*
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.93*	1.8*
Benzo(a)pyrene	mg/kg	0.05	MCERTS	1.4	3.5
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.73	1.8
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.14	0.3
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.84	1.9

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	15.3*	39.5*

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 22-14849
Project / Site name: Don Street
Your Order No: 003749

Lab Sample Number				2543292	2543293
Sample Reference				SW-MG Parcel A 003	SW-MG Parcel A 004
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				19/12/2022	19/12/2022
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Heavy Metals / Metalloids					
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	36	16
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	1.8	1.1
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	36	21
Copper (aqua regia extractable)	mg/kg	1	MCERTS	120	160
Lead (aqua regia extractable)	mg/kg	1	MCERTS	160	150
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.5	0.7
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	26	27
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	440	760
Petroleum Hydrocarbons					
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	< 2.0	< 2.0
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	< 4.0	< 4.0
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	35	20
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	150	120
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	43	25
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	230	160

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

*Data reported unaccredited due to quality control parameter failure associated with this result; other checks applied prior to reporting the data have been accepted and the failure justified as having no significant impact on sample data reported.

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The results included within the report relate only to the sample(s) submitted for testing.

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Analytical i2 Environmental Science

Analytical Report Number: 22-14849
Project / Site name: Don Street
Your Order No: 003749

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2543293	SW-MG Parcel A 004		106	Loose Fibres	**Chrysotile & Amosite**	< 0.001	**< 0.001**

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 22-14849
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2543292	V-MG Parcel A 0	None Supplied	None Supplied	Brown sand with gravel and vegetation.
2543293	V-MG Parcel A 0	None Supplied	None Supplied	Brown silt with gravel.**

**Unaccredited sample matrix.

Analytical Report Number : 22-14849
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS

Analytical Report Number : 22-14849
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Sample Deviation Report

Analytical Report Number : 22-14849

Project / Site name: Don Street

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
SW-MG Parcel A 003	None Supplied	S	2543292	c	Sulphide in soil	L010-PL	c
SW-MG Parcel A 003	None Supplied	S	2543292	c	Total cyanide in soil	L080-PL	c
SW-MG Parcel A 004	None Supplied	S	2543293	c	Sulphide in soil	L010-PL	c
SW-MG Parcel A 004	None Supplied	S	2543293	c	Total cyanide in soil	L080-PL	c

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Analytical Report Number : 23-11122-2

Replaces Analytical Report Number: 23-11122, issue no. 1
Additional analysis undertaken.

Project / Site name:	Don Street	**Samples received on:**	09/01/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	10/01/2023
Your order number:	003830	**Analysis completed by:**	18/01/2023
Report Issue Number:	2	**Report issued on:**	18/01/2023
Samples Analysed:	2 leachate samples - 2 soil samples		

Signed:

Adam Fenwick
Technical Reviewer
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Analytical Report Number: 23-11122
Project / Site name: Don Street
Your Order No: 003830

Lab Sample Number				2550278	2550279
Sample Reference				SW-MG-006	SW-MG-007
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				06/01/2023	06/01/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	15	29
Total mass of sample received	kg	0.001	NONE	0.8	0.8

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile & Amosite & Crocidolite	-
Asbestos in Soil	Type	N/A	ISO 17025	Detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	< 0.001	-
Asbestos Quantification Total	%	0.001	ISO 17025	< 0.001	-
Asbestos Analyst ID	N/A	N/A	N/A	LFT	LFT

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	10.7	8.2
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	3200	1200
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.38	0.1
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	760	200
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	380	100
Sulphide	mg/kg	1	MCERTS	17	7.4
Total Sulphur	mg/kg	50	MCERTS	1200	740
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.2	4.6

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.34	0.15
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	0.39	0.17
Fluorene	mg/kg	0.05	MCERTS	0.31	0.15
Phenanthrene	mg/kg	0.05	MCERTS	3.8	1.6
Anthracene	mg/kg	0.05	MCERTS	0.9	0.31
Fluoranthene	mg/kg	0.05	MCERTS	4.8	2.4
Pyrene	mg/kg	0.05	MCERTS	4.5	2.4
Benzo(a)anthracene	mg/kg	0.05	MCERTS	2.3	1.1
Chrysene	mg/kg	0.05	MCERTS	2	1.3
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	2.1	1.2
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.94	0.61
Benzo(a)pyrene	mg/kg	0.05	MCERTS	2	1.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	1.1	0.68
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.25	0.17
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	1.3	0.76

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	26.9	14.1

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	13	21
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.8	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	16	18

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Analytical Report Number: 23-11122
Project / Site name: Don Street
Your Order No: 003830

Lab Sample Number				2550278	2550279
Sample Reference				SW-MG-006	SW-MG-007
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				06/01/2023	06/01/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Copper (aqua regia extractable)	mg/kg	1	MCERTS	110	100
Lead (aqua regia extractable)	mg/kg	1	MCERTS	88	120
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	22	19
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	220	180
Petroleum Hydrocarbons					
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	< 2.0	< 2.0
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	14	7.7
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	41	16
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	170	88
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	47	29
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	270	140

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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The results included within the report relate only to the sample(s) submitted for testing.

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Analytical i2 Environmental Science

Analytical Report Number: 23-11122
Project / Site name: Don Street
Your Order No: 003830

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2550278	SW-MG-006		142	Loose Fibres	**Chrysotile & Amosite & Crocidolite**	< 0.001	**< 0.001**

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number: 23-11122
Project / Site name: Don Street

Your Order No: 003830

Lab Sample Number				2550280	2550281
Sample Reference				SW-MG-006	SW-MG-007
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				06/01/2023	06/01/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Leachate Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
General Inorganics					
pH (automated)	pH Units	N/A	ISO 17025	10.3	7.7
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	1.5	< 1.0
Total Phenols					
Total Phenols (monohydric)	µg/l	1	ISO 17025	2.9	2.2
Speciated PAHs					
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	NONE	< 0.01	< 0.01
Total PAH					
Total EPA-16 PAHs	µg/l	0.2	NONE	< 0.2	< 0.2
Heavy Metals / Metalloids					
Arsenic (dissolved)	µg/l	1	ISO 17025	11	1.2
Cadmium (dissolved)	µg/l	0.08	ISO 17025	< 0.08	< 0.08
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0
Chromium (dissolved)	µg/l	0.4	ISO 17025	2	< 0.4
Copper (dissolved)	µg/l	0.7	ISO 17025	39	21
Lead (dissolved)	µg/l	1	ISO 17025	2.4	1.8
Mercury (dissolved)	µg/l	0.5	ISO 17025	< 0.5	< 0.5
Nickel (dissolved)	µg/l	0.3	ISO 17025	4.9	2.4
Selenium (dissolved)	µg/l	4	ISO 17025	< 4.0	< 4.0
Zinc (dissolved)	µg/l	0.4	ISO 17025	6.4	6.3
Monoaromatics & Oxygenates					
Benzene	µg/l	1	ISO 17025	< 1.0	< 1.0
Toluene	µg/l	1	ISO 17025	< 1.0	< 1.0
Ethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0
p & m-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0
o-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	10	NONE	< 10	< 10
Petroleum Hydrocarbons					
TPH1 (C10 - C40) $_{EH\_1D\_TOTAL\_MS}$	µg/l	10	NONE	< 10	< 10

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-11122
Project / Site name: Don Street

Your Order No: 003830

Lab Sample Number				2550280	2550281
Sample Reference				SW-MG-006	SW-MG-007
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				06/01/2023	06/01/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Leachate Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
TPH-CWG - Aliphatic >C5 - C6 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) $_{HS+EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aromatic >C5 - C7 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aromatic >C21 - C35 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aromatic (C5 - C35) $_{HS+EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-11122
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2550278	SW-MG-006	None Supplied	None Supplied	Brown clay and sand with gravel and vegetation.
2550279	SW-MG-007	None Supplied	None Supplied	Brown clay and loam with gravel and vegetation.

Analytical Report Number : 23-11122
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
BS EN 12457-1 (2:1) Leachate Prep	2:1 (as recieved, moisture adjusted) end over end extraction with water for 24 hours. Eluate filtered prior to analysis.	In-house method based on BSEN12457-1.	L043-PL	W	NONE
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Metals by ICP-OES in leachate	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Hexavalent chromium in leachate	Determination of hexavalent chromium in leachate by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in leachate - LOW LEVEL 1 ug/l	Determination of phenols in leachate by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in leachate	Determination of PAH compounds in leachate by extraction in dichloromethane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
pH at 20oC in leachate (automated)	Determination of pH in leachate by electrometric measurement.	In house method.	L099B	W	ISO 17025
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS

Analytical Report Number : 23-11122
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
TPH1 (Leachates)	Determination of dichloromethane extractable hydrocarbons in leachate by GC-MS.	In-house method	L070-PL	W	NONE
TPHCWG (Leachates)	Determination of dichloromethane extractable hydrocarbons in leachate by GC-MS.	In-house method	L070-PL	W	ISO 17025
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
BTEX and MTBE in leachates (Monoaromatics)	Determination of BTEX and MTBE in leachates by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Total cyanide in leachate - 1µg/l	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics

Analytical Report Number : 23-11122
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
#1	EH_2D_Total but with humics mathematically subtracted				
#2	EH_2D_Total but with fatty acids mathematically subtracted				
_	Operator - understore to separate acronyms (exception for +)				
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total				

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Analytical Report Number : 23-28846

Project / Site name:	Don Street	**Samples received on:**	17/04/2023
Your job number:	14 554	**Samples instructed on/ Analysis started on:**	18/04/2023
Your order number:	004597	**Analysis completed by:**	25/04/2023
Report Issue Number:	1	**Report issued on:**	25/04/2023
Samples Analysed:	10 soil samples		

Signed:

Elżbieta Suchy
Junior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-28846
Project / Site name: Don Street
Your Order No: 004597

Lab Sample Number				2650701	2650702	2650703	2650704	2650705
Sample Reference				D1	D2	D4	D4	D5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.00	1.30	0.80	3.20	1.10
Date Sampled				14/04/2023	14/04/2023	14/04/2023	14/04/2023	14/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	17	19	15	21	15
Total mass of sample received	kg	0.001	NONE	0.3	0.3	0.3	0.3	0.3

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	Chrysotile & Amosite	Chrysotile	Amosite
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Detected	Detected	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	0.002	< 0.001	< 0.001
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	0.002	< 0.001	< 0.001
Asbestos Analyst ID	N/A	N/A	N/A	PDO	PDO	PDO	PDO	PDO

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.1	7.7	10.7	7.8	7.8
Total Cyanide	mg/kg	1	MCERTS	5	< 1.0	13	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	510	280	1600	360	950
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.12	0.053	0.21	0.041	0.22
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	230	110	420	82	440
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	115	52.8	210	41	219
Sulphide	mg/kg	1	MCERTS	7.7	14	32	3.4	78
Total Sulphur	mg/kg	50	MCERTS	380	3000	1000	440	960
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1	2.5	1.8	2.4	1.9

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	0.11	4.7	< 0.05	1.2
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.56	< 0.05	0.21
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	0.09	3.1	12	1.1
Fluorene	mg/kg	0.05	MCERTS	< 0.05	0.14	3.1	7.7	1.1
Phenanthrene	mg/kg	0.05	MCERTS	0.43	0.73	22	76	6.9
Anthracene	mg/kg	0.05	MCERTS	0.11	0.17	6.3	19	1.9
Fluoranthene	mg/kg	0.05	MCERTS	0.71	0.65	24	100	8.9
Pyrene	mg/kg	0.05	MCERTS	0.71	0.72	22	92	8.4
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.33	0.3	11	42	4.4
Chrysene	mg/kg	0.05	MCERTS	0.42	0.45	9.4	38	3.7
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.38	0.29	9.1	47	5.1
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.21	0.16	4	13	0.89
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.33	< 0.05	6.6	36	3.7
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.2	0.06	3.4	17	2.3
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.41	5	0.33
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.24	0.21	4.3	20	2.1

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	4.07	4.08	134	527	52.3

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Analytical Report Number: 23-28846
Project / Site name: Don Street
Your Order No: 004597

Lab Sample Number				2650701	2650702	2650703	2650704	2650705
Sample Reference				D1	D2	D4	D4	D5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.00	1.30	0.80	3.20	1.10
Date Sampled				14/04/2023	14/04/2023	14/04/2023	14/04/2023	14/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	19	7.1	15	23	24
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	0.4	< 0.2	0.5	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	17	32	16	16	21
Copper (aqua regia extractable)	mg/kg	1	MCERTS	42	37	57	63	60
Lead (aqua regia extractable)	mg/kg	1	MCERTS	79	24	130	55	130
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	22	47	20	28	26
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	240	93	400	64	1400
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	< 2.0	2.3	< 2.0	3	< 2.0
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	< 4.0	5.8	15	37	8.5
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	1.9	6	78	210	38
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	4.4	12	230	290	110
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	< 10	< 10	31	24	< 10
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	< 10	28	350	560	160

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 23-28846
Project / Site name: Don Street
Your Order No: 004597

Lab Sample Number				2650706	2650707	2650708	2650709	2650710
Sample Reference				E1	E3	C1	C2	C3
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.90	1.20	0.90	1.10	1.30
Date Sampled				14/04/2023	14/04/2023	14/04/2023	14/04/2023	14/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	36	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	22	22	14	12	18
Total mass of sample received	kg	0.001	NONE	0.3	0.3	0.3	0.3	0.3

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	Chrysotile	Chrysotile	-	Amosite
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Detected	Detected	Not-detected	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	< 0.001	< 0.001	-	< 0.001
Asbestos Quantification Total	%	0.001	ISO 17025	-	< 0.001	< 0.001	-	< 0.001
Asbestos Analyst ID	N/A	N/A	N/A	EC	EC	EC	EC	EC

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8	7.4	9.3	11.5	10.8
Total Cyanide	mg/kg	1	MCERTS	< 1.0	1.5	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	670	1700	780	3300	1700
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.041	0.53	0.2	0.16	0.13
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	82	1100	410	320	250
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	41	530	204	158	125
Sulphide	mg/kg	1	MCERTS	11	26	22	17	40
Total Sulphur	mg/kg	50	MCERTS	520	950	780	1500	1800
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	3.3	3.2	1.3	1.3	2.5

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.38	0.42	0.23	0.84	0.55
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	0.09	0.08	0.11	0.11
Acenaphthene	mg/kg	0.05	MCERTS	2.7	1.6	0.33	1.1	1.4
Fluorene	mg/kg	0.05	MCERTS	2	0.98	0.33	0.94	1.2
Phenanthrene	mg/kg	0.05	MCERTS	18	9.7	2.6	7.3	10
Anthracene	mg/kg	0.05	MCERTS	4.5	2.2	0.67	1.9	2.8
Fluoranthene	mg/kg	0.05	MCERTS	19	13	4.8	9.4	15
Pyrene	mg/kg	0.05	MCERTS	17	12	4.3	8.8	14
Benzo(a)anthracene	mg/kg	0.05	MCERTS	6.9	6	2.1	4	6.7
Chrysene	mg/kg	0.05	MCERTS	6.5	5.6	1.9	3.7	5.2
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	7.9	5.4	2.3	4.1	7
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	1.8	3.4	0.98	1.8	2.7
Benzo(a)pyrene	mg/kg	0.05	MCERTS	5.9	5.2	1.8	3.6	5.8
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	3.3	2.5	0.97	1.7	3
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.15	0.34	0.38
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	3.1	2.8	1.1	2	3.2

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	98.5	71.2	24.6	51.6	79.2

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-28846
Project / Site name: Don Street
Your Order No: 004597

Lab Sample Number				2650706	2650707	2650708	2650709	2650710
Sample Reference				E1	E3	C1	C2	C3
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.90	1.20	0.90	1.10	1.30
Date Sampled				14/04/2023	14/04/2023	14/04/2023	14/04/2023	14/04/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	15	16	13	8.8	20
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.7	0.6	< 0.2	0.7	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	28	17	15	15	23
Copper (aqua regia extractable)	mg/kg	1	MCERTS	69	54	30	33	63
Lead (aqua regia extractable)	mg/kg	1	MCERTS	140	180	62	68	100
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	20	16	14	12	26
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	250	190	70	94	210
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	10	5.1	4.8	4.5	7.4
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	30	31	13	24	48
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	77	84	57	120	170
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	11	15	14	37	35
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	130	140	89	180	260

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 23-28846
Project / Site name: Don Street
Your Order No: 004597

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2650703	D4	0.80	131	Loose Fibres	**Chrysotile & Amosite**	0.002	**0.002**
2650704	D4	3.20	107	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**
2650705	D5	1.10	135	Loose Fibres	**Amosite**	< 0.001	**< 0.001**
2650707	E3	1.20	120	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**
2650708	C1	0.90	126	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**
2650710	C3	1.30	126	Loose Fibres	**Amosite**	< 0.001	**< 0.001**

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number : 23-28846
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2650701	D1	None Supplied	1	Brown clay and sand with gravel.
2650702	D2	None Supplied	1.3	Brown clay with gravel.
2650703	D4	None Supplied	0.8	Brown sand with gravel and brick.
2650704	D4	None Supplied	3.2	Brown sand with gravel.
2650705	D5	None Supplied	1.1	Brown clay and sand with gravel and brick.
2650706	E1	None Supplied	0.9	Brown loam and sand with gravel and vegetation.
2650707	E3	None Supplied	1.2	Brown clay and loam with gravel and vegetation.
2650708	C1	None Supplied	0.9	Brown clay and sand with gravel and stones.
2650709	C2	None Supplied	1.1	Brown clay and sand with gravel and vegetation.
2650710	C3	None Supplied	1.3	Brown clay and sand with gravel and vegetation.

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Analytical Report Number : 23-28846
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

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Analytical Report Number : 23-28846
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-14763

Project / Site name:	Don Street	**Samples received on:**	30/01/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	30/01/2023
Your order number:	003981	**Analysis completed by:**	06/02/2023
Report Issue Number:	1	**Report issued on:**	06/02/2023
Samples Analysed:	2 soil samples		

Signed:

Claire Brown-Crociquia
Group Customer Services Manager
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-14763
Project / Site name: Don Street
Your Order No: 003981

Lab Sample Number				2569233	2569234
Sample Reference				Parcel C Import 101	Parcel C Import 102
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				30/01/2023	30/01/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	8.2	13
Total mass of sample received	kg	0.001	NONE	0.3	0.3
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	ASE	ASE
General Inorganics					
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0
Speciated PAHs					
Naphthalene	mg/kg	0.05	MCERTS	15	0.68
Acenaphthylene	mg/kg	0.05	MCERTS	2.3	0.21
Acenaphthene	mg/kg	0.05	MCERTS	4.4	1.2
Fluorene	mg/kg	0.05	MCERTS	6.1	1.1
Phenanthrene	mg/kg	0.05	MCERTS	32	8.3
Anthracene	mg/kg	0.05	MCERTS	8.5	2.4
Fluoranthene	mg/kg	0.05	MCERTS	26	13
Pyrene	mg/kg	0.05	MCERTS	26	12
Benzo(a)anthracene	mg/kg	0.05	MCERTS	11	5.3
Chrysene	mg/kg	0.05	MCERTS	10	4.5
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	10	5.5
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	4.6	2.9
Benzo(a)pyrene	mg/kg	0.05	MCERTS	10	5.5
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	4.2	2.7
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	1.4	0.67
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	4.5	3.2
Total PAH					
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	177	68.6
Heavy Metals / Metalloids					
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	9.2	13
Barium (aqua regia extractable)	mg/kg	1	MCERTS	120	190
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.72	0.9
Boron (water soluble)	mg/kg	0.2	MCERTS	1	0.4
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.5	0.6
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8
Copper (aqua regia extractable)	mg/kg	1	MCERTS	29	41
Lead (aqua regia extractable)	mg/kg	1	MCERTS	67	85
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	13	17
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	21	25
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	62	140

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Analytical Report Number: 23-14763
Project / Site name: Don Street
Your Order No: 003981

Lab Sample Number				2569233	2569234
Sample Reference				Parcel C Import 101	Parcel C Import 102
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				30/01/2023	30/01/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Petroleum Hydrocarbons					
TPH (C5 - C6) HS_1D_TOTAL	mg/kg	1	NONE	< 1.0	< 1.0
TPH (C6 - C8) HS_1D_TOTAL	mg/kg	0.1	NONE	< 0.1	< 0.1
TPH (C8 - C10) HS_1D_TOTAL	mg/kg	0.1	NONE	< 0.1	< 0.1
TPH (C10 - C12) EH_CU_1D_TOTAL	mg/kg	2	MCERTS	14	< 2.0
TPH (C12 - C16) EH_CU_1D_TOTAL	mg/kg	4	MCERTS	130	12
TPH (C16 - C21) EH_CU_1D_TOTAL	mg/kg	1	MCERTS	200	54
TPH (C21 - C35) EH_CU_1D_TOTAL	mg/kg	1	MCERTS	550	230
TPH (C35 - C40) EH_CU_1D_TOTAL	mg/kg	10	MCERTS	140	84
TPH Total C5 - C40 EH_CU+HS_1D_TOTAL	mg/kg	10	NONE	1000	380

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-14763
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2569233	Parcel C Import 101	None Supplied	None Supplied	Brown gravelly sand.
2569234	Parcel C Import 102	None Supplied	None Supplied	Brown clay with gravel.

Analytical Report Number : 23-14763
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted

Analytical Report Number : 23-14763
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
_	Operator - understore to separate acronyms (exception for +)				
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total				

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Analytical Report Number : 23-15243

Project / Site name:	Don Street	**Samples received on:**	01/02/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	01/02/2023
Your order number:	003999	**Analysis completed by:**	09/02/2023
Report Issue Number:	1	**Report issued on:**	09/02/2023
Samples Analysed:	2 soil samples		

Signed:

Adam Fenwick
Technical Reviewer
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-15243
Project / Site name: Don Street
Your Order No: 003999

Lab Sample Number				2572015	2572016
Sample Reference				PARCEL C Import 103	PARCEL C Import 104
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				01/02/2023	01/02/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	49	< 0.1
Moisture Content	%	0.01	NONE	9.2	13
Total mass of sample received	kg	0.001	NONE	0.3	0.3
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	PDO	PDO
General Inorganics					
pH - Automated	pH Units	N/A	MCERTS	12.1	11.1
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	2700	2800
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.27	0.47
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	550	940
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	275	469
Sulphide	mg/kg	1	MCERTS	20	33
Total Sulphur	mg/kg	50	MCERTS	850	1300
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.1	1
Total Phenols					
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0
Speciated PAHs					
Naphthalene	mg/kg	0.05	MCERTS	1	5
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	0.96	3.4
Fluorene	mg/kg	0.05	MCERTS	0.79	2.6
Phenanthrene	mg/kg	0.05	MCERTS	5	15
Anthracene	mg/kg	0.05	MCERTS	1.1	3.8
Fluoranthene	mg/kg	0.05	MCERTS	5.2	15
Pyrene	mg/kg	0.05	MCERTS	5	14
Benzo(a)anthracene	mg/kg	0.05	MCERTS	2	6.3
Chrysene	mg/kg	0.05	MCERTS	2.1	5.4
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	2.3	5.6
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.79	3.1
Benzo(a)pyrene	mg/kg	0.05	MCERTS	2.2	6
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.87	2.5
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.18	0.55
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	1.1	2.8
Total PAH					
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	30.6	91
Heavy Metals / Metalloids					
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	4.7	8.1
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.3	0.4
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	9.7	13
Copper (aqua regia extractable)	mg/kg	1	MCERTS	16	31
Lead (aqua regia extractable)	mg/kg	1	MCERTS	35	61
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3

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Analytical Report Number: 23-15243
Project / Site name: Don Street
Your Order No: 003999

Lab Sample Number				2572015	2572016
Sample Reference				PARCEL C Import 103	PARCEL C Import 104
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				01/02/2023	01/02/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	7.5	12
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	36	59
Petroleum Hydrocarbons					
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	< 2.0	5.7
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	4.9	21
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	20	71
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	170	190
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	120	84
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	310	370

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number : 23-15243
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2572015	RCEL C Import	None Supplied	None Supplied	Brown loam with stones.
2572016	RCEL C Import	None Supplied	None Supplied	Brown clay and sand with gravel and brick.

Analytical Report Number : 23-15243
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

Analytical Report Number : 23-15243
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-26301

Project / Site name:	Don Street	**Samples received on:**	31/03/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	31/03/2023
Your order number:	004502	**Analysis completed by:**	11/04/2023
Report Issue Number:	1	**Report issued on:**	11/04/2023
Samples Analysed:	2 soil samples		

Izabela Wójcik
Signed:

Izabela Wójcik
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Analytical Report Number: 23-26301
Project / Site name: Don Street
Your Order No: 004502

Lab Sample Number				2637172	2637173
Sample Reference				Import 108 6F5	Import 109 6F5
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				30/03/2023	30/03/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	13	14
Total mass of sample received	kg	0.001	NONE	0.3	0.3

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	SFS	SFS

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	11.3	11.5
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	71000	23000
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	1.8	1.6
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	3600	3200
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	1800	1600
Sulphide	mg/kg	1	MCERTS	95	34
Total Sulphur	mg/kg	50	MCERTS	22000	11000
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.2	1.5

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.95	0.46
Acenaphthylene	mg/kg	0.05	MCERTS	0.06	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	1.1	0.73
Fluorene	mg/kg	0.05	MCERTS	0.82	0.47
Phenanthrene	mg/kg	0.05	MCERTS	6.1	4.9
Anthracene	mg/kg	0.05	MCERTS	1.3	1.1
Fluoranthene	mg/kg	0.05	MCERTS	5.8	5.5
Pyrene	mg/kg	0.05	MCERTS	5.5	5.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	2.2	2.3
Chrysene	mg/kg	0.05	MCERTS	2.2	2.2
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	2.2	2.4
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	1.1	0.95
Benzo(a)pyrene	mg/kg	0.05	MCERTS	2.1	2.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.96	0.9
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.21	0.23
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	1.1	1.1

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	33.7	30.6

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Analytical Report Number: 23-26301
Project / Site name: Don Street
Your Order No: 004502

Lab Sample Number				2637172	2637173
Sample Reference				Import 108 6F5	Import 109 6F5
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				30/03/2023	30/03/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Heavy Metals / Metalloids					
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	8.6	11
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.4	0.7
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	12	15
Copper (aqua regia extractable)	mg/kg	1	MCERTS	24	1200
Lead (aqua regia extractable)	mg/kg	1	MCERTS	78	120
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	10	13
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	72	440
Petroleum Hydrocarbons					
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	2.1	< 2.0
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	23	19
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	60	49
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	190	230
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	77	70
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	360	370

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-26301
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2637172	Import 108 6F5	None Supplied	None Supplied	Brown loam and sand with gravel.
2637173	Import 109 6F5	None Supplied	None Supplied	Brown loam and sand with gravel.

Analytical Report Number : 23-26301
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

Analytical Report Number : 23-26301
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-19920

Project / Site name:	Don Street	**Samples received on:**	27/02/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	27/02/2023
Your order number:	004228	**Analysis completed by:**	07/03/2023
Report Issue Number:	1	**Report issued on:**	07/03/2023
Samples Analysed:	3 soil samples		

Izabela Wójcik

Signed:

Izabela Wójcik
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-19920
Project / Site name: Don Street
Your Order No: 004228

Lab Sample Number				2599050	2599051	2599052
Sample Reference				Import 105 6F5	Import 106 6F5	Import 107 6F5
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				27/02/2023	27/02/2023	27/02/2023
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	10	8.7	8.3
Total mass of sample received	kg	0.001	NONE	0.3	0.3	0.3
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	Chrysotile	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	< 0.001	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	< 0.001	-
Asbestos Analyst ID	N/A	N/A	N/A	SPU	SPU	SPU
General Inorganics						
pH - Automated	pH Units	N/A	MCERTS	12	11.4	11.2
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	3300	3000	3100
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.17	0.4	0.48
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	340	790	950
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	168	396	476
Sulphide	mg/kg	1	MCERTS	25	40	99
Total Sulphur	mg/kg	50	MCERTS	890	1200	1200
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	0.7	1	0.7
Total Phenols						
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Speciated PAHs						
Naphthalene	mg/kg	0.05	MCERTS	1.8	0.48	0.18
Acenaphthylene	mg/kg	0.05	MCERTS	0.08	0.09	0.06
Acenaphthene	mg/kg	0.05	MCERTS	1.2	1.2	0.33
Fluorene	mg/kg	0.05	MCERTS	1.1	0.89	0.37
Phenanthrene	mg/kg	0.05	MCERTS	7.4	5.8	3.2
Anthracene	mg/kg	0.05	MCERTS	2.1	1.3	1.1
Fluoranthene	mg/kg	0.05	MCERTS	7.8	5.7	4.6
Pyrene	mg/kg	0.05	MCERTS	7.2	5.5	4.4
Benzo(a)anthracene	mg/kg	0.05	MCERTS	3.1	2.7	1.8
Chrysene	mg/kg	0.05	MCERTS	3.2	2.5	2
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	3.5	2.6	2
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	1.2	1	0.89
Benzo(a)pyrene	mg/kg	0.05	MCERTS	2.8	2.4	1.8
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	1.4	1	0.84
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.37	0.23	0.24
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	1.5	1.2	0.9
Total PAH						
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	45.6	34.7	24.6

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Analytical Report Number: 23-19920
Project / Site name: Don Street
Your Order No: 004228

Lab Sample Number				2599050	2599051	2599052
Sample Reference				Import 105 6F5	Import 106 6F5	Import 107 6F5
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				27/02/2023	27/02/2023	27/02/2023
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Heavy Metals / Metalloids						
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	5.5	7.1	5.7
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.4	0.3	0.3
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	11	14	21
Copper (aqua regia extractable)	mg/kg	1	MCERTS	23	24	36
Lead (aqua regia extractable)	mg/kg	1	MCERTS	42	130	42
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	10	13	14
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	59	57	70
Petroleum Hydrocarbons						
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	20	13	12
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	130	120	100
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	77	72	63
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	230	200	180

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: **23-19920**
Project / Site name: **Don Street**
Your Order No: **004228**

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2599051	Import 106 6F5		209	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

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Analytical Report Number : 23-19920
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2599050	Import 105 6F5	None Supplied	None Supplied	Brown clay and sand with gravel.
2599051	Import 106 6F5	None Supplied	None Supplied	Brown clay and sand with gravel.
2599052	Import 107 6F5	None Supplied	None Supplied	Brown clay and sand with gravel.

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Analytical Report Number : 23-19920
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

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Analytical Report Number : 23-19920
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-14763

Project / Site name:	Don Street	**Samples received on:**	30/01/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	30/01/2023
Your order number:	003981	**Analysis completed by:**	06/02/2023
Report Issue Number:	1	**Report issued on:**	06/02/2023
Samples Analysed:	2 soil samples		

Signed:

Claire Brown-Crociquia
Group Customer Services Manager
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Analytical Report Number: 23-14763
Project / Site name: Don Street
Your Order No: 003981

Lab Sample Number				2569233	2569234
Sample Reference				Parcel C Import 101	Parcel C Import 102
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				30/01/2023	30/01/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	8.2	13
Total mass of sample received	kg	0.001	NONE	0.3	0.3
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	ASE	ASE
General Inorganics					
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0
Speciated PAHs					
Naphthalene	mg/kg	0.05	MCERTS	15	0.68
Acenaphthylene	mg/kg	0.05	MCERTS	2.3	0.21
Acenaphthene	mg/kg	0.05	MCERTS	4.4	1.2
Fluorene	mg/kg	0.05	MCERTS	6.1	1.1
Phenanthrene	mg/kg	0.05	MCERTS	32	8.3
Anthracene	mg/kg	0.05	MCERTS	8.5	2.4
Fluoranthene	mg/kg	0.05	MCERTS	26	13
Pyrene	mg/kg	0.05	MCERTS	26	12
Benzo(a)anthracene	mg/kg	0.05	MCERTS	11	5.3
Chrysene	mg/kg	0.05	MCERTS	10	4.5
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	10	5.5
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	4.6	2.9
Benzo(a)pyrene	mg/kg	0.05	MCERTS	10	5.5
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	4.2	2.7
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	1.4	0.67
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	4.5	3.2
Total PAH					
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	177	68.6
Heavy Metals / Metalloids					
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	9.2	13
Barium (aqua regia extractable)	mg/kg	1	MCERTS	120	190
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.72	0.9
Boron (water soluble)	mg/kg	0.2	MCERTS	1	0.4
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.5	0.6
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8
Copper (aqua regia extractable)	mg/kg	1	MCERTS	29	41
Lead (aqua regia extractable)	mg/kg	1	MCERTS	67	85
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	13	17
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	21	25
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	62	140

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Analytical Report Number: 23-14763
Project / Site name: Don Street
Your Order No: 003981

Lab Sample Number				2569233	2569234
Sample Reference				Parcel C Import 101	Parcel C Import 102
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				30/01/2023	30/01/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Petroleum Hydrocarbons					
TPH (C5 - C6) HS_1D_TOTAL	mg/kg	1	NONE	< 1.0	< 1.0
TPH (C6 - C8) HS_1D_TOTAL	mg/kg	0.1	NONE	< 0.1	< 0.1
TPH (C8 - C10) HS_1D_TOTAL	mg/kg	0.1	NONE	< 0.1	< 0.1
TPH (C10 - C12) EH_CU_1D_TOTAL	mg/kg	2	MCERTS	14	< 2.0
TPH (C12 - C16) EH_CU_1D_TOTAL	mg/kg	4	MCERTS	130	12
TPH (C16 - C21) EH_CU_1D_TOTAL	mg/kg	1	MCERTS	200	54
TPH (C21 - C35) EH_CU_1D_TOTAL	mg/kg	1	MCERTS	550	230
TPH (C35 - C40) EH_CU_1D_TOTAL	mg/kg	10	MCERTS	140	84
TPH Total C5 - C40 EH_CU+HS_1D_TOTAL	mg/kg	10	NONE	1000	380

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number : 23-14763
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2569233	Parcel C Import 101	None Supplied	None Supplied	Brown gravelly sand.
2569234	Parcel C Import 102	None Supplied	None Supplied	Brown clay with gravel.

Analytical Report Number : 23-14763
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted

Analytical Report Number : 23-14763
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
_	Operator - understore to separate acronyms (exception for +)				
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total				

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Analytical Report Number : 23-15243

Project / Site name:	Don Street	**Samples received on:**	01/02/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	01/02/2023
Your order number:	003999	**Analysis completed by:**	09/02/2023
Report Issue Number:	1	**Report issued on:**	09/02/2023
Samples Analysed:	2 soil samples		

Signed:

Adam Fenwick
Technical Reviewer
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-15243
Project / Site name: Don Street
Your Order No: 003999

Lab Sample Number				2572015	2572016
Sample Reference				PARCEL C Import 103	PARCEL C Import 104
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				01/02/2023	01/02/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	49	< 0.1
Moisture Content	%	0.01	NONE	9.2	13
Total mass of sample received	kg	0.001	NONE	0.3	0.3
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	PDO	PDO
General Inorganics					
pH - Automated	pH Units	N/A	MCERTS	12.1	11.1
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	2700	2800
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.27	0.47
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	550	940
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	275	469
Sulphide	mg/kg	1	MCERTS	20	33
Total Sulphur	mg/kg	50	MCERTS	850	1300
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.1	1
Total Phenols					
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0
Speciated PAHs					
Naphthalene	mg/kg	0.05	MCERTS	1	5
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	0.96	3.4
Fluorene	mg/kg	0.05	MCERTS	0.79	2.6
Phenanthrene	mg/kg	0.05	MCERTS	5	15
Anthracene	mg/kg	0.05	MCERTS	1.1	3.8
Fluoranthene	mg/kg	0.05	MCERTS	5.2	15
Pyrene	mg/kg	0.05	MCERTS	5	14
Benzo(a)anthracene	mg/kg	0.05	MCERTS	2	6.3
Chrysene	mg/kg	0.05	MCERTS	2.1	5.4
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	2.3	5.6
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.79	3.1
Benzo(a)pyrene	mg/kg	0.05	MCERTS	2.2	6
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.87	2.5
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.18	0.55
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	1.1	2.8
Total PAH					
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	30.6	91
Heavy Metals / Metalloids					
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	4.7	8.1
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.3	0.4
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	9.7	13
Copper (aqua regia extractable)	mg/kg	1	MCERTS	16	31
Lead (aqua regia extractable)	mg/kg	1	MCERTS	35	61
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3

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Analytical Report Number: 23-15243
Project / Site name: Don Street
Your Order No: 003999

Lab Sample Number				2572015	2572016
Sample Reference				PARCEL C Import 103	PARCEL C Import 104
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				01/02/2023	01/02/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	7.5	12
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	36	59
Petroleum Hydrocarbons					
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	< 2.0	5.7
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	4.9	21
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	20	71
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	170	190
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	120	84
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	310	370

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-15243
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2572015	RCEL C Import	None Supplied	None Supplied	Brown loam with stones.
2572016	RCEL C Import	None Supplied	None Supplied	Brown clay and sand with gravel and brick.

Analytical Report Number : 23-15243
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

Analytical Report Number : 23-15243
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
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GC	Gas Chromatography
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1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

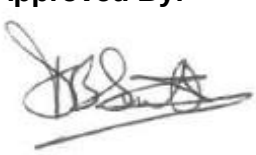
Eurofins Chemtest Ltd
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CB8 0AL
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Final Report

Report No.:	24-14785-1
Initial Date of Issue:	17-May-2024
Re-Issue Details:	
Client	E3P
Client Address:	Taylor Road Trafford Park Urmston Manchester M41 7JQ
Contact(s):	gcalvert@e3p.co.uk; mdee@e3p.co.uk
Project	Don Street 14-554

Quotation No.:	Q23-31421	**Date Received:**	10-May-2024
Order No.:	8170	**Date Instructed:**	10-May-2024
No. of Samples:	10		
Turnaround (Wkdays):	5	**Results Due:**	16-May-2024
Date Approved:	17-May-2024		

Approved By:



Details: David Smith, Technical Director

For details about application of accreditation to specific matrix types, please refer to the Table at the back of this report

Results - Soil

Project: Don Street 14-554

Client: E3P				**Chemtest Job No.:**		24-14785	24-14785	24-14785	24-14785	24-14785	24-14785	24-14785
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1805765	1805766	1805767	1805768	1805769	1805770	1805771
				Client Sample ID.:		SW-TS011	SW-TS012	SW-TS013	SW-TS014	SW-TS015	SW-SS-006	SW-SS-007
				Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
				Date Sampled:		08-May-2024	08-May-2024	08-May-2024	08-May-2024	08-May-2024	08-May-2024	08-May-2024
				Time Sampled:		0:00	0:00	0:00	0:00	0:00	0:00	0:00
				Asbestos Lab:		DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**							
ACM Type		U	2192		N/A	-	-	-	-	-	-	-
Asbestos Identification		U	2192		N/A	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
Moisture		N	2030	%	0.020	21	20	21	19	20	8.9	8.3
Soil Colour		N	2040		N/A	Brown	Brown	Brown	Brown	Brown	Black	Brown
Other Material		N	2040		N/A	Stones and Roots	Stones and Roots	Stones and Roots	Stones and Roots	Stones	Stones	Stones
Soil Texture		N	2040		N/A	Clay	Clay	Clay	Clay	Clay	Sand	Sand
pH at 20C		M	2010		4.0	6.8	6.9	6.9	7.1	6.8	6.9	8.0
Sulphate (2:1 Water Soluble) as SO4		M	2120	g/l	0.010	0.010	0.061	0.047	0.056	0.046	0.039	0.020
Total Sulphur		U	2175	%	0.010	0.057	0.069	0.047	0.052	0.054	0.020	0.014
Cyanide (Total)		M	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Sulphide (Easily Liberatable)		N	2325	mg/kg	0.50	4.6	4.3	7.7	4.0	4.2	5.4	4.0
Sulphate (Total)		U	2430	%	0.010	0.10	0.056	0.13	0.12	0.11	< 0.010	< 0.010
Arsenic		M	2455	mg/kg	0.5	14	4.8	10	10	14	4.4	4.0
Cadmium		M	2455	mg/kg	0.10	0.22	< 0.10	0.14	0.22	0.19	< 0.10	< 0.10
Chromium		M	2455	mg/kg	0.5	5.9	< 0.5	1.0	3.4	6.2	< 0.5	< 0.5
Copper		M	2455	mg/kg	0.50	31	11	22	24	31	7.6	7.3
Mercury		M	2455	mg/kg	0.05	0.33	0.12	0.23	0.20	0.31	0.05	< 0.05
Nickel		M	2455	mg/kg	0.50	16	5.4	11	12	15	5.5	5.9
Lead		M	2455	mg/kg	0.50	63	22	44	54	61	12	9.6
Selenium		M	2455	mg/kg	0.25	1.1	0.44	0.71	0.79	0.94	0.37	0.35
Zinc		M	2455	mg/kg	0.50	65	24	46	53	69	20	21
Chromium (Hexavalent)		N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Organic Matter		M	2625	%	0.40	5.1	3.7	4.4	4.8	4.3	0.64	0.43
Total Organic Carbon		M	2625	%	0.20	3.0	2.2	2.5	2.8	2.5	0.37	0.25
TPH >C6-C8	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C8-C10	EH_1D_Total	N	2670	mg/kg	1.0	8.1	6.5	6.1	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C10-C12	EH_1D_Total	N	2670	mg/kg	1.0	12	10	10	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C12-C16	EH_1D_Total	N	2670	mg/kg	1.0	17	15	13	< 1.0	< 1.0	3.5	< 1.0
TPH >C16-C21	EH_1D_Total	N	2670	mg/kg	1.0	22	20	14	26	18	5.6	13
TPH >C21-C25	EH_1D_Total	N	2670	mg/kg	1.0	50	45	41	12	8.6	2.0	6.2
TPH >C25-C35	EH_1D_Total	N	2670	mg/kg	1.0	73	69	36	72	32	< 1.0	15
TPH >C35-C40	EH_1D_Total	N	2670	mg/kg	1.0	9.6	9.3	4.8	5.9	4.8	< 1.0	3.2
Total TPH >C6-C40	EH_1D_Total	M	2670	mg/kg	10	190	170	120	120	64	11	37
Naphthalene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene		N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

Results - Soil

Project: Don Street 14-554

Client: E3P				**Chemtest Job No.:**		24-14785	24-14785	24-14785	24-14785	24-14785	24-14785	24-14785
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1805765	1805766	1805767	1805768	1805769	1805770	1805771
				Client Sample ID.:		SW-TS011	SW-TS012	SW-TS013	SW-TS014	SW-TS015	SW-SS-006	SW-SS-007
				Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
				Date Sampled:		08-May-2024	08-May-2024	08-May-2024	08-May-2024	08-May-2024	08-May-2024	08-May-2024
				Time Sampled:		0:00	0:00	0:00	0:00	0:00	0:00	0:00
				Asbestos Lab:		DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**							
Phenanthrene		M	2800	mg/kg	0.10	0.50	0.49	< 0.10	0.54	0.28	< 0.10	< 0.10
Anthracene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene		M	2800	mg/kg	0.10	0.69	0.78	0.73	1.1	0.58	< 0.10	< 0.10
Pyrene		M	2800	mg/kg	0.10	0.65	0.72	0.62	1.1	0.54	< 0.10	< 0.10
Benzo[a]anthracene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.25	< 0.10	< 0.10
Chrysene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.29	< 0.10	< 0.10
Benzo[b]fluoranthene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.39	< 0.10	< 0.10
Benzo[k]fluoranthene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.14	< 0.10	< 0.10
Benzo[a]pyrene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.33	< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.21	< 0.10	< 0.10
Dibenz(a,h)Anthracene		N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.24	< 0.10	< 0.10
Total Of 16 PAH's		N	2800	mg/kg	2.0	< 2.0	< 2.0	< 2.0	2.7	3.3	< 2.0	< 2.0
Total Phenols		M	2920	mg/kg	0.10	0.42	0.57	0.74	0.38	0.78	< 0.10	< 0.10

Results - Soil

Project: Don Street 14-554

Client: E3P				**Chemtest Job No.:**		24-14785	24-14785	24-14785
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1805772	1805773	1805774
				Client Sample ID.:		SW-SS-008	SW-SS-009	SW-SS-010
				Sample Type:		SOIL	SOIL	SOIL
				Date Sampled:		08-May-2024	08-May-2024	08-May-2024
				Time Sampled:		0:00	0:00	0:00
				Asbestos Lab:		DURHAM	DURHAM	DURHAM
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**			
ACM Type		U	2192		N/A	-	-	-
Asbestos Identification		U	2192		N/A	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
Moisture		N	2030	%	0.020	7.3	7.2	6.2
Soil Colour		N	2040		N/A	Brown	Brown	Brown
Other Material		N	2040		N/A	Stones	Stones	Stones
Soil Texture		N	2040		N/A	Sand	Sand	Sand
pH at 20C		M	2010		4.0	7.8	8.2	8.0
Sulphate (2:1 Water Soluble) as SO4		M	2120	g/l	0.010	0.023	0.029	0.035
Total Sulphur		U	2175	%	0.010	0.013	0.012	0.017
Cyanide (Total)		M	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Sulphide (Easily Liberatable)		N	2325	mg/kg	0.50	4.0	5.6	4.1
Sulphate (Total)		U	2430	%	0.010	0.012	< 0.010	0.013
Arsenic		M	2455	mg/kg	0.5	4.2	2.0	5.2
Cadmium		M	2455	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Chromium		M	2455	mg/kg	0.5	< 0.5	< 0.5	< 0.5
Copper		M	2455	mg/kg	0.50	8.0	4.0	12
Mercury		M	2455	mg/kg	0.05	< 0.05	< 0.05	0.05
Nickel		M	2455	mg/kg	0.50	7.1	3.6	9.1
Lead		M	2455	mg/kg	0.50	9.4	4.6	39
Selenium		M	2455	mg/kg	0.25	0.45	< 0.25	0.42
Zinc		M	2455	mg/kg	0.50	24	13	35
Chromium (Hexavalent)		N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Organic Matter		M	2625	%	0.40	0.55	0.62	0.47
Total Organic Carbon		M	2625	%	0.20	0.32	0.36	0.27
TPH >C6-C8	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0
TPH >C8-C10	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0
TPH >C10-C12	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0
TPH >C12-C16	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0
TPH >C16-C21	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	40
TPH >C21-C25	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	54
TPH >C25-C35	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	83
TPH >C35-C40	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	9.8
Total TPH >C6-C40	EH_1D_Total	M	2670	mg/kg	10	< 10	< 10	190
Naphthalene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene		N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Acenaphthene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Fluorene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10

Results - Soil

Project: Don Street 14-554

Client: E3P				**Chemtest Job No.:**		24-14785	24-14785	24-14785
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1805772	1805773	1805774
				Client Sample ID.:		SW-SS-008	SW-SS-009	SW-SS-010
				Sample Type:		SOIL	SOIL	SOIL
				Date Sampled:		08-May-2024	08-May-2024	08-May-2024
				Time Sampled:		0:00	0:00	0:00
				Asbestos Lab:		DURHAM	DURHAM	DURHAM
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**			
Phenanthrene		M	2800	mg/kg	0.10	0.20	< 0.10	< 0.10
Anthracene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Fluoranthene		M	2800	mg/kg	0.10	0.55	< 0.10	< 0.10
Pyrene		M	2800	mg/kg	0.10	0.47	< 0.10	< 0.10
Benzo[a]anthracene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Chrysene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Benzo[b]fluoranthene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)Anthracene		N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Total Of 16 PAH's		N	2800	mg/kg	2.0	< 2.0	< 2.0	< 2.0
Total Phenols		M	2920	mg/kg	0.10	< 0.10	< 0.10	< 0.10

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
2010	pH Value of Soils	pH at 20°C	pH Meter	
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <30°C.	
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930	
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES	
2175	Total Sulphur in Soils	Total Sulphur	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.	
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry	
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Allkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.	
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N–dimethyl-p-phenylenediamine.	
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.	
2455	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.	
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.	
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.	
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID	
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS	
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.	

Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

This report shall not be reproduced except in full, and only with the prior approval of the laboratory.
Any comments or interpretations are outside the scope of UKAS accreditation.
The Laboratory is not accredited for any sampling activities and reported results relate to the samples 'as received' at the laboratory.
Uncertainty of measurement for the determinands tested are available upon request .
None of the results in this report have been recovery corrected.
All results are expressed on a dry weight basis.

The following tests were analysed on samples 'as received' and the results subsequently corrected to a dry weight basis EPH, VPH, TPH, BTEX, VOCs, SVOCs, PCBs, Phenols.

For all other tests the samples were dried at ≤ 30°C prior to analysis.
All Asbestos testing is performed at the indicated laboratory .
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1.

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt.
All water samples will be retained for 14 days from the date of receipt.
Charges may apply to extended sample storage.

Water Sample Category Key for Accreditation

DW - Drinking Water
GW - Ground Water
LE - Land Leachate
NA - Not Applicable

Report Information

PL - Prepared Leachate
PW - Processed Water
RE - Recreational Water
SA - Saline Water
SW - Surface Water
TE - Treated Effluent
TS - Treated Sewage
UL - Unspecified Liquid

Clean Up Codes

NC - No Clean Up
MC - Mathematical Clean Up
FC - Florisil Clean Up

HWOL Acronym System

HS - Headspace analysis
EH - Extractable hydrocarbons – i.e. everything extracted by the solvent
CU - Clean-up – e.g. by Florisil, silica gel
1D - GC – Single coil gas chromatography
Total - Aliphatics & Aromatics
AL - Aliphatics only
AR - Aromatic only
2D - GC-GC – Double coil gas chromatography
#1 - EH_2D_Total but with humics mathematically subtracted
#2 - EH_2D_Total but with fatty acids mathematically subtracted
+ - Operator to indicate cumulative e.g. EH+EH_Total or EH_CU+HS_Total

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com

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Analytical Report Number : 22-14259

Project / Site name:	Don Street	**Samples received on:**	20/12/2022
Your job number:	14 554	**Samples instructed on/ Analysis started on:**	20/12/2022
Your order number:	003751	**Analysis completed by:**	03/01/2023
Report Issue Number:	1	**Report issued on:**	03/01/2023
Samples Analysed:	10 soil samples		

Signed:

Dominika Warjan
Junior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 22-14259
Project / Site name: Don Street
Your Order No: 003751

Lab Sample Number				2539789	2539790	2539791	2539792	2539793
Sample Reference				TS 001 Parcel B	TS 002 Parcel B	TS 003 Parcel B	TS 004 Parcel B	TS 005 Parcel B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				19/12/2022	19/12/2022	19/12/2022	19/12/2022	19/12/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	25	26	25	38	22
Total mass of sample received	kg	0.001	NONE	0.4	0.3	0.3	0.4	0.3
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	MLO	MLO	MLO	MLO	KSZ
General Inorganics								
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs*								
Naphthalene	mg/kg	0.05	NONE	0.12	0.09	0.1	0.09	0.1
Acenaphthylene	mg/kg	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	NONE	0.06	< 0.05	0.11	0.07	0.11
Fluorene	mg/kg	0.05	NONE	< 0.05	0.06	0.1	0.06	0.12
Phenanthrene	mg/kg	0.05	NONE	0.53	0.84	0.96	0.46	0.88
Anthracene	mg/kg	0.05	NONE	0.09	0.18	0.18	0.1	0.18
Fluoranthene	mg/kg	0.05	NONE	0.94	2.3	1.1	0.72	1.4
Pyrene	mg/kg	0.05	NONE	0.91	2.5	1.2	0.69	1.3
Benzo(a)anthracene	mg/kg	0.05	NONE	0.45	1	0.62	0.36	0.7
Chrysene	mg/kg	0.05	NONE	0.51	0.89	0.52	0.35	0.63
Benzo(b)fluoranthene	mg/kg	0.05	NONE	0.56	1.2	0.65	0.45	0.79
Benzo(k)fluoranthene	mg/kg	0.05	NONE	0.29	0.55	0.31	0.19	0.34
Benzo(a)pyrene	mg/kg	0.05	NONE	0.44	0.88	0.47	0.36	0.48
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	0.21	0.46	0.22	0.17	0.27
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	0.05	0.07	0.05	< 0.05	0.05
Benzo(ghi)perylene	mg/kg	0.05	NONE	0.23	0.56	0.31	0.25	0.46
Total PAH*								
Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	5.39	11.5	6.93	4.32	7.8
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	12	11	12	9.8	11
Barium (aqua regia extractable)	mg/kg	1	MCERTS	48	60	55	55	54
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.52	0.59	0.53	0.49	0.52
Boron (water soluble)	mg/kg	0.2	MCERTS	0.3	0.6	0.2	0.5	0.3
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Copper (aqua regia extractable)	mg/kg	1	MCERTS	21	19	27	21	26
Lead (aqua regia extractable)	mg/kg	1	MCERTS	50	41	51	42	48
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	0.3	0.5	0.4
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	11	11	12	11	12
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	20	20	21	17	19
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	44	45	49	47	47

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Analytical Report Number: 22-14259
Project / Site name: Don Street
Your Order No: 003751

Lab Sample Number				2539789	2539790	2539791	2539792	2539793
Sample Reference				TS 001 Parcel B	TS 002 Parcel B	TS 003 Parcel B	TS 004 Parcel B	TS 005 Parcel B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				19/12/2022	19/12/2022	19/12/2022	19/12/2022	19/12/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Petroleum Hydrocarbons								
TPH (C5 - C6) HS_1D_TOTAL	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH (C6 - C8) HS_1D_TOTAL	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C8 - C10) HS_1D_TOTAL	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C10 - C12) EH_CU_1D_TOTAL	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH (C12 - C16) EH_CU_1D_TOTAL	mg/kg	4	MCERTS	< 4.0	6	< 4.0	< 4.0	< 4.0
TPH (C16 - C21) EH_CU_1D_TOTAL	mg/kg	1	MCERTS	< 1.0	14	7	11	8.3
TPH (C21 - C35) EH_CU_1D_TOTAL	mg/kg	1	MCERTS	2	28	14	22	16
TPH (C35 - C40) EH_CU_1D_TOTAL	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH Total C5 - C40 EH_CU+HS_1D_TOTAL	mg/kg	10	NONE	< 10	48	20	33	24

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

*Data reported unaccredited due to quality control parameter failure associated with this result; other checks applied prior to reporting the data have been accepted and the failure justified as having no significant impact on sample data reported.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 22-14259
Project / Site name: Don Street
Your Order No: 003751

Lab Sample Number				2539794	2539795	2539796	2539797	2539798
Sample Reference				TS 006 Parcel B	TS 007 Parcel B	TS 008 Parcel B	TS 009 Parcel B	TS 010 Parcel B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				19/12/2022	19/12/2022	19/12/2022	19/12/2022	19/12/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	26	24	29	25	26
Total mass of sample received	kg	0.001	NONE	0.3	0.3	0.3	0.3	0.3
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	KSZ	KSZ	KSZ	KSZ	KSZ
General Inorganics								
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs*								
Naphthalene	mg/kg	0.05	NONE	0.12	0.74	0.17	0.11	0.15
Acenaphthylene	mg/kg	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	NONE	0.08	0.4	0.06	< 0.05	0.1
Fluorene	mg/kg	0.05	NONE	0.06	0.3	0.07	0.05	0.05
Phenanthrene	mg/kg	0.05	NONE	0.64	2.8	0.34	0.31	0.66
Anthracene	mg/kg	0.05	NONE	0.13	0.52	0.07	0.07	0.11
Fluoranthene	mg/kg	0.05	NONE	1.2	2.6	0.65	0.75	1.2
Pyrene	mg/kg	0.05	NONE	1.1	2.3	0.66	0.76	1.1
Benzo(a)anthracene	mg/kg	0.05	NONE	0.6	1.1	0.37	0.32	0.54
Chrysene	mg/kg	0.05	NONE	0.57	1	0.32	0.31	0.48
Benzo(b)fluoranthene	mg/kg	0.05	NONE	0.7	1.1	0.41	0.5	0.59
Benzo(k)fluoranthene	mg/kg	0.05	NONE	0.32	0.49	0.22	0.11	0.3
Benzo(a)pyrene	mg/kg	0.05	NONE	0.49	0.87	0.29	0.28	0.42
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	0.19	0.41	0.17	0.16	0.18
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	< 0.05	0.09	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	NONE	0.25	0.53	0.22	0.21	0.28
Total PAH*								
Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	6.41	15.3	4.02	3.94	6.16
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	11	13	13	11	14
Barium (aqua regia extractable)	mg/kg	1	MCERTS	57	56	56	56	55
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.54	0.61	0.57	0.54	0.59
Boron (water soluble)	mg/kg	0.2	MCERTS	0.3	< 0.2	0.2	0.3	< 0.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Copper (aqua regia extractable)	mg/kg	1	MCERTS	24	25	23	25	25
Lead (aqua regia extractable)	mg/kg	1	MCERTS	48	49	55	47	56
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.4	< 0.3	< 0.3	0.5	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	11	14	12	12	13
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	19	21	21	20	22
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	46	48	48	48	49

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 22-14259
Project / Site name: Don Street
Your Order No: 003751

Lab Sample Number				2539794	2539795	2539796	2539797	2539798
Sample Reference				TS 006 Parcel B	TS 007 Parcel B	TS 008 Parcel B	TS 009 Parcel B	TS 010 Parcel B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				19/12/2022	19/12/2022	19/12/2022	19/12/2022	19/12/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Petroleum Hydrocarbons								
TPH (C5 - C6) HS_1D_TOTAL	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH (C6 - C8) HS_1D_TOTAL	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C8 - C10) HS_1D_TOTAL	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C10 - C12) EH_CU_1D_TOTAL	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH (C12 - C16) EH_CU_1D_TOTAL	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
TPH (C16 - C21) EH_CU_1D_TOTAL	mg/kg	1	MCERTS	7.1	6.9	5.9	7.6	7
TPH (C21 - C35) EH_CU_1D_TOTAL	mg/kg	1	MCERTS	12	7.1	5.9	12	12
TPH (C35 - C40) EH_CU_1D_TOTAL	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH Total C5 - C40 EH_CU+HS_1D_TOTAL	mg/kg	10	NONE	19	14	12	20	19

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

*Data reported unaccredited due to quality control parameter failure associated with this result; other checks applied prior to reporting the data have been accepted and the failure justified as having no significant impact on sample data reported.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number : 22-14259
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2539789	TS 001 Parcel B	None Supplied	None Supplied	Brown clay and loam with vegetation.
2539790	TS 002 Parcel B	None Supplied	None Supplied	Brown clay and loam with vegetation.
2539791	TS 003 Parcel B	None Supplied	None Supplied	Brown clay and loam with vegetation.
2539792	TS 004 Parcel B	None Supplied	None Supplied	Brown clay and loam with vegetation.
2539793	TS 005 Parcel B	None Supplied	None Supplied	Brown clay and loam with vegetation.
2539794	TS 006 Parcel B	None Supplied	None Supplied	Brown clay and loam with vegetation.
2539795	TS 007 Parcel B	None Supplied	None Supplied	Brown clay and loam with vegetation.
2539796	TS 008 Parcel B	None Supplied	None Supplied	Brown clay and loam with vegetation.
2539797	TS 009 Parcel B	None Supplied	None Supplied	Brown clay and loam with gravel and vegetation.
2539798	TS 010 Parcel B	None Supplied	None Supplied	Brown clay and loam with gravel and vegetation.

Analytical Report Number : 22-14259
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS

Analytical Report Number : 22-14259
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Eurofins Chemtest Ltd
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

Final Report

Report No.:	24-12008-1
Initial Date of Issue:	25-Apr-2024
Re-Issue Details:	
Client	E3P
Client Address:	Taylor Road Trafford Park Urmston Manchester M41 7JQ
Contact(s):	mdee@e3p.co.uk; gcalvert@e3p.co.uk
Project	Don Street

Quotation No.:	Q23-31421	**Date Received:**	18-Apr-2024
Order No.:	007970	**Date Instructed:**	18-Apr-2024
No. of Samples:	3		
Turnaround (Wkdays):	5	**Results Due:**	24-Apr-2024
Date Approved:	25-Apr-2024		

Approved By:



Details: David Smith, Technical Director

For details about application of accreditation to specific matrix types, please refer to the Table at the back of this report

Results - Soil

Project: Don Street

Client: E3P				**Chemtest Job No.:**		24-12008	24-12008	24-12008
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1795398	1795399	1795400
				Client Sample ID.:		PHASE 3 CARTOFF 101	PHASE 3 CARTOFF 102	PHASE 3 CARTOFF 103
				Sample Type:		SOIL	SOIL	SOIL
				Date Sampled:		16-Apr-2024	16-Apr-2024	16-Apr-2024
				Time Sampled:		0:00	0:00	0:00
				Asbestos Lab:		DURHAM	DURHAM	DURHAM
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**			
ACM Type		U	2192		N/A	-	-	Fibres/Clumps
Asbestos Identification		U	2192		N/A	No Asbestos Detected	No Asbestos Detected	Chrysotile
Asbestos by Gravimetry		U	2192	%	0.001			<0.001
Total Asbestos		U	2192	%	0.001			<0.001
Moisture		N	2030	%	0.020	13	16	18
Soil Colour		N	2040		N/A	Brown	Brown	Brown
Other Material		N	2040		N/A	Stones and Roots	Stones, Roots and Wood	Stones and Roots
Soil Texture		N	2040		N/A	Clay	Clay	Clay
pH at 20C		M	2010		4.0	8.9	8.6	8.5
Sulphate (2:1 Water Soluble) as SO4		M	2120	g/l	0.010	0.35	0.33	0.27
Total Sulphur		U	2175	%	0.010	0.12	0.10	0.059
Cyanide (Total)		M	2300	mg/kg	0.50	11	1.7	< 0.50
Sulphide (Easily Liberatable)		N	2325	mg/kg	0.50	7.4	5.7	5.2
Sulphate (Total)		U	2430	%	0.010	0.52	0.29	0.25
Arsenic		M	2455	mg/kg	0.5	12	9.8	10
Cadmium		M	2455	mg/kg	0.10	0.16	< 0.10	0.18
Chromium		M	2455	mg/kg	0.5	15	15	15
Copper		M	2455	mg/kg	0.50	31	28	27
Mercury		M	2455	mg/kg	0.05	0.09	0.10	0.25
Nickel		M	2455	mg/kg	0.50	20	15	14
Lead		M	2455	mg/kg	0.50	53	55	52
Selenium		M	2455	mg/kg	0.25	0.62	0.49	0.51
Zinc		M	2455	mg/kg	0.50	130	140	81
Chromium (Hexavalent)		N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Total Organic Carbon		M	2625	%	0.20	1.5	3.7	1.8
TPH >C6-C8	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0
TPH >C8-C10	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0
TPH >C10-C12	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	3.7	< 1.0
TPH >C12-C16	EH_1D_Total	N	2670	mg/kg	1.0	13	15	8.6
TPH >C16-C21	EH_1D_Total	N	2670	mg/kg	1.0	33	67	18
TPH >C21-C25	EH_1D_Total	N	2670	mg/kg	1.0	18	80	15
TPH >C25-C35	EH_1D_Total	N	2670	mg/kg	1.0	63	220	47
TPH >C35-C40	EH_1D_Total	N	2670	mg/kg	1.0	58	15	5.3
Total TPH >C6-C40	EH_1D_Total	M	2670	mg/kg	10	190	400	94
Naphthalene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10

Results - Soil

Project: Don Street

Client: E3P				**Chemtest Job No.:**		24-12008	24-12008	24-12008
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1795398	1795399	1795400
				Client Sample ID.:		PHASE 3 CARTOFF 101	PHASE 3 CARTOFF 102	PHASE 3 CARTOFF 103
				Sample Type:		SOIL	SOIL	SOIL
				Date Sampled:		16-Apr-2024	16-Apr-2024	16-Apr-2024
				Time Sampled:		0:00	0:00	0:00
				Asbestos Lab:		DURHAM	DURHAM	DURHAM
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**			
Acenaphthylene		N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Acenaphthene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Fluorene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Phenanthrene		M	2800	mg/kg	0.10	1.5	1.8	0.77
Anthracene		M	2800	mg/kg	0.10	0.55	0.61	0.29
Fluoranthene		M	2800	mg/kg	0.10	2.8	2.5	1.4
Pyrene		M	2800	mg/kg	0.10	2.5	2.2	1.2
Benzo[a]anthracene		M	2800	mg/kg	0.10	1.3	1.2	0.69
Chrysene		M	2800	mg/kg	0.10	1.4	1.1	0.68
Benzo[b]fluoranthene		M	2800	mg/kg	0.10	1.7	1.5	0.87
Benzo[k]fluoranthene		M	2800	mg/kg	0.10	0.59	0.61	0.32
Benzo[a]pyrene		M	2800	mg/kg	0.10	1.5	1.3	0.73
Indeno(1,2,3-c,d)Pyrene		M	2800	mg/kg	0.10	1.2	0.96	0.48
Dibenz(a,h)Anthracene		N	2800	mg/kg	0.10	0.32	0.36	< 0.10
Benzo[g,h,i]perylene		M	2800	mg/kg	0.10	1.1	1.0	0.58
Total Of 16 PAH's		N	2800	mg/kg	2.0	17	15	8.0
Total Phenols		M	2920	mg/kg	0.10	< 0.10	< 0.10	< 0.10

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
2010	pH Value of Soils	pH at 20°C	pH Meter	
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <30°C.	
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930	
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES	
2175	Total Sulphur in Soils	Total Sulphur	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.	
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry	
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Allkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.	
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N–dimethyl-p-phenylenediamine.	
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.	
2455	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.	
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.	
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.	
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID	
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS	
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.	

Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

Comments or interpretations are beyond the scope of UKAS accreditation
The results relate only to the items tested
Uncertainty of measurement for the determinands tested are available upon request
None of the results in this report have been recovery corrected
All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis
All Asbestos testing is performed at the indicated laboratory
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt
All water samples will be retained for 14 days from the date of receipt
Charges may apply to extended sample storage

Water Sample Category Key for Accreditation

DW - Drinking Water
GW - Ground Water
LE - Land Leachate
NA - Not Applicable
PL - Prepared Leachate
PW - Processed Water

Report Information

RE - Recreational Water
SA - Saline Water
SW - Surface Water
TE - Treated Effluent
TS - Treated Sewage
UL - Unspecified Liquid

Clean Up Codes

NC - No Clean Up
MC - Mathematical Clean Up
FC - Florisil Clean Up

HWOL Acronym System

HS - Headspace analysis
EH - Extractable hydrocarbons – i.e. everything extracted by the solvent
CU - Clean-up – e.g. by Florisil, silica gel
1D - GC – Single coil gas chromatography
Total - Aliphatics & Aromatics
AL - Aliphatics only
AR - Aromatic only
2D - GC-GC – Double coil gas chromatography
#1 - EH_2D_Total but with humics mathematically subtracted
#2 - EH_2D_Total but with fatty acids mathematically subtracted
+ - Operator to indicate cumulative e.g. EH+EH_Total or EH_CU+HS_Total

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com

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i2 Analytical Ltd.
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WD18 8YS

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e: reception@i2analytical.com

Analytical Report Number : 23-28847

Project / Site name:	Don Street	**Samples received on:**	17/04/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	17/04/2023
Your order number:	004601	**Analysis completed by:**	24/04/2023
Report Issue Number:	1	**Report issued on:**	24/04/2023
Samples Analysed:	2 soil samples		

Signed:

Joanna Wawrzeczko
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-28847
Project / Site name: Don Street
Your Order No: 004601

Lab Sample Number				2650711	2650712
Sample Reference				Knotweed 101	Oil Tank 1 Base
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				14/04/2023	14/04/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	19	3.3
Total mass of sample received	kg	0.001	NONE	0.8	0.3
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	MJN	MJN

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.6	6.7
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	380	55
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.0075	0.0028
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	15	5.6
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	7.5	2.8
Sulphide	mg/kg	1	MCERTS	1.3	< 1.0
Total Sulphur	mg/kg	50	MCERTS	320	< 50
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	2.4	0.2

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.16	-
Acenaphthylene	mg/kg	0.05	MCERTS	0.07	-
Acenaphthene	mg/kg	0.05	MCERTS	0.39	-
Fluorene	mg/kg	0.05	MCERTS	0.27	-
Phenanthrene	mg/kg	0.05	MCERTS	3.5	-
Anthracene	mg/kg	0.05	MCERTS	0.83	-
Fluoranthene	mg/kg	0.05	MCERTS	6.3	-
Pyrene	mg/kg	0.05	MCERTS	5.8	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	3	-
Chrysene	mg/kg	0.05	MCERTS	2.9	-
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	3.3	-
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	1.5	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	2.8	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	1.5	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.25	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	1.6	-

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	34	-

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Analytical Report Number: 23-28847
Project / Site name: Don Street
Your Order No: 004601

Lab Sample Number				2650711	2650712
Sample Reference				Knotweed 101	Oil Tank 1 Base
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				14/04/2023	14/04/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Heavy Metals / Metalloids					
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	17	3.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.7	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	27	7.8
Copper (aqua regia extractable)	mg/kg	1	MCERTS	80	7.7
Lead (aqua regia extractable)	mg/kg	1	MCERTS	110	6.8
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	24	10
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	130	28
Petroleum Hydrocarbons					
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	< 2.0	< 2.0
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	< 4.0	< 4.0
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	16	< 1.0
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	56	< 1.0
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	< 10	< 10
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	78	< 10
VOCs					
Chloromethane	µg/kg	5	ISO 17025	-	< 5.0
Chloroethane	µg/kg	5	NONE	-	< 5.0
Bromomethane	µg/kg	5	ISO 17025	-	< 5.0
Vinyl Chloride	µg/kg	5	NONE	-	< 5.0
Trichlorofluoromethane	µg/kg	5	NONE	-	< 5.0
1,1-Dichloroethene	µg/kg	5	NONE	-	< 5.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	5	NONE	-	< 5.0
Cis-1,2-dichloroethene	µg/kg	5	ISO 17025	-	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	-	< 5.0
1,1-Dichloroethane	µg/kg	5	ISO 17025	-	< 5.0
2,2-Dichloropropane	µg/kg	5	ISO 17025	-	< 5.0
Trichloromethane	µg/kg	5	ISO 17025	-	< 5.0
1,1,1-Trichloroethane	µg/kg	5	ISO 17025	-	< 5.0
1,2-Dichloroethane	µg/kg	5	ISO 17025	-	< 5.0
1,1-Dichloropropene	µg/kg	5	ISO 17025	-	< 5.0
Trans-1,2-dichloroethene	µg/kg	5	NONE	-	< 5.0
Benzene	µg/kg	5	MCERTS	-	< 5.0
Tetrachloromethane	µg/kg	5	NONE	-	< 5.0
1,2-Dichloropropane	µg/kg	5	ISO 17025	-	< 5.0
Trichloroethene	µg/kg	5	ISO 17025	-	< 5.0
Dibromomethane	µg/kg	5	ISO 17025	-	< 5.0
Bromodichloromethane	µg/kg	5	ISO 17025	-	< 5.0
Cis-1,3-dichloropropene	µg/kg	5	ISO 17025	-	< 5.0
Trans-1,3-dichloropropene	µg/kg	5	ISO 17025	-	< 5.0
Toluene	µg/kg	5	MCERTS	-	< 5.0
1,1,2-Trichloroethane	µg/kg	5	ISO 17025	-	< 5.0
1,3-Dichloropropane	µg/kg	5	ISO 17025	-	< 5.0
Dibromochloromethane	µg/kg	5	ISO 17025	-	< 5.0
Tetrachloroethene	µg/kg	5	NONE	-	< 5.0

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Analytical Report Number: 23-28847
Project / Site name: Don Street
Your Order No: 004601

Lab Sample Number				2650711	2650712
Sample Reference				Knotweed 101	Oil Tank 1 Base
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				14/04/2023	14/04/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
1,2-Dibromoethane	µg/kg	5	ISO 17025	-	< 5.0
Chlorobenzene	µg/kg	5	ISO 17025	-	< 5.0
1,1,1,2-Tetrachloroethane	µg/kg	5	ISO 17025	-	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	-	< 5.0
p & m-Xylene	µg/kg	5	MCERTS	-	< 5.0
Styrene	µg/kg	5	ISO 17025	-	< 5.0
Tribromomethane	µg/kg	5	NONE	-	< 5.0
o-Xylene	µg/kg	5	MCERTS	-	< 5.0
1,1,2,2-Tetrachloroethane	µg/kg	5	ISO 17025	-	< 5.0
Isopropylbenzene	µg/kg	5	ISO 17025	-	< 5.0
Bromobenzene	µg/kg	5	ISO 17025	-	< 5.0
n-Propylbenzene	µg/kg	5	ISO 17025	-	< 5.0
2-Chlorotoluene	µg/kg	5	ISO 17025	-	< 5.0
4-Chlorotoluene	µg/kg	5	ISO 17025	-	< 5.0
1,3,5-Trimethylbenzene	µg/kg	5	ISO 17025	-	< 5.0
tert-Butylbenzene	µg/kg	5	ISO 17025	-	< 5.0
1,2,4-Trimethylbenzene	µg/kg	5	ISO 17025	-	< 5.0
sec-Butylbenzene	µg/kg	5	ISO 17025	-	< 5.0
1,3-Dichlorobenzene	µg/kg	5	ISO 17025	-	< 5.0
p-Isopropyltoluene	µg/kg	5	ISO 17025	-	< 5.0
1,2-Dichlorobenzene	µg/kg	5	ISO 17025	-	< 5.0
1,4-Dichlorobenzene	µg/kg	5	ISO 17025	-	< 5.0
Butylbenzene	µg/kg	5	NONE	-	< 5.0
1,2-Dibromo-3-chloropropane	µg/kg	5	ISO 17025	-	< 5.0
1,2,4-Trichlorobenzene	µg/kg	5	ISO 17025	-	< 5.0
Hexachlorobutadiene	µg/kg	5	NONE	-	< 5.0
1,2,3-Trichlorobenzene	µg/kg	5	ISO 17025	-	< 5.0

SVOCs

Aniline	mg/kg	0.1	NONE	-	0.5
Phenol	mg/kg	0.2	ISO 17025	-	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	-	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	-	< 0.3
Hexachloroethane	mg/kg	0.05	ISO 17025	-	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	-	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	-	< 0.2
Isophorone	mg/kg	0.2	MCERTS	-	< 0.2
2-Nitrophenol	mg/kg	0.3	NONE	-	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	-	< 0.05
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	-	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	NONE	-	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	NONE	-	< 0.2

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Analytical Report Number: 23-28847
Project / Site name: Don Street
Your Order No: 004601

Lab Sample Number				2650711	2650712
Sample Reference				Knotweed 101	Oil Tank 1 Base
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				14/04/2023	14/04/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
2-Methylnaphthalene	mg/kg	0.1	NONE	-	< 0.1
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	< 0.1
Dimethylphthalate	mg/kg	0.1	MCERTS	-	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	NONE	-	< 0.1
Acenaphthylene	mg/kg	0.05	MCERTS	-	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	-	< 0.05
2,4-Dinitrotoluene	mg/kg	0.2	NONE	-	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	-	< 0.2
4-Chlorophenyl phenyl ether	mg/kg	0.3	MCERTS	-	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	-	< 0.2
4-Nitroaniline	mg/kg	0.2	NONE	-	< 0.2
Fluorene	mg/kg	0.05	MCERTS	-	< 0.05
Azobenzene	mg/kg	0.3	NONE	-	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	-	< 0.05
Anthracene	mg/kg	0.05	MCERTS	-	< 0.05
Carbazole	mg/kg	0.3	MCERTS	-	< 0.3
Dibutyl phthalate	mg/kg	0.2	NONE	-	< 0.2
Anthraquinone	mg/kg	0.3	NONE	-	< 0.3
Fluoranthene	mg/kg	0.05	MCERTS	-	< 0.05
Pyrene	mg/kg	0.05	MCERTS	-	< 0.05
Butyl benzyl phthalate	mg/kg	0.3	NONE	-	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	< 0.05
Chrysene	mg/kg	0.05	MCERTS	-	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	-	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	-	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	< 0.05

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-28847
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2650711	Knotweed 101	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
2650712	Oil Tank 1 Base	None Supplied	None Supplied	Brown sand.

Analytical Report Number : 23-28847
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS

Analytical Report Number : 23-28847
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-23948

Project / Site name:	Don Street	**Samples received on:**	20/03/2023
Your job number:	14-554	**Samples instructed on/ Analysis started on:**	20/03/2023
Your order number:	004390	**Analysis completed by:**	28/03/2023
Report Issue Number:	1	**Report issued on:**	28/03/2023
Samples Analysed:	3 soil samples		

Izabela Wójcik

Signed:

Izabela Wójcik
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-23948
Project / Site name: Don Street
Your Order No: 004390

Lab Sample Number				2623024	2623025	2623026
Sample Reference				Pond 001	Pond 002	Pond 003
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				3.00	2.00	0.50
Date Sampled				17/03/2023	17/03/2023	17/03/2023
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	8.7	26	22
Total mass of sample received	kg	0.001	NONE	0.3	0.3	0.3

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	JSW	JSW	JSW

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	6.7	7	6.8
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	96	1700	800
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.0082	0.12	0.06
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	16	240	120
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	8.2	121	59.7
Sulphide	mg/kg	1	MCERTS	2.7	120	14
Total Sulphur	mg/kg	50	MCERTS	63	6600	830
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	0.2	-	1.2
Total Organic Carbon (TOC) – Manual	%	0.1	MCERTS	-	8.4	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	0.13	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	0.53	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	0.35	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	1.5	0.08
Anthracene	mg/kg	0.05	MCERTS	< 0.05	0.35	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	2.5	0.16
Pyrene	mg/kg	0.05	MCERTS	< 0.05	2.1	0.16
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	1	0.09
Chrysene	mg/kg	0.05	MCERTS	< 0.05	1.2	0.07
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	1.2	0.09
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	0.75	0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	0.92	0.07
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	0.64	0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	0.18	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	0.79	0.06

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	< 0.80	14.2	0.88

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-23948
Project / Site name: Don Street
Your Order No: 004390

Lab Sample Number				2623024	2623025	2623026
Sample Reference				Pond 001	Pond 002	Pond 003
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				3.00	2.00	0.50
Date Sampled				17/03/2023	17/03/2023	17/03/2023
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Heavy Metals / Metalloids						
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	4.7	26	36
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	U/S#	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	9.4	14	37
Copper (aqua regia extractable)	mg/kg	1	MCERTS	12	59	210
Lead (aqua regia extractable)	mg/kg	1	MCERTS	7.5	100	67
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	13	17	76
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	29	170	100
Petroleum Hydrocarbons						
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	< 1.0	19	< 1.0
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	< 1.0	93	< 1.0
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	< 10	< 10	< 10
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	< 10	120	< 10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number : 23-23948
Project / Site name: Don Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2623024	Pond 001	None Supplied	3	Brown sand.
2623025	Pond 002	None Supplied	2	Brown clay.
2623026	Pond 003	None Supplied	0.5	Brown gravelly sand.

Analytical Report Number : 23-23948
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Total organic carbon in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L023-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

Analytical Report Number : 23-23948
Project / Site name: Don Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

#U/S - Unsuitable for analysis due to high colour intensity.

APPENDIX V
PHOTOGRAPHS

PLATE 1 SUPPLEMENTARY TRIAL PITTING PHASE 1 (AREA 1)





PLATE 2 SUPPLEMENTARY TRIAL PITTING PHASE 1 (AREA 2)





PLATE 3 SUPPLEMENTARY TRIAL PITTING PHASE 2A (AREA 3)





PLATE 4 SUPPLEMENTARY WINDOW SAMPLING PHASE 3 (AREA 5)





PLATE 5 SUPPLEMENTARY WINDOW SAMPLING PHASE 3 (AREA 5)





PLATE 6 SILT BUSTER AND FENCING ON SITE DURING EXCAVATION AND DEWATERING



PLATE 7 SILT FENCING ERECTED ALONG THE SOUTHERN BOUNDARY IN PHASE 1



PLATE 8 HERAS FENCING AND SIGNAGE AROUND BOUNDARY



PLATE 9 TOPSOIL AND VEGETATION REMOVAL IN PHASE 1



PLATE 10 TOPSOIL STRIP AND TREE REMOVAL IN PHASE 2A



PLATE 11 REMOVAL OF SLAB AND SHALLOW OBSTRUCTIONS WITHIN PHASE 1



PLATE 12 START OF SLAB REMOVAL IN PHASE 3



PLATE 13 WS17 TRENCH



PLATE 14 RECOVERY OF NATURAL TOPSOIL ACROSS IN PHASE 2



PLATE 15 TOPSOIL AND TURF ARISING FROM AREA 2



PLATE 16 ASBESTOS HOTSPOTS PHASE 1 (WS402 LEFT & TP516 RIGHT)





PLATE 17 ASBESTOS HOTSPOTS PHASE 2 (WS305 AND ARISING)





PLATE 18 ASBESTOS HOTSPOTS PHASE 3 (TP48 RIGHT AND WS203 LEFT)





PLATE 19 VOLITILE HOTSPOTS PHASE 1 (TP204 RIGHT AND BH1 LEFT)





PLATE 20 VOLITILE HOTSPOTS ARSINGS PHASE 1 (TP204 RIGHT AND BH1 LEFT)





PLATE 21 VOLITILE HOTSPOTS PHASE 1 (TP5 RIGHT AND BH4 LEFT)





PLATE 22 VOLITILE HOTSPOT ARISINGS PHASE 1 (TP5 RIGHT AND BH4 LEFT)





PLATE 23 VOLITILE HOTSPOT PHASE 2A - TP11



PLATE 24 VOLITILE HOTSPOT PHASE 3 – WS5





PLATE 25 MERCURY HOTSPOTS PHASE 1 – BH3





PLATE 26 MERCURY HOTSPOTS – TP342





PLATE 27 SUPPLEMENTARY TRIAL PITTING PHASE 2A (AREA 3)





PLATE 28 PROCESSED MADE GROUND FOR RE-USE



PLATE 29 PROCESSING OF MADE GROUND



PLATE 30 BREAKING AND PROCESSING OF MADE GROUND



PLATE 31 PROCESSING OF MADE GROUND PHASE 3 (AREA 5)



PLATE 32 SUPPLEMENTARY TRIAL PITTING PHASE 3 (AREA 5)



PLATE 33 BREAKING AND PROCESSING OF ABOVE AND BELOW GROUND STRUCUTRES PHASE 1 (AREA 1)



PLATE 34 PROCESSING OF MADE GROUND (AREA 2A)



PLATE 35 BREAKING AND PROCESSING OF ABOVE AND BELOW GROUND STRUCUTRES PHASE 1 (AREA 2A)



PLATE 36 SUPPLEMENTARY TRIAL PITTING OF IMPACTED SOILS (TP409)





PLATE 37 SUPPLEMENTARY TRIAL PITTING OF IMPACTED SOILS



PLATE 38 SUPPLEMENTARY TRIAL PITTING OF IMPACTED SOILS



PLATE 39 TANK VALIDATION IN PHASE 2A



PLATE 40 REMOVAL OF TANK



PLATE 41 DELINEATION, EXCAVATION AND TREATMENT OF INFILLED HISTORICAL PONDS AND STREAMS





PLATE 42 DELINEATION, EXCAVATION AND TREATMENT OF INFILLED HISTORICAL PONDS AND STREAMS



PLATE 43 DELINEATION, EXCAVATION AND TREATMENT OF INFILLED HISTORICAL PONDS AND STREAMS



PLATE 44 REMOVAL AND SEGREGATION OF WASTE



PLATE 45 REMOVAL AND SEGREGATION OF WASTE



PLATE 46 REMOVAL AND SEGREGATION OF WASTE



PLATE 47 REMOVAL AND SEGREGATION OF WASTE



PLATE 48 REMOVAL AND SEGREGATION OF WASTE



PLATE 49 SUPPLEMENTARY TRIAL PITTING PHASE 3 (AREA 5)



PLATE 50 CUT AND FILL IN PHASE 1



PLATE 51 CUT AND FILL (AREA 2A)



PLATE 52 CUT AND FILL (AREA 2A)



PLATE 53 CUT AND FILL (AREA 2A)



PLATE 54 FILLING OPERATIONS IN PHASE 1 (AREA 1)



PLATE 55 FILLING OPERATIONS IN PHASE 1 (AREA 1)



PLATE 56 CUT AND FILL WORKS (AREA 5)



PLATE 57 CONSTRUCTION OF TEMPORARY WORKING PLATFORM PHASE 3 (AREA 5)



PLATE 58 CONSTRUCTION OF TEMPORARY WORKING PLATFORM PHASE 2A



PLATE 59 IMPORTATION OF BULK FILL TO PHASE 2A



PLATE 60 PREPERATION OF GARDEN COVER SYSTEM



PLATE 61 PREPERATION OF GARDEN COVER SYSTEM



PLATE 62 PROVISION OF SUBSIOL



PLATE 63 SUBSOIL STOCKPILED IN PHASE 2



PLATE 64 LANDFILL TREATMENT



PLATE 65 LANDFILL TREATMENT



PLATE 66 LANDFILL TREATMENT



PLATE 67 LANDFILL TREATMENT



PLATE 68 LANDFILL TREATMENT



PLATE 69 LANDFILL TREATMENT



PLATE 70 LANDFILL TREATMENT



PLATE 71 LANDFILL TREATMENT



PLATE 72 LANDFILL TREATMENT



PLATE 73 LANDFILL TREATMENT



PLATE 74 LANDFILL TREATMENT



PLATE 75 LANDFILL TREATMENT



PLATE 76 LANDFILL TREATMENT



PLATE 77 LANDFILL TREATMENT



PLATE 78 LANDFILL TREATMENT



PLATE 79 LANDFILL TREATMENT



PLATE 80 LANDFILL TREATMENT



APPENDIX VI
GEOTECHNICAL TESTING RESULTS

MURRAY RIX
CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client e3p

Address Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

Contract Don Street

Job Number MRN 4588/151
Date of Issue 17 November 2023

Approved Signatories

S J Hutchings, O P Davies

Notes

1 All remaining samples and remnants from this contract will be disposed 28 days from the date of this report unless you notify us to the contrary.

2 Result certificates, in this report, not bearing a UKAS mark, are not included in our UKAS accreditation schedule.

3 Opinions and interpretations expressed herein are outside the scope of our UKAS accreditation.

4 Certified that the samples have been examined and tested in accordance with the terms of the contract/order and unless otherwise stated conform to the standards/specifications quoted.

5 The results included within the report are representative of the samples submitted for analysis.

6 This certificate should not be reproduced, except in full, without the express permission of the laboratory.

M U R R A Y R I X
ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

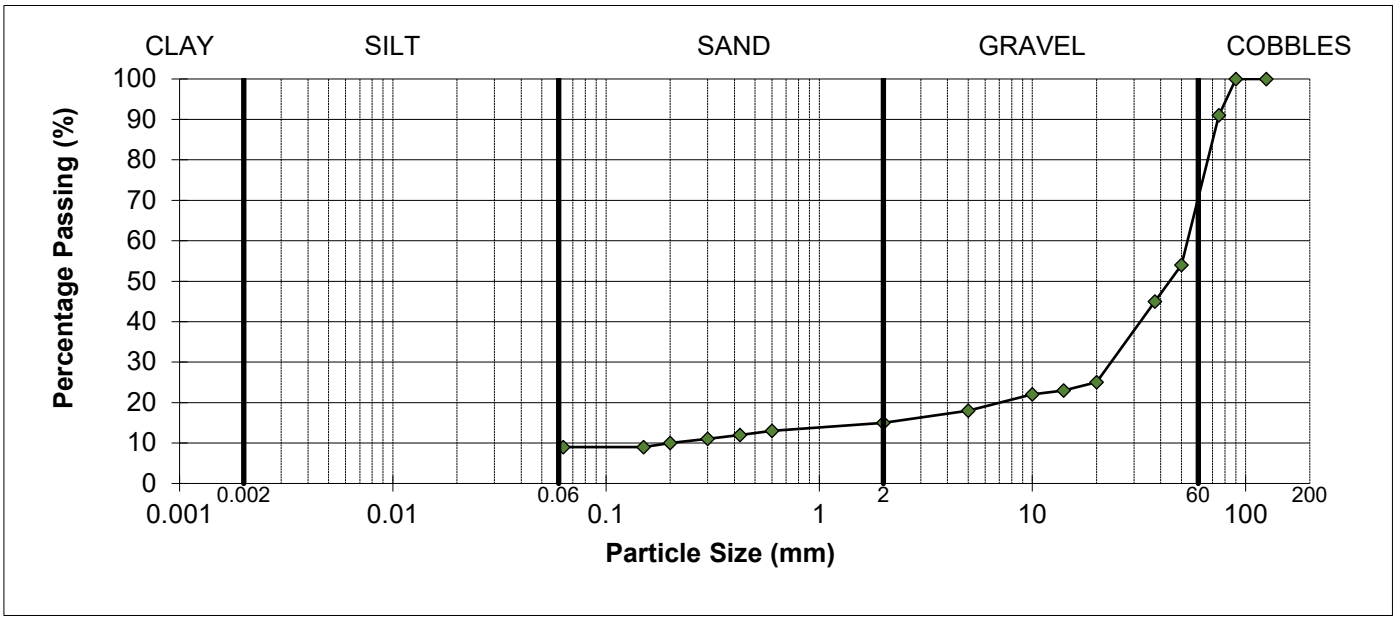
Determination of Water Content in accordance with BS EN ISO 17892-1:2014+A1:2022 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/151

SAMPLE LABEL	LF Crush 005	DATE SAMPLED	31-Oct-23
LAB SAMPLE No	133369	DATE RECEIVED	31-Oct-23
DATE TESTED	01-Nov-23	SAMPLED BY	Client

MATERIAL	Crush
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	18	10-45
90	100	80-100	2	15	
75	91	65-100	0.6	13	0-25
50	54		0.425	12	
37.5	45	45-100	0.3	11	
20	25		0.2	10	
14	23		0.15	9	
10	22	15-60	0.063	9	0-12



SOIL FRACTIONS			
COBBLES	28%	SAND	6%
GRAVEL	58%	SILT / CLAY	9%

REMARKS
As received water content = 11.1%
Sample complies with the advised grading specification for a 6F2 material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 17-Nov-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-2:2022 Cl.11
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

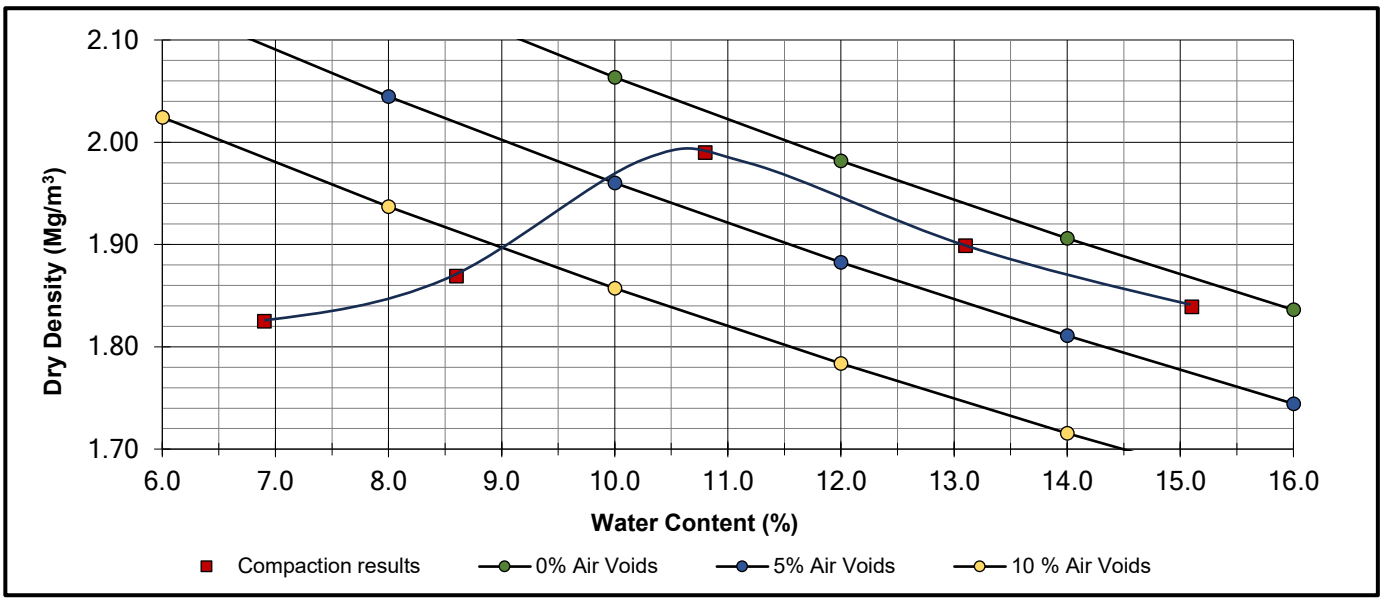
CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/151

SAMPLE LABEL	LF Crush 005	DATE SAMPLED	31-Oct-23
SAMPLE NUMBER	133369	DATE RECEIVED	31-Oct-23
DATE TESTED	06-Nov-23	SAMPLED BY	Client

MATERIAL	Crush
ADVISED SOURCE	Site won
PRE TREATMENT	Air Dried / Single Sample

RETAINED 37.5mm	55 %	GRADING ZONE	Zone X
RETAINED 20mm	75 %	PARTICLE DENSITY	2.60 Mg/m3 (Measured)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	6.9	1.825
2	8.6	1.869
3	10.8	1.990
4	13.1	1.899
5	15.1	1.839



OPTIMUM WATER CONTENT	**11**	(%)
MAXIMUM DRY DENSITY	**1.99**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 17-Nov-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

TEST CERTIFICATE

ACID SOLUBLE SULFIDE CONTENT
BS EN 1744-1:2009+A1:2012 Cl. 13

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/151

DATE TESTED	06 November 2023	DATE SAMPLED	31 October 2023
SAMPLED BY	Client	DATE RECEIVED	31 October 2023

Sample Number	Site Mark	Aggregate Type	Acid Soluble Sulfide % S
133369	LF Crush 005	Crush	<0.01

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 17 November 2023

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

TEST CERTIFICATE

TOTAL SULFUR CONTENT
BS EN 1744-1:2009+A1:2012 Cl. 11

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/148

DATE TESTED	06 November 2023	DATE SAMPLED	31 October 2023
SAMPLED BY	Client	DATE RECEIVED	31 October 2023

Sample Number	Site Mark	Aggregate Type	Total Sulfur % S
133369	LF Crush 005	Crush	0.1

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 17 November 2023

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

TEST CERTIFICATE

WATER SOLUBLE SULFATE CONTENT
BS EN 1744-1:2009+A1:2012 Cl. 10

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/151

DATE TESTED	06 November 2023	DATE SAMPLED	31 October 2023
SAMPLED BY	Client	DATE RECEIVED	31 October 2023

Sample Number	Site Mark	Aggregate Type	Water Soluble Sulfate % SO_4
133369	LF Crush 005	Crush	<0.01

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 17 November 2023

M U R R A Y R I X

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DETERMINATION OF CONSTITUENTS OF COARSE RECYCLED AGGREGATE

BS EN 933-11:2009

CLIENT	e3p
SITE	Don Street

SAMPLE DETAILS

Job Number	:	MRN 4588/151
Laboratory sample number	:	133369
Material	:	Crush
Advised source	:	Site won
Site mark	:	LF Crush 005
Certificate of sampling received	:	No
Date and time of sampling	:	31 October 2023
Date received at Laboratory	:	31 October 2023
Date of start of test	:	01 November 2023
Sampling Location	:	Not advised
Method of sampling	:	BS EN 932-1 : 1997
Sampled by	:	Client
Mass of dry sample tested	:	50 kg
Drying Temperature	:	40 ± 5°C

RESULT

Constituent	Description	Proportion (%)
Rc	Concrete, Concrete products, Mortar, Concrete masonry units	12
Ru	Unbound aggregate, Natural stone, Hydraulically bound aggregate	49
Rb	Clay masonry units (i.e. bricks & tiles), Calcium silicate masonry units, Aerated non-floating concrete	29
Ra	Bituminous materials	8.7
Rg	Glass	0.4
X	Other: Cohesive (i.e. clay & soil), Metals (ferrous & non-ferrous), Non-floating wood, plastic & rubber, Gypsum plaster	0.9
FL	Floating Particles (cm^3/kg)	0.4

Comments
Client requested constituent X to be reported separately to clay/soil. No other consituent X was present, above consituent X figure is shown as the clay/soil proportion.

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 17-Nov-23

M U R R A Y R I X

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DETERMINATION OF RESISTANCE TO FRAGMENTATION BY THE LOS ANGELES TEST METHOD

BS EN 1097-2:2020

CLIENT	e3p
SITE	Don Street

SAMPLE DETAILS

Job Number	:	MRN 4588/151
Laboratory sample number	:	133369
Material	:	Crush
Advised source	:	Site won
Site mark	:	LF Crush 005
Certificate of sampling received	:	No
Date and time of sampling	:	31-Oct-23
Date received at Laboratory	:	31-Oct-23
Date of start of test	:	01-Nov-23
Sampling Location	:	Site
Method of sampling	:	BS EN 932-1 : 1997
Sampled by	:	Client
Size Fraction	:	34% passing 14mm retained 12.5mm 66% passing 12.5mm retained 10mm
Mass of dry sample tested	:	5000g
Target specification	:	<50

RESULT

Los Angeles Coefficient	:	**41**

Comment

NAME O.P. Davies BA (Hons (Laboratory Manager) SIGNED DATE 17-Nov-23

M U R R A Y R I X

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

TEST CERTIFICATE

DETERMINATION OF PARTICLE DENSITY AND WATER ABSORPTION

BS EN 1097-6:2013:CLAUSE 7

METHODS FOR AGGREGATES PASSING THE 63mm TEST SIEVE AND RETAINED ON THE 31.5mm TEST SIEVE (24 HOUR SOAKED)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/151

SITE REFERENCE	LF Crush 005	DATE SAMPLED	31 October 2023
SAMPLE NUMBER	133369	DATE RECEIVED	31 October 2023
DATE TESTED	06 November 2023	SAMPLED BY	Client

MATERIAL	Crush
ADVISED SUPPLIER	Site won

AGGREGATE SIZE TESTED	63mm to 31.5mm	WAS SAMPLE ARTIFICIALLY HEATED BEFORE TEST	No

Apparent particle density	**2.60**	Mg/m^3
Particle density on an oven dried basis	**2.26**	Mg/m^3
Particle density on a saturated and surface dried basis	**2.39**	Mg/m^3
Water absorption as % of dry mass	**5.8**	%

COMMENT / ANOMALIES

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED  DATE 17-Nov-23

LABORATORY REPORT

Contract Number: PSL23/0368

Report Date: 02 February 2023

Client's Reference: 003885

Client Name: E3P
Taylor Road
Urmston
Manchester
M41 7JQ

For the attention of: Matt Dee/Georgia Calvert

Contract Title: Don Street

Date Received: 19/1/2023
Date Commenced: 19/1/2023
Date Completed: 2/2/2023

Notes: Opinions and Interpretations are outside the UKAS Accreditation

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Checked and Approved Signatories:

A Watkins (Director)
R Berriman (Quality Manager)
S Royle (Laboratory Manager)

L Knight (Assistant Laboratory Manager)
S Eyre (Senior Technician)
T Watkins (Senior Technician)

5 – 7 Hexthorpe Road,
Hexthorpe,
Doncaster,
DN4 0AR
Tel: 01302 768098
Email: rberriman@prosoils.co.uk
awatkins@prosoils.co.uk

SUMMARY OF LABORATORY SOIL DESCRIPTIONS

Hole Number	Sample Number	Sample Type	Top Depth m	Base Depth m	Description of Sample
CRUSH 002 Parcel A					Class 1A

UKAS TESTING 4043

PSL PROFESSIONAL SOILS LABORATORY A PHENNA GROUP COMPANY

Don Street

Contract No:

PSL23/0368

Client Ref:

003885

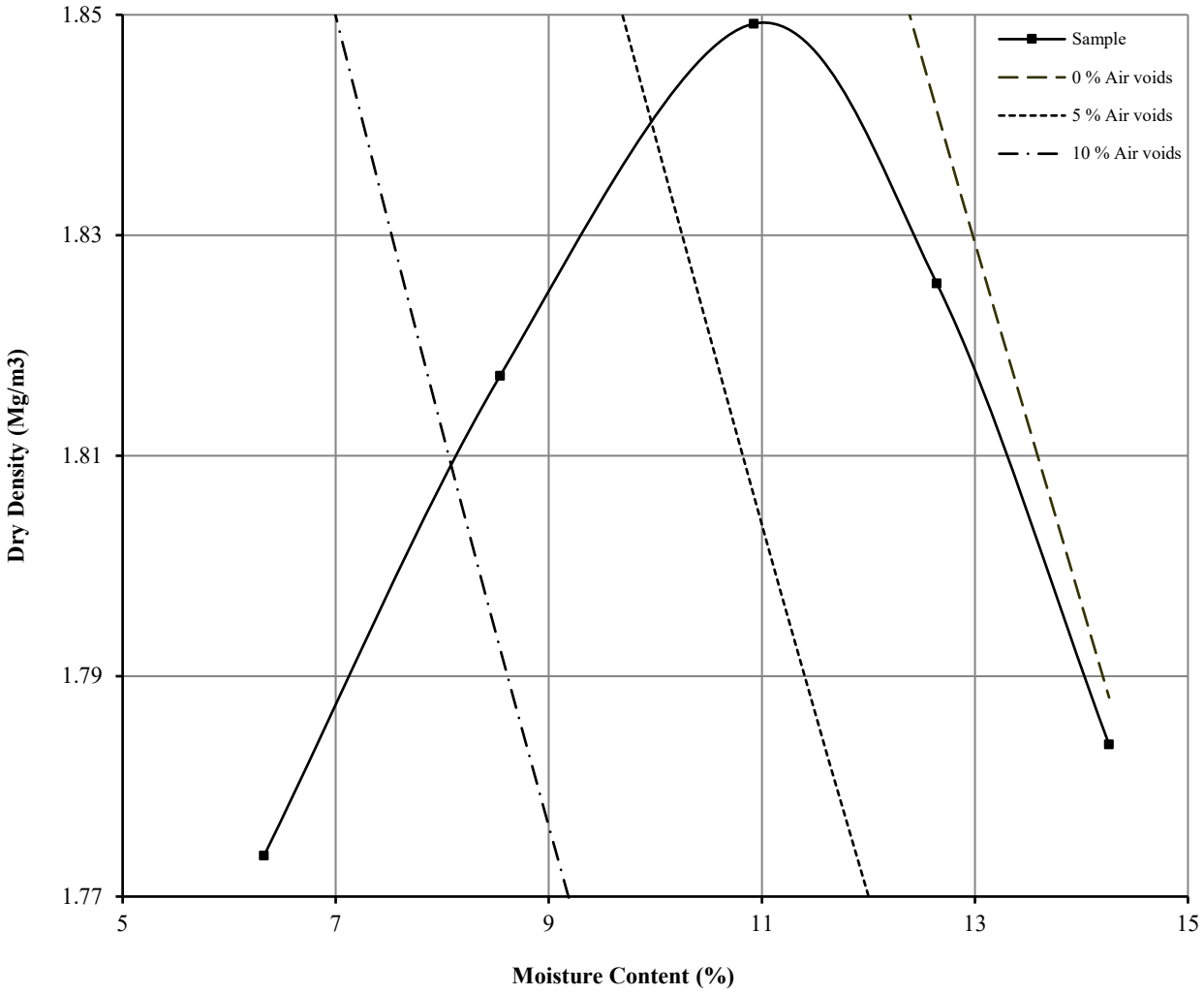
DRY DENSITY / MOISTURE CONTENT RELATIONSHIP

Non compliance with BS 1377 : Part 4 : Clause 3.6 : 1990

Hole Number: CRUSH 002 Parcel A **Top Depth (m) :**

Sample Number: **Base Depth (m) :**

Sample Type:



Initial Moisture Content:		13	Method of Compaction:	4.5kg	Separate Samples
Particle Density (Mg/m3):	2.4	Assumed	Material Retained on 37.5 mm Test Sieve (%):		65
Maximum Dry Density (Mg/m3):		1.85	Material Retained on 20.0 mm Test Sieve (%):		10
Optimum Moisture Content (%):		11			
Remarks See summary of soil descriptions					

UKAS TESTING 4043

PSL PROFESSIONAL SOILS LABORATORY A PHENNA GROUP COMPANY

Don Street

Contract
PSL23/0368
Client Ref
3885

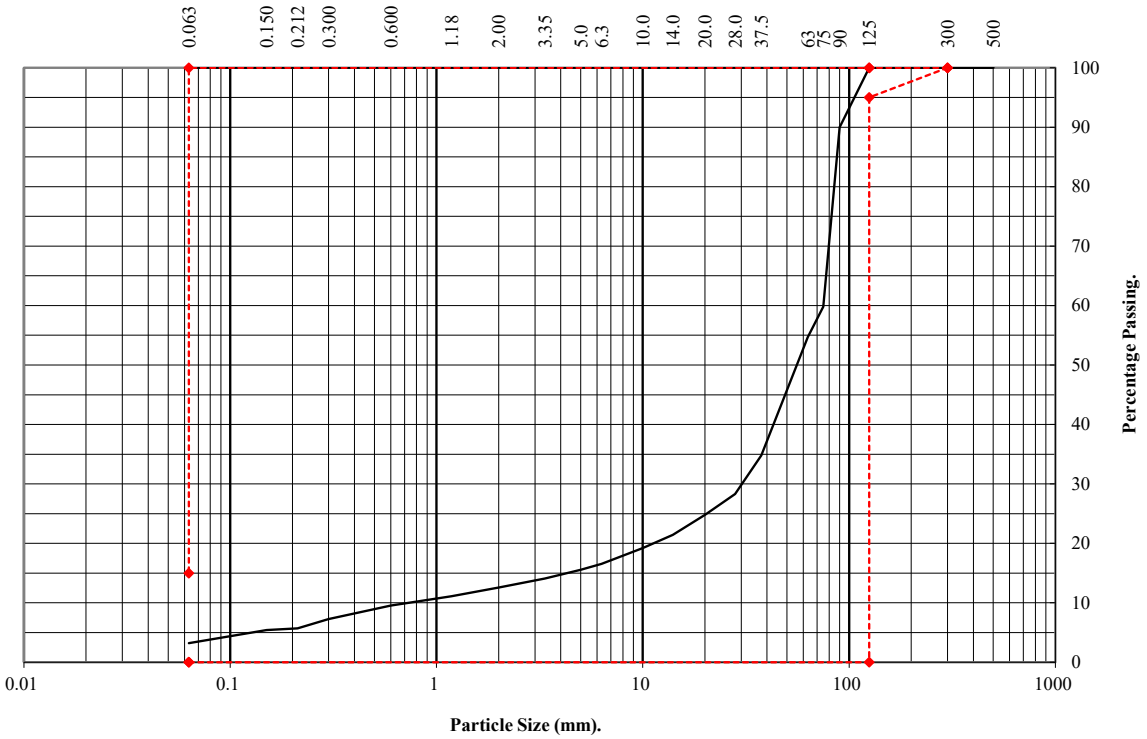
PARTICLE SIZE DISTRIBUTION TEST

BS1377:Part 2:1990

Wet Sieve: Clause 9.2

Classification for Acceptable Earthworks Materials

Sample Reference CRUSH 002 Parcel A **Classification Type:** 1A



BS Test Sieve mm	Percentage Passing %	Table 6/2 Grading Requirements Lower	Upper
500	100		
300	100	100	100
125	100	95	100
90	90		
75	60		
63	55		
37.5	35		
28	28		
20	25		
14	21		
10	19		
6.3	17		
5	16		
3.35	14		
2	13		
1.18	11		
0.6	10		
0.3	7		
0.212	6		
0.15	5		
0.063	3	0	15

Remarks:
SHW Series 600 Table 6/2 : Class 1A

UKAS TESTING 4043

PSL PROFESSIONAL SOILS LABORATORY A PHENNA GROUP COMPANY

Don Street

Contract No.: PSL23/0368

Client Ref: 003885

LABORATORY REPORT

Contract Number: PSL23/0380

Report Date: 30 January 2023

Client's Reference: 003885

Client Name: E3P
Taylor Road
Urmston
Manchester
M41 7JQ

For the attention of: Matt Dee/Georgia Calvert

Contract Title: Don Street

Date Received: 20/1/2023
Date Commenced: 20/1/2023
Date Completed: 27/01/2023

Notes: Opinions and Interpretations are outside the UKAS Accreditation

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L Knight (Assistant Laboratory Manager)
S Eyre (Senior Technician)
M Fennel (Senior Technician)

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Email: rberriman@prosoils.co.uk
awatkins@prosoils.co.uk

SUMMARY OF LABORATORY SOIL DESCRIPTIONS

Hole Number	Sample Number	Sample Type	Top Depth m	Base Depth m	Description of Sample
SI-001		Bulk			Brown very gravelly silty SAND.
SI-002		Bulk			Brown very gravelly silty SAND.
SI-003		Bulk			Brown gravelly clayey silty SAND.
SI-004		Bulk			Brown very gravelly slightly clayey SAND.
SI-005		Bulk			Brown gravelly slightly silty SAND.
SI-006		Bulk			Brown gravelly clayey silty SAND.
SI-007		Bulk			Brown gravelly slightly silty SAND.
SI-008		Bulk			Brown very sandy slightly silty GRAVEL.
SI-009		Bulk			Brown slightly gravelly clayey silty SAND.
SI-010		Bulk			Brown gravelly slightly silty SAND.
SI-011		Bulk			Brown gravelly clayey silty SAND.

UKAS TESTING 4043

PSL PROFESSIONAL SOILS LABORATORY A PHENNA GROUP COMPANY

Don Street

Contract No:

PSL23/0380

Client Ref:

003880

PARTICLE SIZE DISTRIBUTION TEST

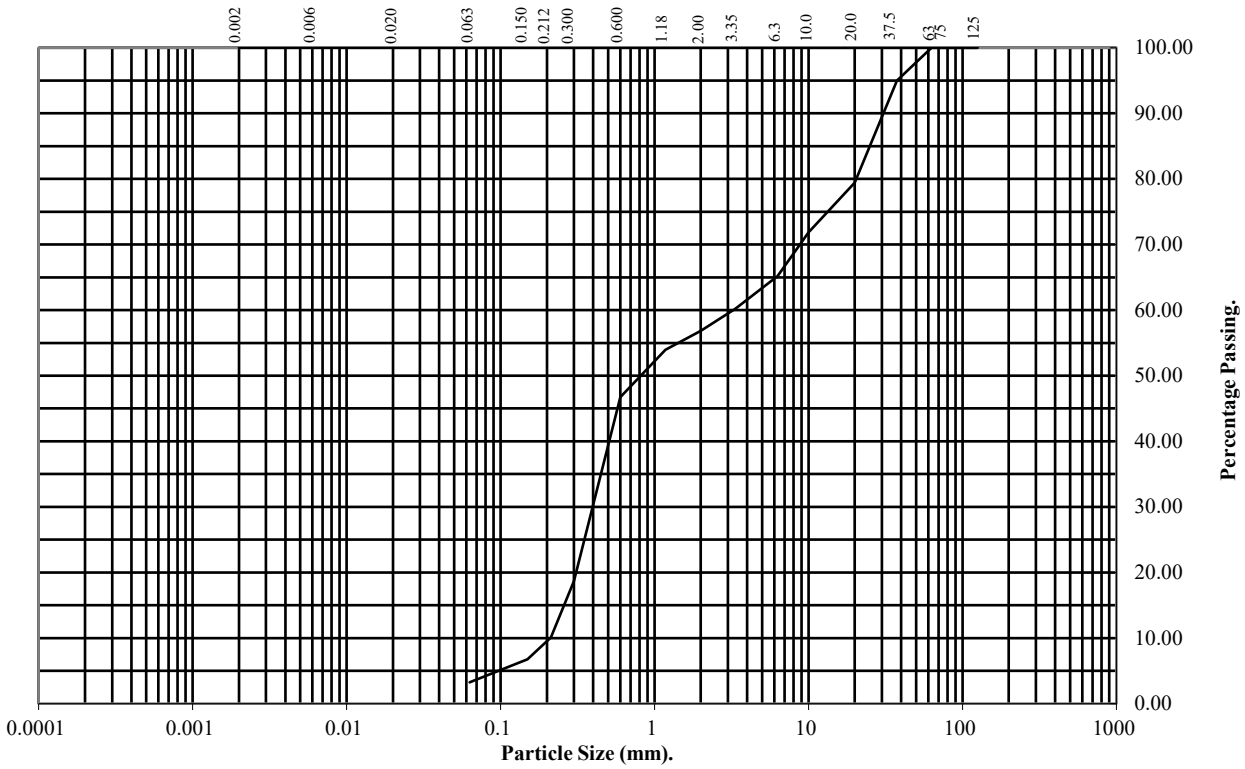
BS1377 : Part 2 : 1990

Wet Sieve, Clause 9.2

Hole Number: **SI-001** **Top Depth (m):**

Sample Number: **Base Depth(m):**

Sample Type: **Bulk**



BS Test Sieve (mm)	Percentage Passing
125	100
75	100
63	100
37.5	95
20	79
10	72
6.3	65
3.35	60
2	57
1.18	54
0.6	47
0.3	19
0.212	10
0.15	7
0.063	3

Soil Fraction	Total Percentage
Cobbles	0
Gravel	43
Sand	54
Silt/Clay	3

Remarks:
See Summary of Soil Descriptions

PARTICLE SIZE DISTRIBUTION TEST

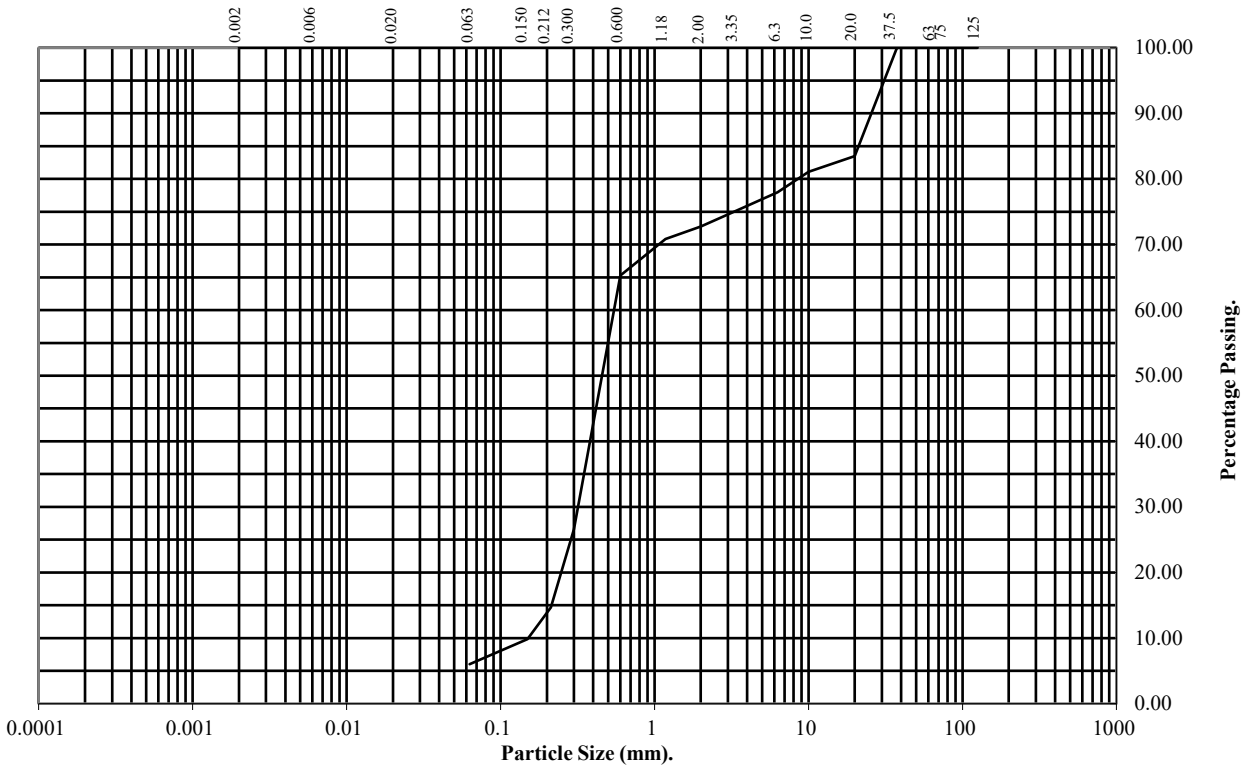
BS1377 : Part 2 : 1990

Wet Sieve, Clause 9.2

Hole Number: **SI-002** **Top Depth (m):**

Sample Number: **Base Depth(m):**

Sample Type: **Bulk**



BS Test Sieve (mm)	Percentage Passing
125	100
75	100
63	100
37.5	100
20	83
10	81
6.3	78
3.35	75
2	73
1.18	71
0.6	65
0.3	27
0.212	15
0.15	10
0.063	6

Soil Fraction	Total Percentage
Cobbles	0
Gravel	27
Sand	67
Silt/Clay	6

Remarks:
See Summary of Soil Descriptions

UKAS TESTING 4043

PSL PROFESSIONAL SOILS LABORATORY A PHENNA GROUP COMPANY

Don Street

Contract No: PSL23/0380

Client Ref: 003880

PARTICLE SIZE DISTRIBUTION TEST

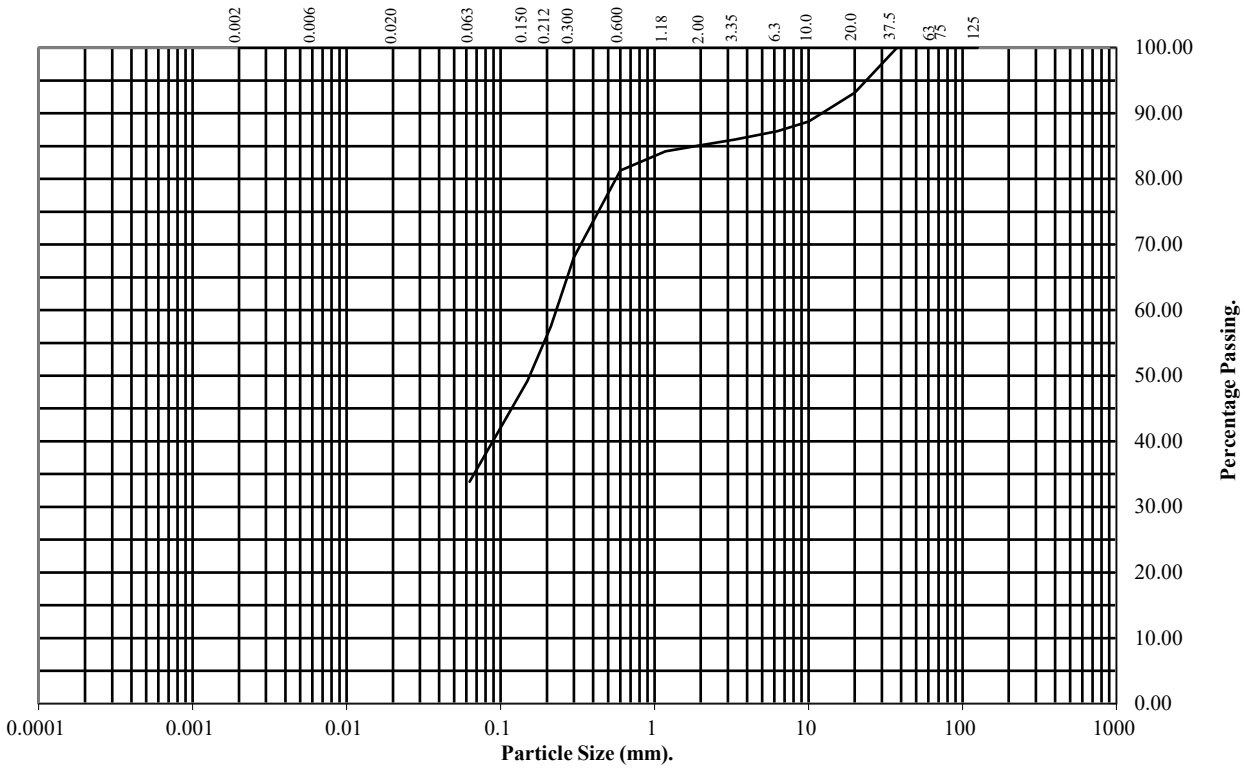
BS1377 : Part 2 : 1990

Wet Sieve, Clause 9.2

Hole Number: **SI-003** **Top Depth (m):**

Sample Number: **Base Depth(m):**

Sample Type: **Bulk**



BS Test Sieve (mm)	Percentage Passing
125	100
75	100
63	100
37.5	100
20	93
10	89
6.3	87
3.35	86
2	85
1.18	84
0.6	81
0.3	68
0.212	58
0.15	49
0.063	34

Soil Fraction	Total Percentage
Cobbles	0
Gravel	15
Sand	51
Silt/Clay	34

Remarks:
See Summary of Soil Descriptions

PARTICLE SIZE DISTRIBUTION TEST

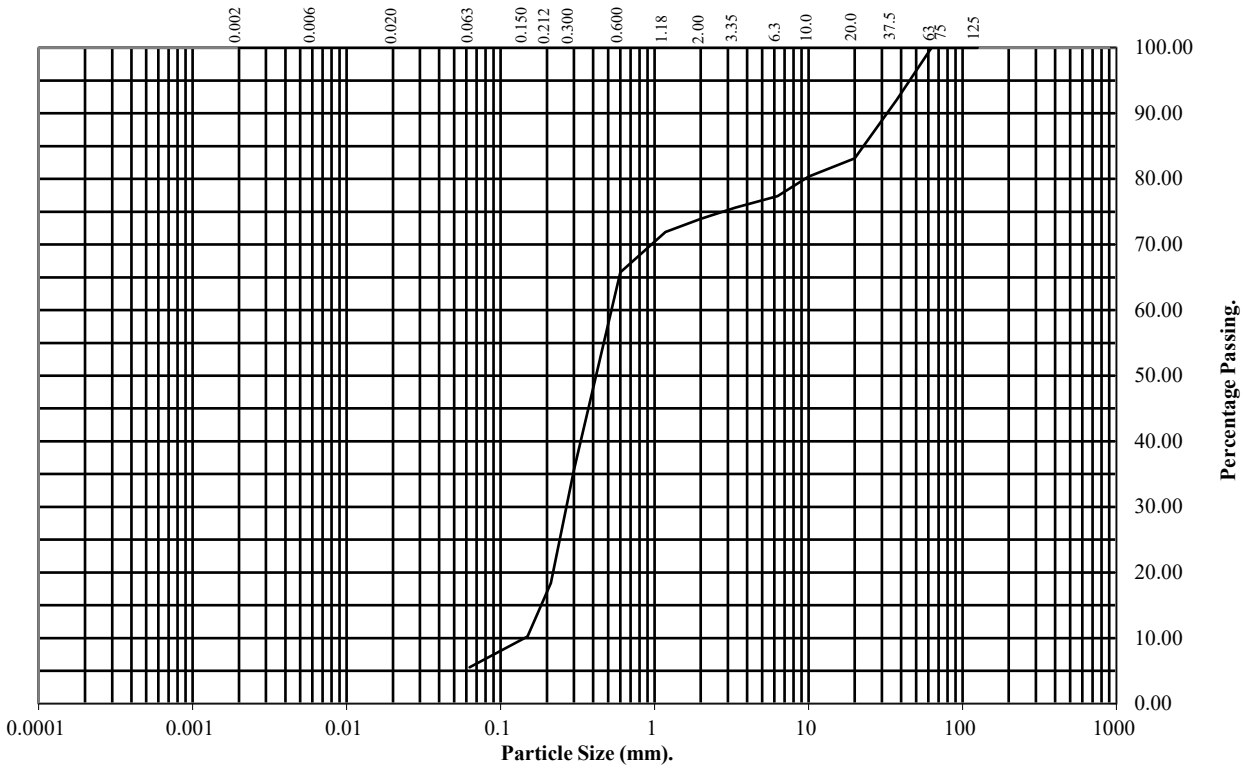
BS1377 : Part 2 : 1990

Wet Sieve, Clause 9.2

Hole Number: **SI-004** **Top Depth (m):**

Sample Number: **Base Depth(m):**

Sample Type: **Bulk**



BS Test Sieve (mm)	Percentage Passing
125	100
75	100
63	100
37.5	92
20	83
10	80
6.3	77
3.35	76
2	74
1.18	72
0.6	66
0.3	36
0.212	18
0.15	10
0.063	6

Soil Fraction	Total Percentage
Cobbles	0
Gravel	26
Sand	68
Silt/Clay	6

Remarks:
See Summary of Soil Descriptions

PARTICLE SIZE DISTRIBUTION TEST

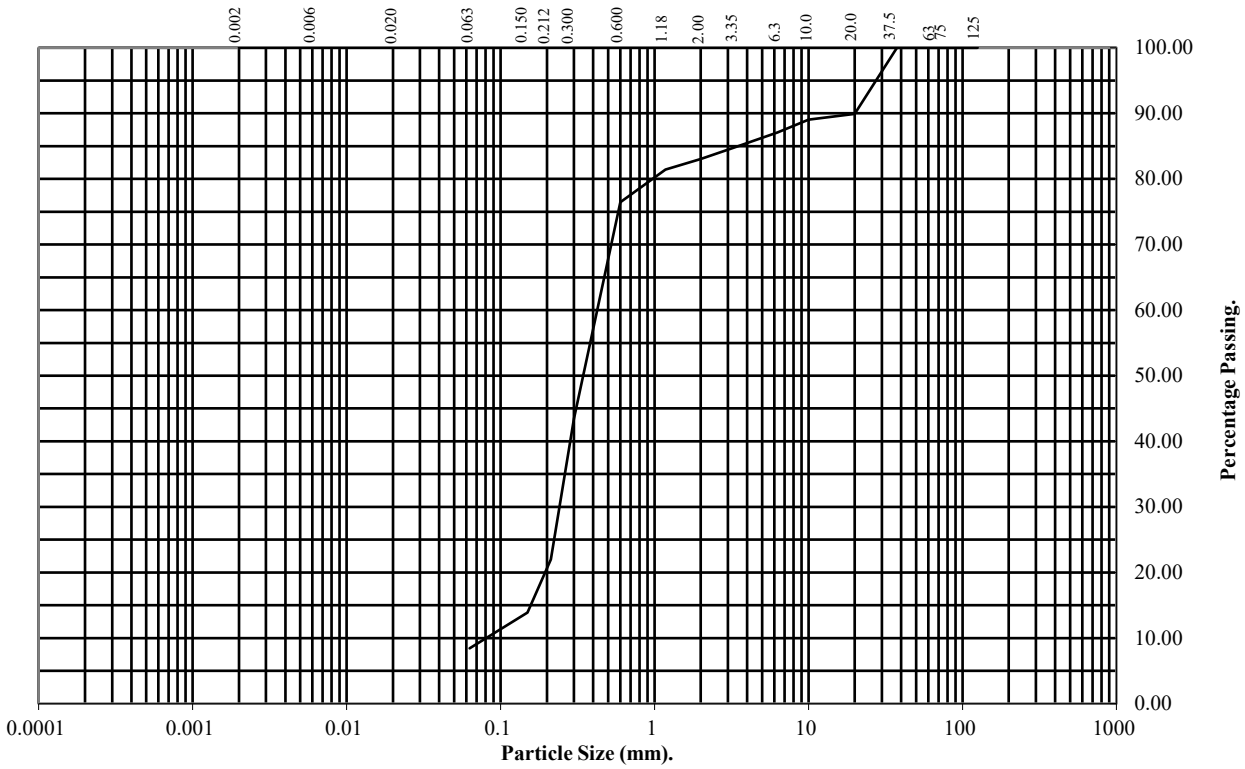
BS1377 : Part 2 : 1990

Wet Sieve, Clause 9.2

Hole Number: **SI-005** **Top Depth (m):**

Sample Number: **Base Depth(m):**

Sample Type: **Bulk**



BS Test Sieve (mm)	Percentage Passing
125	100
75	100
63	100
37.5	100
20	90
10	89
6.3	87
3.35	85
2	83
1.18	81
0.6	76
0.3	43
0.212	22
0.15	14
0.063	8

Soil Fraction	Total Percentage
Cobbles	0
Gravel	17
Sand	75
Silt/Clay	8

Remarks:
See Summary of Soil Descriptions

PARTICLE SIZE DISTRIBUTION TEST

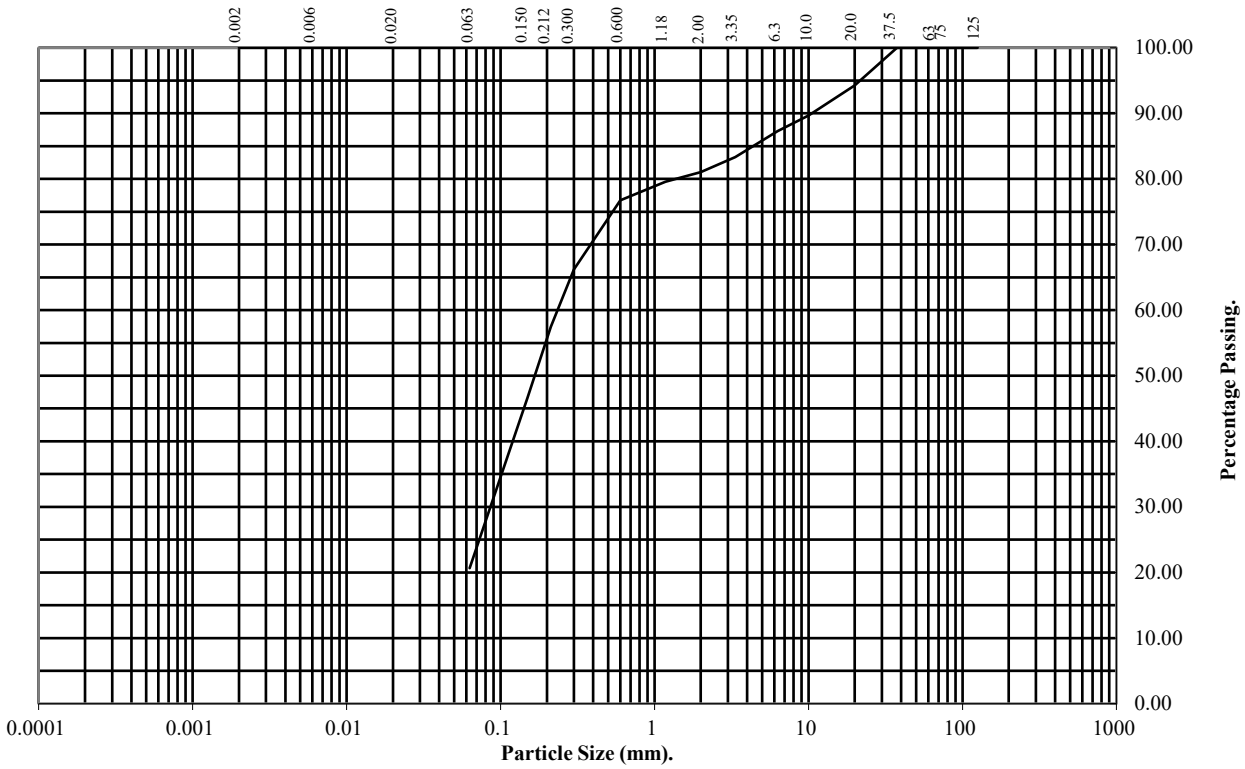
BS1377 : Part 2 : 1990

Wet Sieve, Clause 9.2

Hole Number: **SI-006** **Top Depth (m):**

Sample Number: **Base Depth(m):**

Sample Type: **Bulk**



BS Test Sieve (mm)	Percentage Passing
125	100
75	100
63	100
37.5	100
20	94
10	90
6.3	87
3.35	83
2	81
1.18	80
0.6	77
0.3	66
0.212	57
0.15	47
0.063	21

Soil Fraction	Total Percentage
Cobbles	0
Gravel	19
Sand	60
Silt/Clay	21

Remarks:
See Summary of Soil Descriptions

PARTICLE SIZE DISTRIBUTION TEST

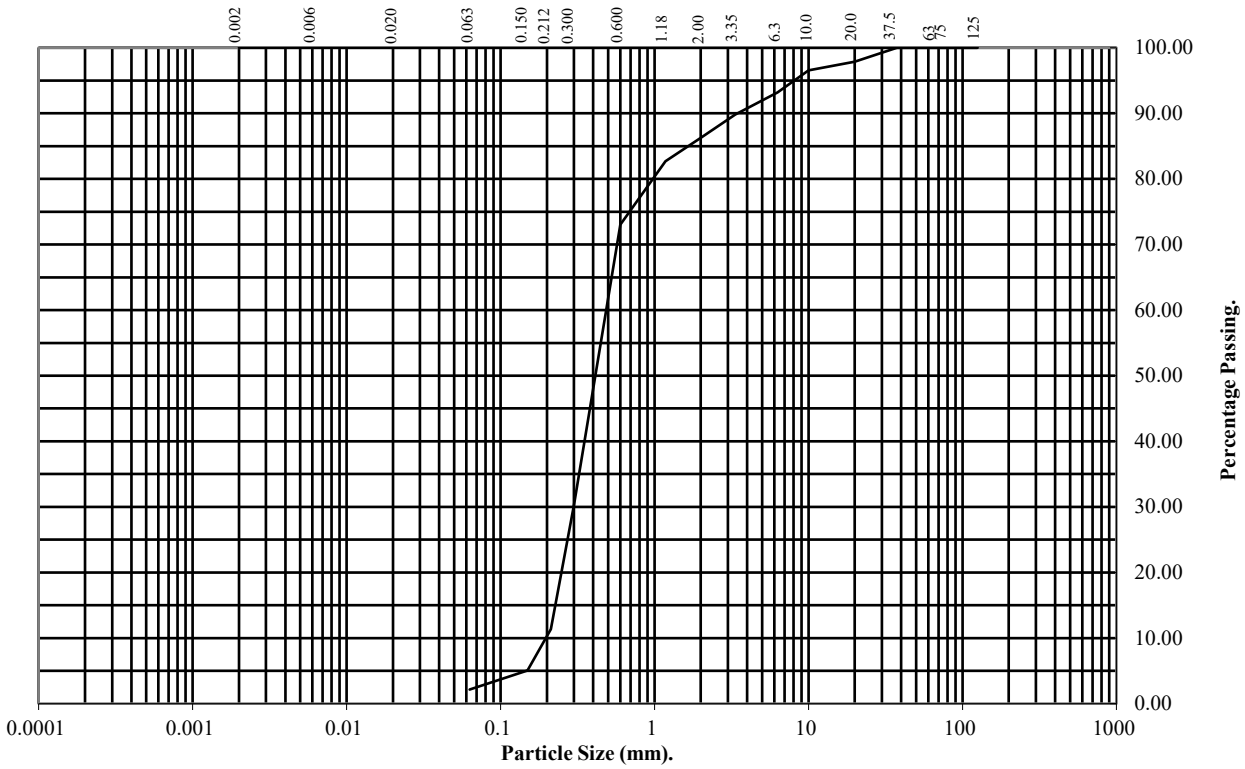
BS1377 : Part 2 : 1990

Wet Sieve, Clause 9.2

Hole Number: **SI-007** **Top Depth (m):**

Sample Number: **Base Depth(m):**

Sample Type: **Bulk**



BS Test Sieve (mm)	Percentage Passing
125	100
75	100
63	100
37.5	100
20	98
10	97
6.3	93
3.35	90
2	86
1.18	83
0.6	73
0.3	30
0.212	11
0.15	5
0.063	2

Soil Fraction	Total Percentage
Cobbles	0
Gravel	14
Sand	84
Silt/Clay	2

Remarks:
See Summary of Soil Descriptions

PARTICLE SIZE DISTRIBUTION TEST

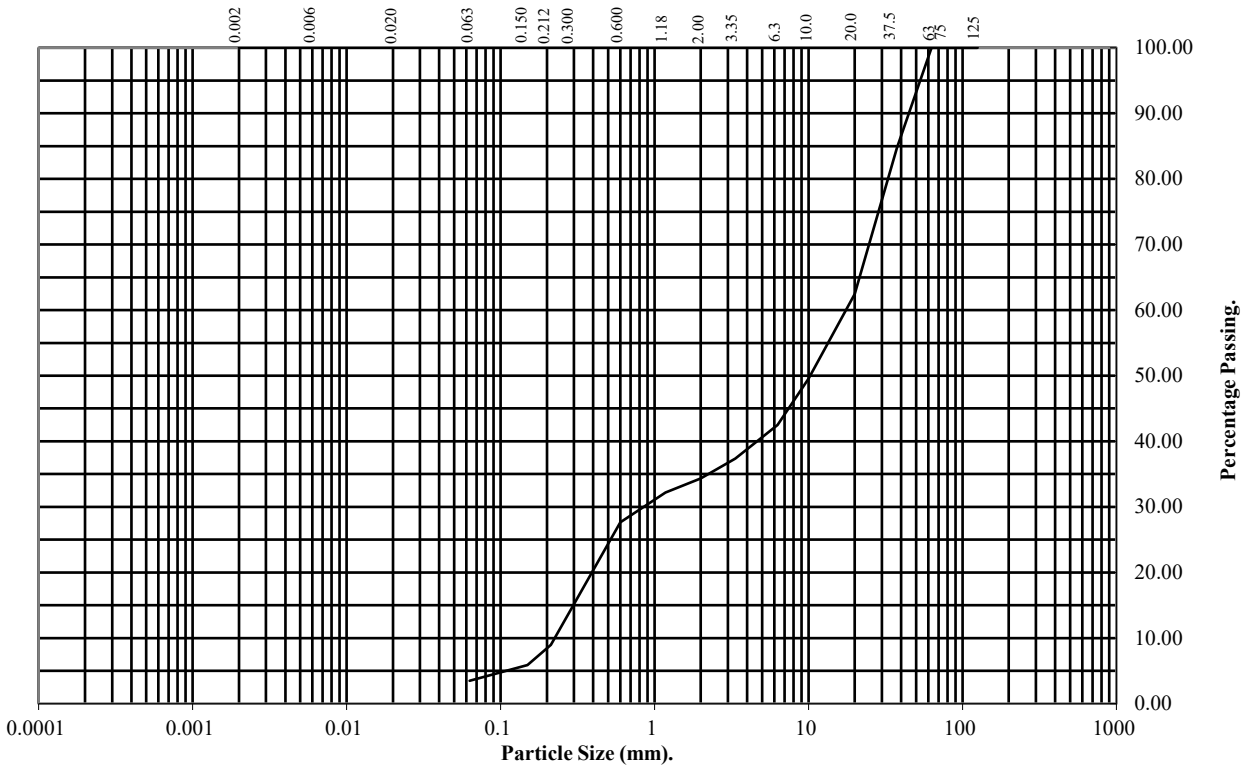
BS1377 : Part 2 : 1990

Wet Sieve, Clause 9.2

Hole Number: **SI-008** **Top Depth (m):**

Sample Number: **Base Depth(m):**

Sample Type: **Bulk**



BS Test Sieve (mm)	Percentage Passing
125	100
75	100
63	100
37.5	85
20	62
10	50
6.3	42
3.35	37
2	34
1.18	32
0.6	28
0.3	15
0.212	9
0.15	6
0.063	3

Soil Fraction	Total Percentage
Cobbles	0
Gravel	66
Sand	31
Silt/Clay	3

Remarks:
See Summary of Soil Descriptions

PARTICLE SIZE DISTRIBUTION TEST

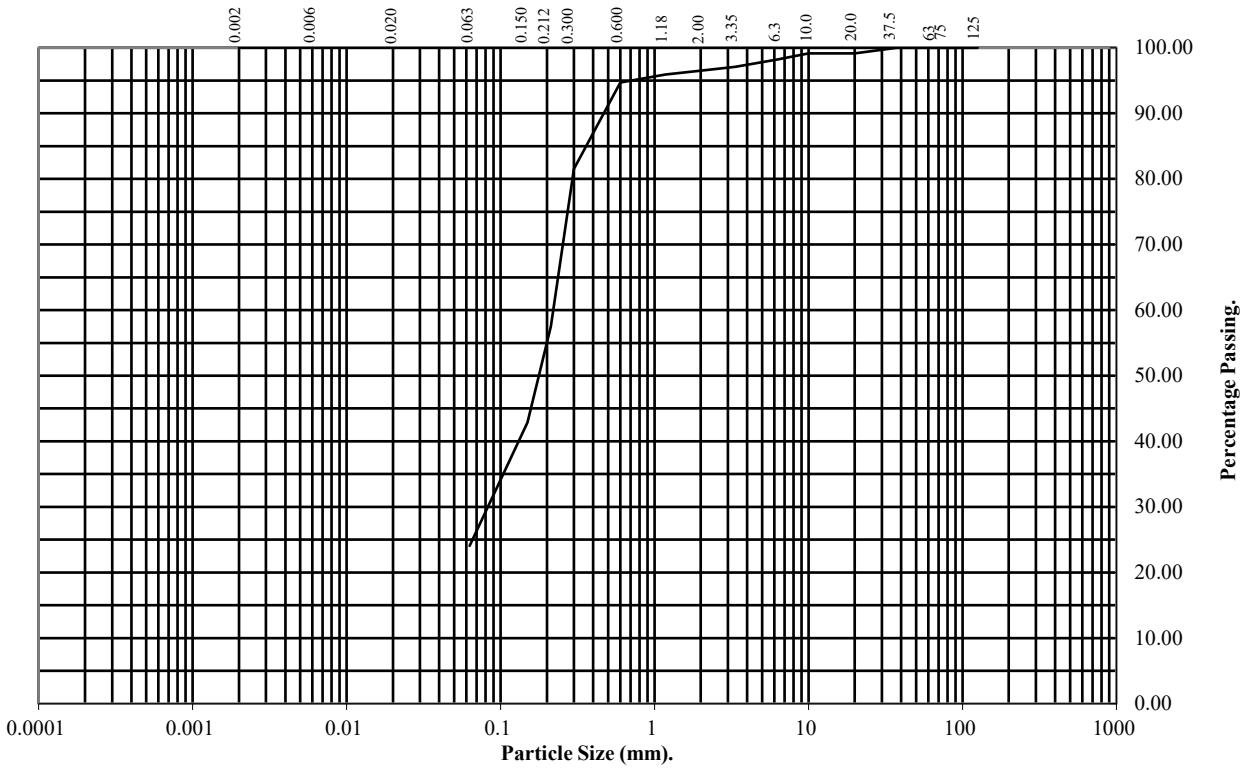
BS1377 : Part 2 : 1990

Wet Sieve, Clause 9.2

Hole Number: **SI-009** **Top Depth (m):**

Sample Number: **Base Depth(m):**

Sample Type: **Bulk**



BS Test Sieve (mm)	Percentage Passing
125	100
75	100
63	100
37.5	100
20	99
10	99
6.3	98
3.35	97
2	96
1.18	96
0.6	95
0.3	82
0.212	58
0.15	43
0.063	24

Soil Fraction	Total Percentage
Cobbles	0
Gravel	4
Sand	72
Silt/Clay	24

Remarks:
See Summary of Soil Descriptions

PARTICLE SIZE DISTRIBUTION TEST

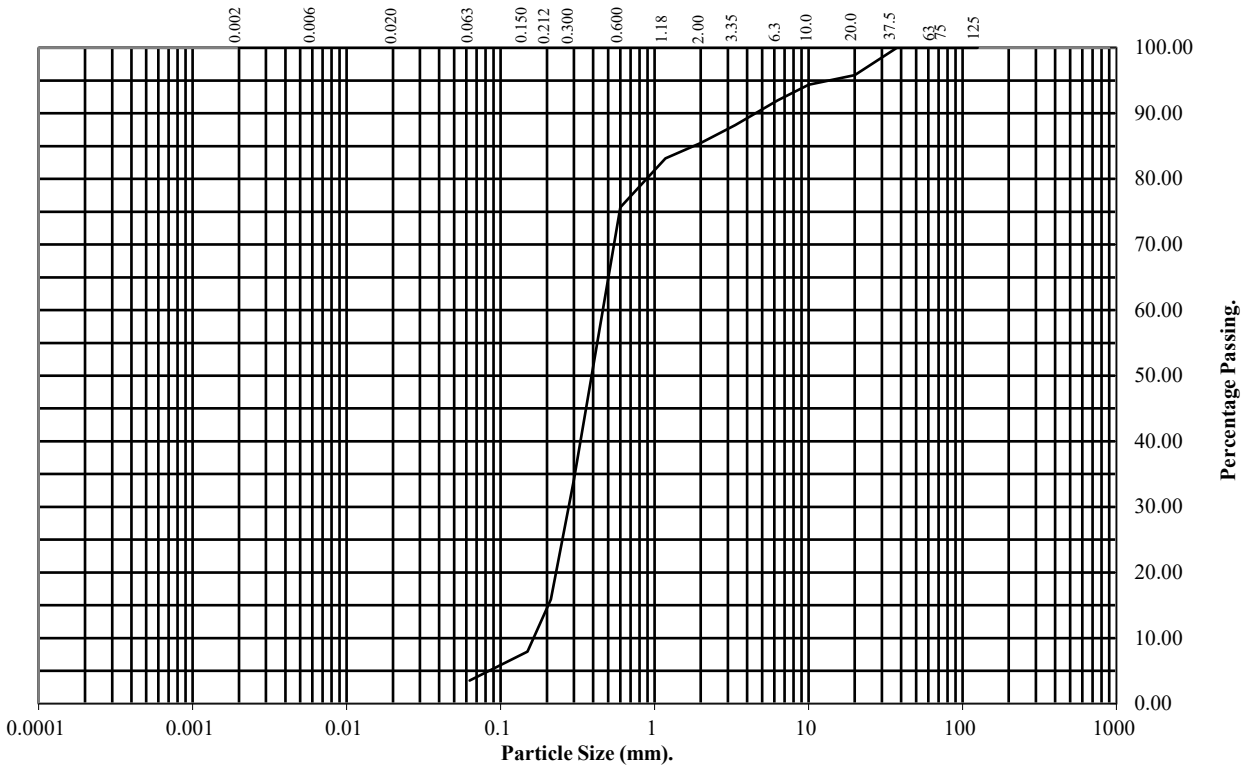
BS1377 : Part 2 : 1990

Wet Sieve, Clause 9.2

Hole Number: **SI-010** **Top Depth (m):**

Sample Number: **Base Depth(m):**

Sample Type: **Bulk**



BS Test Sieve (mm)	Percentage Passing
125	100
75	100
63	100
37.5	100
20	96
10	94
6.3	92
3.35	88
2	85
1.18	83
0.6	76
0.3	34
0.212	16
0.15	8
0.063	4

Soil Fraction	Total Percentage
Cobbles	0
Gravel	15
Sand	81
Silt/Clay	4

Remarks:
See Summary of Soil Descriptions

PARTICLE SIZE DISTRIBUTION TEST

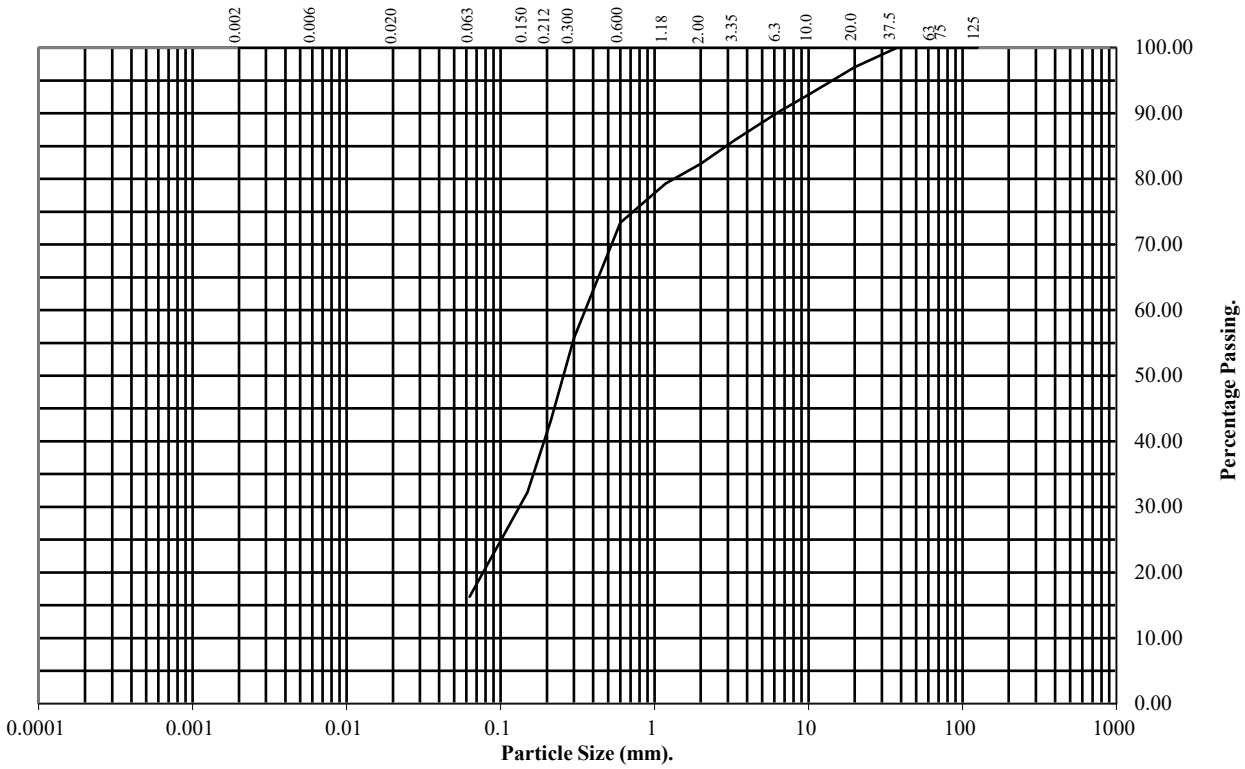
BS1377 : Part 2 : 1990

Wet Sieve, Clause 9.2

Hole Number: **SI-011** **Top Depth (m):**

Sample Number: **Base Depth(m):**

Sample Type: **Bulk**



BS Test Sieve (mm)	Percentage Passing
125	100
75	100
63	100
37.5	100
20	97
10	93
6.3	90
3.35	86
2	82
1.18	79
0.6	73
0.3	56
0.212	43
0.15	32
0.063	16

Soil Fraction	Total Percentage
Cobbles	0
Gravel	18
Sand	66
Silt/Clay	16

Remarks:
See Summary of Soil Descriptions

LABORATORY REPORT

Contract Number: PSL23/0599

Report Date: 07 February 2023

Client's Reference: 003945

Client Name: E3P
Taylor Road
Urmston
Manchester
M41 7JQ

For the attention of: Matt Dee/Georgia Calvert

Contract Title: Don Street

Date Received: 2/2/2023
Date Commenced: 2/2/2023
Date Completed: 07/02/2023

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DN4 0AR
Tel: 01302 768098
Email: rberriman@prosoils.co.uk
awatkins@prosoils.co.uk

SUMMARY OF LABORATORY SOIL DESCRIPTIONS

Hole Number	Sample Number	Sample Type	Top Depth m	Base Depth m	Description of Sample
PARCEL D MC 101			0.50		Brown gravelly slightly sandy CLAY
PARCEL D MC 101			1.50		Brown slightly gravelly sandy CLAY
PARCEL D MC 102			0.30		Brown slightly gravelly sandy CLAY
PARCEL D MC 102			1.50		Brown slightly gravelly sandy CLAY
PARCEL D MC 103			0.50		MADE GROUND brown very gravelly sandy clay
PARCEL D MC 103			2.00		MADE GROUND brown very gravelly sandy clay
PARCEL D MC 104			0.30		Brown very gravelly sandy CLAY
PARCEL D MC 104			2.00		Brown gravelly sandy CLAY
PARCEL D MC 105			0.40		Brown gravelly sandy CLAY
PARCEL D MC 105			1.50		Brown gravelly sandy CLAY

UKAS TESTING 4043

PSL PROFESSIONAL SOILS LABORATORY A PHENNA GROUP COMPANY

Don Street

Contract No:

PSL23/0599

Client Ref:

003945

SUMMARY OF SOIL CLASSIFICATION TESTS

(BS1377 : PART 2 : 1990)

Hole Number	Sample Number	Sample Type	Top Depth m	Base Depth m	Moisture Content % Clause 3.2	Particle Density Mg/m^3 Clause 8.2	Liquid Limit % Clause 4.3/4	Plastic Limit % Clause 5.3	Plasticity Index % Clause 5.4	Passing .425mm %	Remarks
PARCEL D MC 101			0.50		33						
PARCEL D MC 101			1.50		18						
PARCEL D MC 102			0.30		30						
PARCEL D MC 102			1.50		20						
PARCEL D MC 103			0.50		21						
PARCEL D MC 103			2.00		17						
PARCEL D MC 104			0.30		28						
PARCEL D MC 104			2.00		21						
PARCEL D MC 105			0.40		24						
PARCEL D MC 105			1.50		21						

SYMBOLS : **NP : Non Plastic** *** : Liquid Limit and Plastic Limit Wet Sieved.**

UKAS TESTING 4043

PSL PROFESSIONAL SOILS LABORATORY A PHENNA GROUP COMPANY

Don Street

Contract No:

PSL23/0599

Client Ref:

003945

LABORATORY REPORT

Contract Number: PSL23/1056

Report Date: 17 March 2023

Client's Reference: 004166

Client Name: E3P
Taylor Road
Urmston
Manchester
M41 7JQ

For the attention of: Matt Dee/Georgia Calvert

Contract Title: Don Street

Date Received: 22/2/2023
Date Commenced: 22/2/2023
Date Completed: 17/3/2023

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Checked and Approved Signatories:

L Knight
(Assistant Laboratory Manager)

R Berriman
(Associate Director)

S Royle
(Laboratory Manager)

A Watkins
(Managing Director)

S Eyre
(Senior Technical Coordinator)

T Watkins
(Senior Technician)

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Doncaster,
DN4 0AR
Tel: 01302 768098
Email: rberriman@prosoils.co.uk
awatkins@prosoils.co.uk

SUMMARY OF LABORATORY SOIL DESCRIPTIONS

Hole Number	Sample Number	Sample Type	Top Depth m	Base Depth m	Description of Sample
003 Parcel D+E					Class 1A
004 Parcel D+E					Class 1A

UKAS TESTING 4043

PSL PROFESSIONAL SOILS LABORATORY A PHENNA GROUP COMPANY

Don Street

Contract No: PSL23/1056

Client Ref: 004166

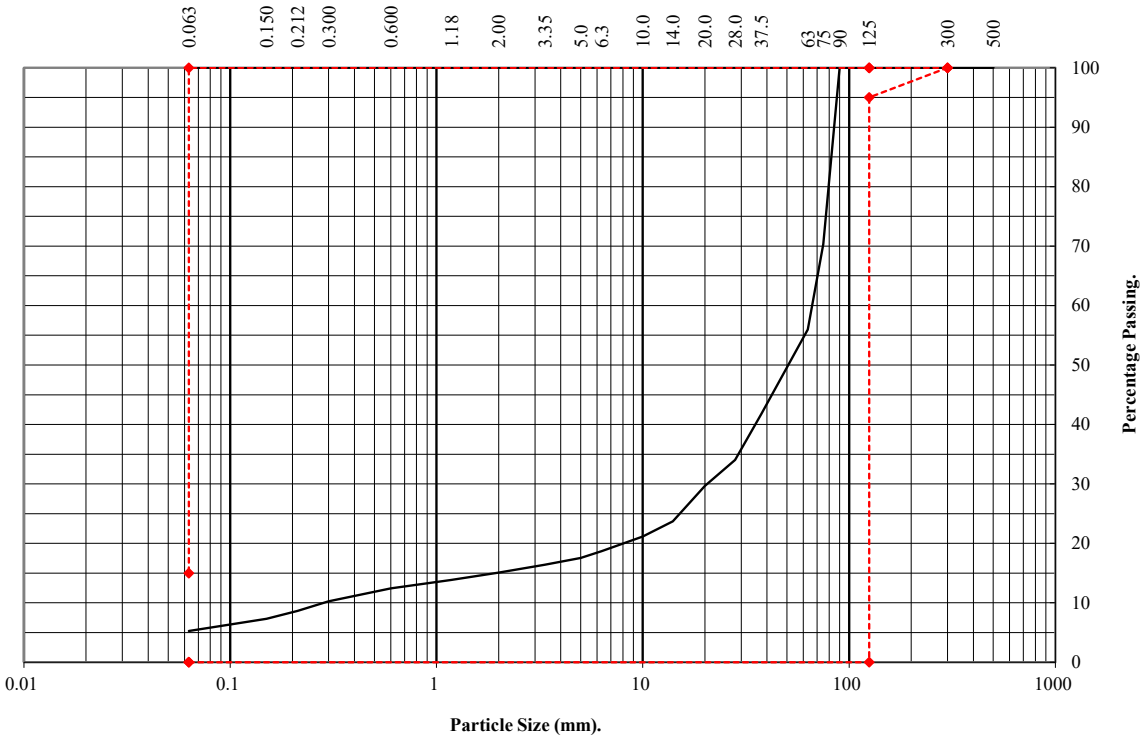
PARTICLE SIZE DISTRIBUTION TEST

BS1377:Part 2:1990

Wet Sieve: Clause 9.2

Classification for Acceptable Earthworks Materials

Sample Reference **003 Parcel D+E** **Classification Type:** **1A**



BS Test Sieve mm	Percentage Passing %	Table 6/2 Grading Requirements Lower	Upper
500	100		
300	100	100	100
125	100	95	100
90	100		
75	70		
63	56		
37.5	42		
28	34		
20	30		
14	24		
10	21		
6.3	19		
5	18		
3.35	16		
2	15		
1.18	14		
0.6	12		
0.3	10		
0.212	9		
0.15	7		
0.063	5	0	15

Remarks:
SHW Series 600 Table 6/2 :
Class 1A

UKAS TESTING 4043

PSL PROFESSIONAL SOILS LABORATORY A PHENNA GROUP COMPANY

Don Street

Contract No.:
PSL23/1056
Client Ref:
4166

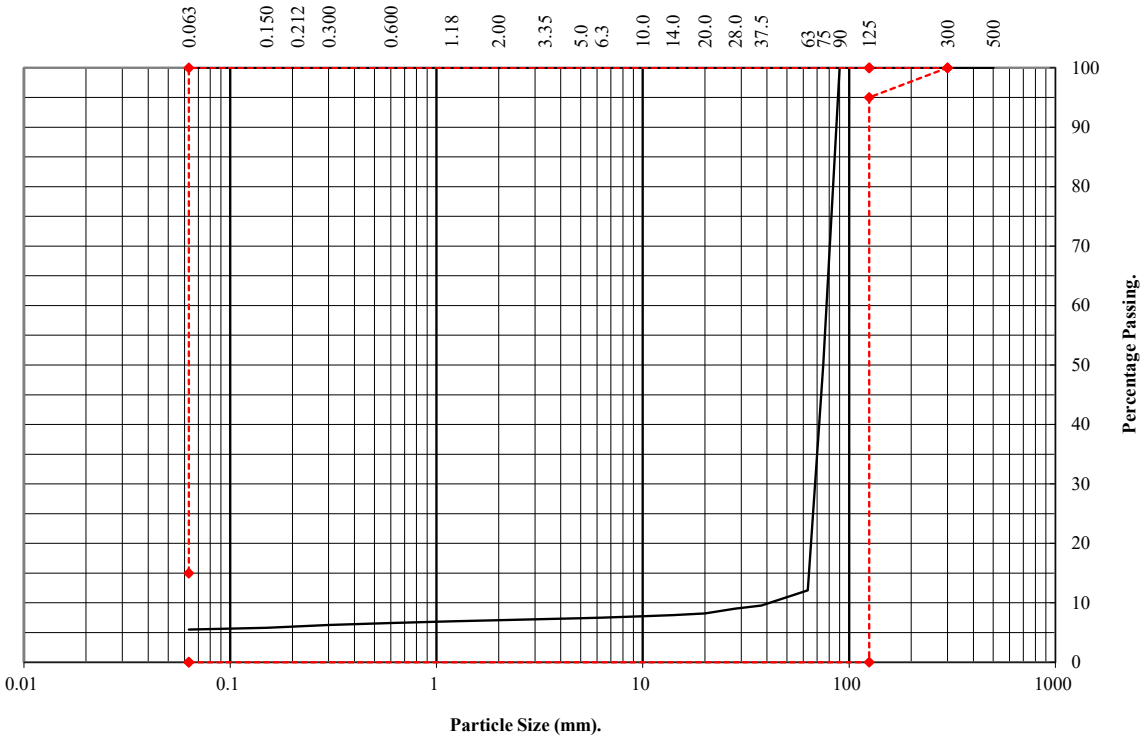
PARTICLE SIZE DISTRIBUTION TEST

BS1377:Part 2:1990

Wet Sieve: Clause 9.2

Classification for Acceptable Earthworks Materials

Sample Reference **004 Parcel D+E** **Classification Type:** **1A**



BS Test Sieve mm	Percentage Passing %	Table 6/2 Grading Requirements Lower	Upper
500	100		
300	100	100	100
125	100	95	100
90	100		
75	50		
63	12		
37.5	10		
28	9		
20	8		
14	8		
10	8		
6.3	7		
5	7		
3.35	7		
2	7		
1.18	7		
0.6	7		
0.3	6		
0.212	6		
0.15	6		
0.063	6	0	15

Remarks:
SHW Series 600 Table 6/2 :
Class 1A

UKAS TESTING 4043

PSL PROFESSIONAL SOILS LABORATORY A PHENNA GROUP COMPANY

Don Street

Contract No.:
PSL23/1056
Client Ref:
4166

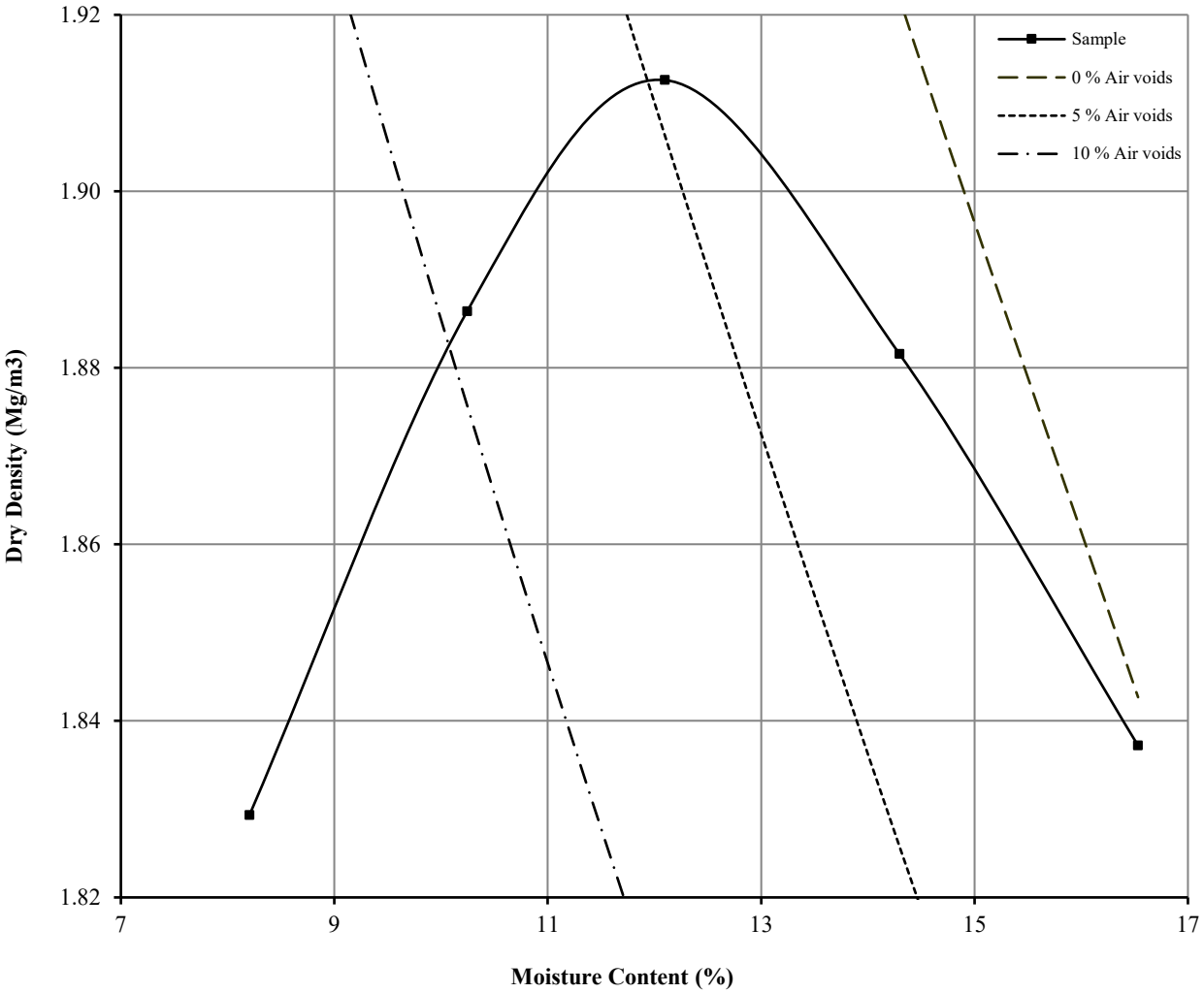
DRY DENSITY / MOISTURE CONTENT RELATIONSHIP

Non compliance with BS 1377 : Part 4 : Clause 3.6 : 1990

Hole Number: 003 Parcel D+E **Top Depth (m) :**

Sample Number: **Base Depth (m) :**

Sample Type:



Initial Moisture Content:		10	Method of Compaction:	4.5kg	Separate Samples
Particle Density (Mg/m3):	2.65	Assumed	Material Retained on 37.5 mm Test Sieve (%):		58
Maximum Dry Density (Mg/m3):		1.91	Material Retained on 20.0 mm Test Sieve (%):		12
Optimum Moisture Content (%):		12			
Remarks See summary of soil descriptions					

LABORATORY REPORT

Contract Number: PSL23/1434

Report Date: 17 April 2023

Client's Reference: 004288

Client Name: E3P
Taylor Road
Urmston
Manchester
M41 7JQ

For the attention of: Matt Dee/Georgia Calvert

Contract Title: Don Street

Date Received: 8/3/2023
Date Commenced: 8/3/2023
Date Completed: 17/4/2023

Notes: Opinions and Interpretations are outside the UKAS Accreditation

A copy of the Laboratory Schedule of accredited tests as issued by UKAS is attached to this report. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced other than in full, without the prior written approval of the laboratory.

Checked and Approved Signatories:

L Knight (Assistant Laboratory Manager)
R Berriman (Associate Director)
S Royle (Laboratory Manager)
A Watkins (Managing Director)
S Eyre (Senior Technical Coordinator)
T Watkins (Senior Technician)

5 – 7 Hexthorpe Road,
Hexthorpe,
Doncaster,
DN4 0AR
Tel: 01302 768098
Email: rberriman@prosoils.co.uk
awatkins@prosoils.co.uk

SUMMARY OF LABORATORY SOIL DESCRIPTIONS

Hole Number	Sample Number	Sample Type	Top Depth m	Base Depth m	Description of Sample
Allotment 101		Bulk	1.00		Brown slightly gravelly slightly silty SAND.
Allotment 103		Bulk	0.30		MADE GROUND dark grey very gravelly clayey silty SAND.

UKAS TESTING 4043

PSL PROFESSIONAL SOILS LABORATORY A PHENNA GROUP COMPANY

Don Street

Contract No:

PSL23/1434

Client Ref:

004288

PARTICLE SIZE DISTRIBUTION TEST

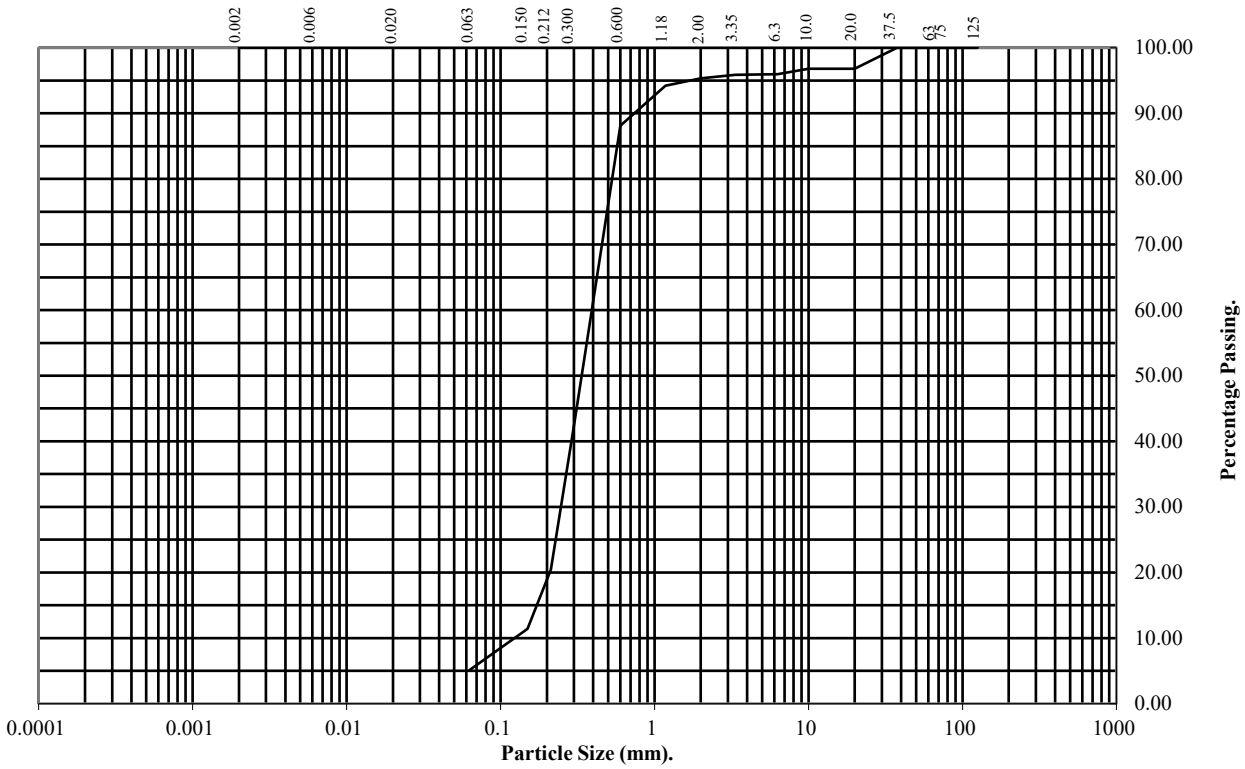
BS1377 : Part 2 : 1990

Wet Sieve, Clause 9.2

Hole Number: **Allotment 101** **Top Depth (m):** **1.00**

Sample Number: **Base Depth(m):**

Sample Type: **Bulk**



BS Test Sieve (mm)	Percentage Passing
125	100
75	100
63	100
37.5	100
20	97
10	97
6.3	96
3.35	96
2	95
1.18	94
0.6	88
0.3	42
0.212	20
0.15	11
0.063	5

Soil Fraction	Total Percentage
Cobbles	0
Gravel	5
Sand	90
Silt/Clay	5

Remarks:
See Summary of Soil Descriptions

UKAS TESTING 4043

PSL PROFESSIONAL SOILS LABORATORY A PHENNA GROUP COMPANY

Don Street

Contract No: PSL23/1434

Client Ref: 004288

PARTICLE SIZE DISTRIBUTION TEST

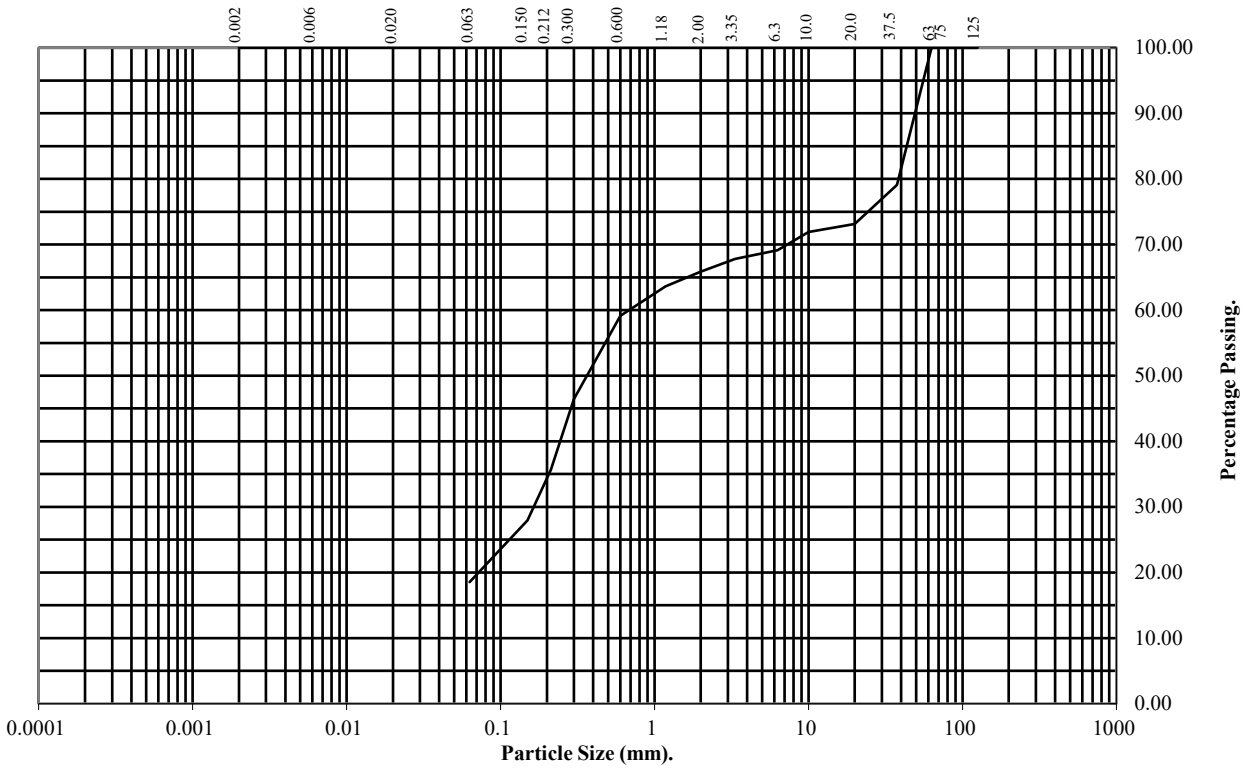
BS1377 : Part 2 : 1990

Wet Sieve, Clause 9.2

Hole Number: **Allotment 103** **Top Depth (m):** **0.30**

Sample Number: **Base Depth(m):**

Sample Type: **Bulk**



BS Test Sieve (mm)	Percentage Passing
125	100
75	100
63	100
37.5	79
20	73
10	72
6.3	69
3.35	68
2	66
1.18	64
0.6	59
0.3	46
0.212	36
0.15	28
0.063	19

Soil Fraction	Total Percentage
Cobbles	0
Gravel	34
Sand	47
Silt/Clay	19

Remarks:
See Summary of Soil Descriptions

UKAS TESTING 4043

PSL PROFESSIONAL SOILS LABORATORY A PHENNA GROUP COMPANY

Don Street

Contract No: PSL23/1434

Client Ref: 004288

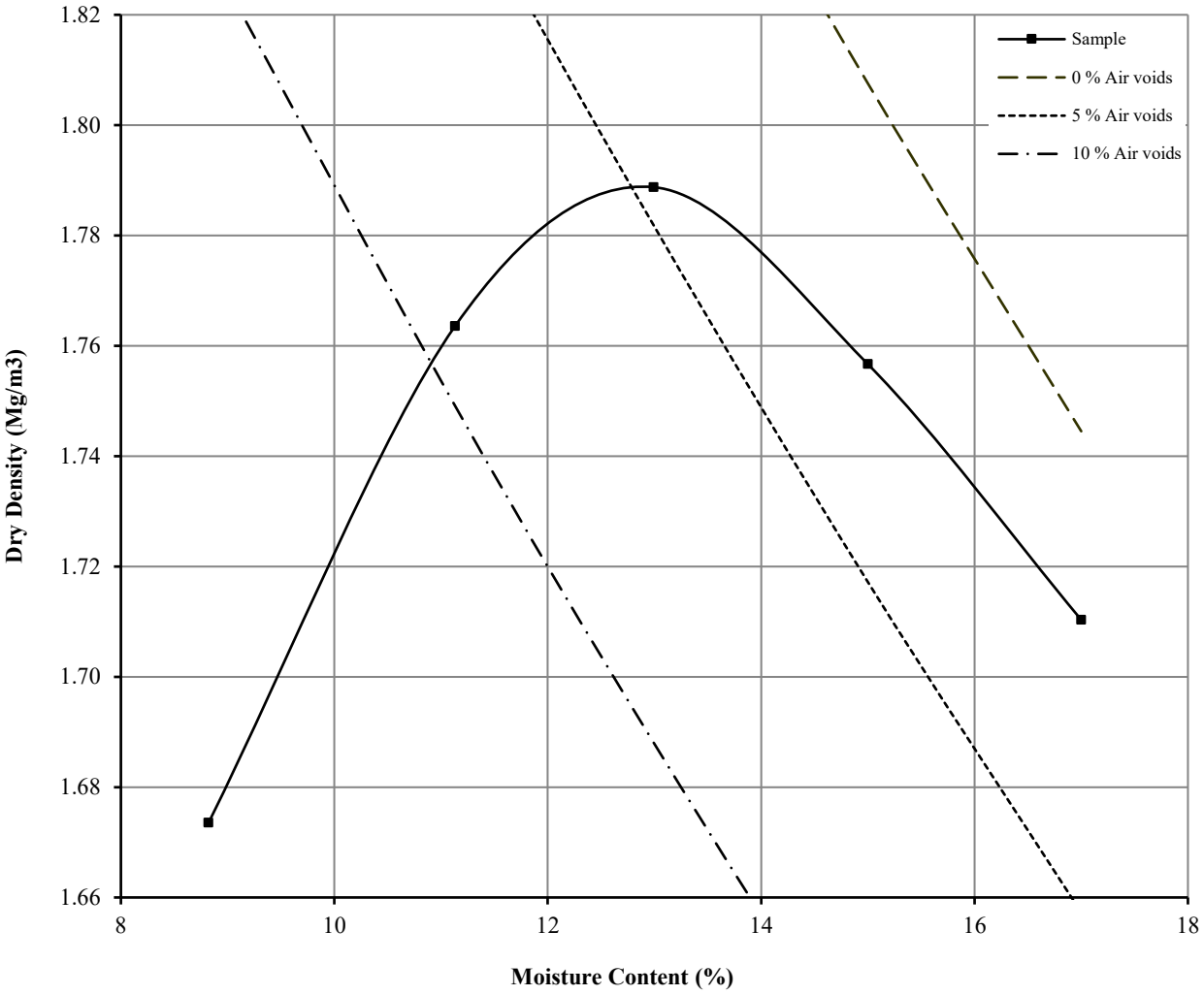
DRY DENSITY / MOISTURE CONTENT RELATIONSHIP

BS 1377 : Part 4 : Clause 3.5 : 1990

Hole Number: Allotment 101 **Top Depth (m) :** 1.00

Sample Number: **Base Depth (m) :**

Sample Type: Bulk



Initial Moisture Content:		4.9	Method of Compaction:	4.5kg	Separate Samples
Particle Density (Mg/m3):	2.48	Assumed	Material Retained on 37.5 mm Test Sieve (%):		0
Maximum Dry Density (Mg/m3):		1.79	Material Retained on 20.0 mm Test Sieve (%):		3
Optimum Moisture Content (%):		13			
Remarks See summary of soil descriptions					

UKAS TESTING 4043

PSL PROFESSIONAL SOILS LABORATORY A PHENNA GROUP COMPANY

Don Street

Contract
PSL23/1434
Client Ref
004288

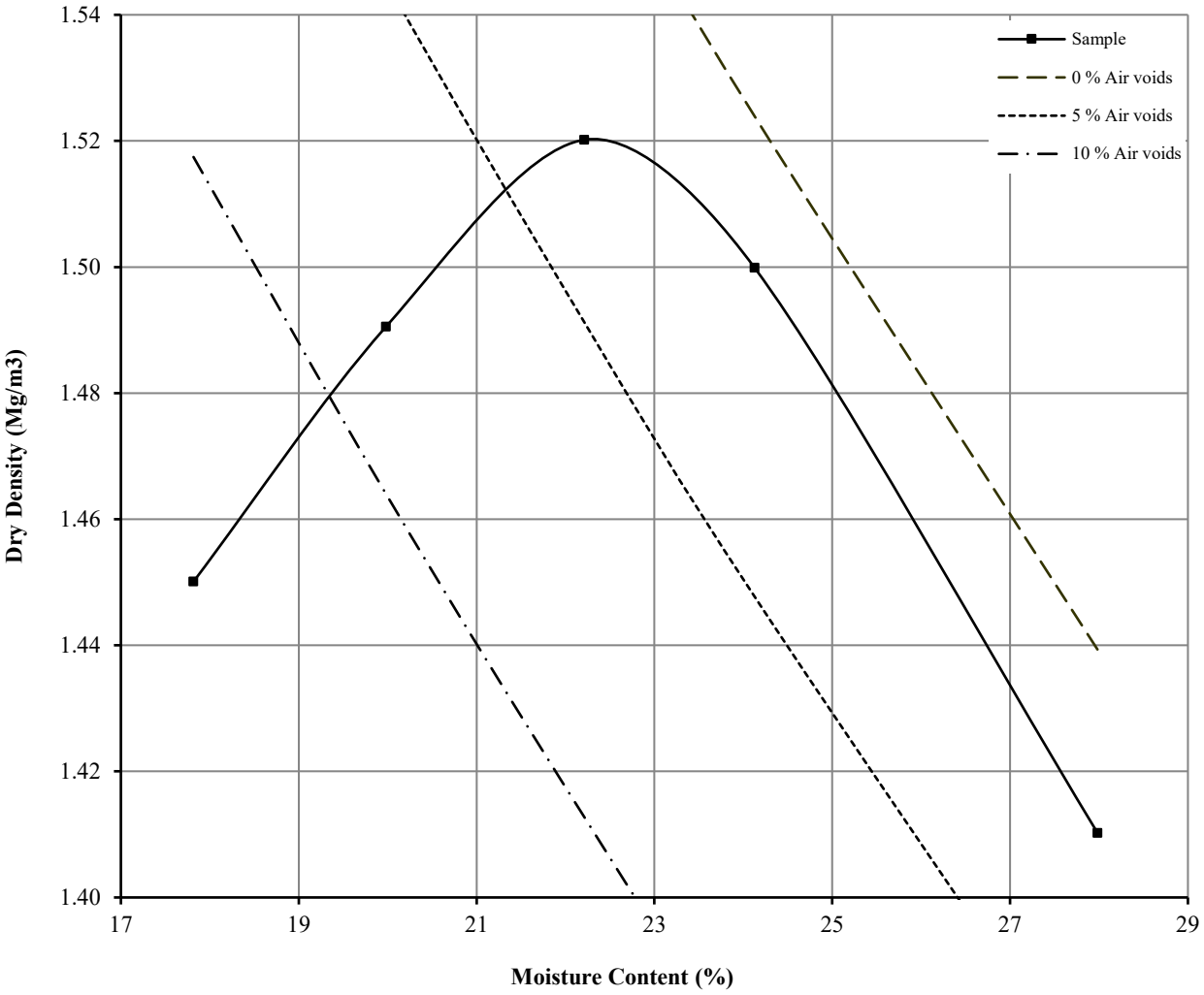
DRY DENSITY / MOISTURE CONTENT RELATIONSHIP

Non compliance with BS 1377 : Part 4 : Clause 3.6 : 1990

Hole Number: Allotment 103 **Top Depth (m) :** 0.30

Sample Number: **Base Depth (m) :**

Sample Type: Bulk



Initial Moisture Content:		28	Method of Compaction:	4.5kg	Separate Samples
Particle Density (Mg/m3):	2.41	Assumed	Material Retained on 37.5 mm Test Sieve (%):		21
Maximum Dry Density (Mg/m3):		1.52	Material Retained on 20.0 mm Test Sieve (%):		6
Optimum Moisture Content (%):		22			
Remarks See summary of soil descriptions					

UKAS TESTING 4043

PSL PROFESSIONAL SOILS LABORATORY A PHENNA GROUP COMPANY

Don Street

Contract
PSL23/1434
Client Ref
004288

LABORATORY REPORT

4043

Contract Number: PSL22/6972

Report Date: 21 November 2022

Client's Reference: 3284

Client Name: E3P
Taylor Road
Urmston
Manchester
M41 7JQ

For the attention of: Stuart Ellis/Georgia Calvert

Contract Title: Don Street

Date Received: 27/10/2022
Date Commenced: 27/10/2022
Date Completed: 21/11/2022

Notes: Opinions and Interpretations are outside the UKAS Accreditation

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Checked and Approved Signatories:

A Watkins (Director)
R Berriman (Quality Manager)
S Royle (Laboratory Manager)
L Knight (Assistant Laboratory Manager)
S Eyre (Senior Technician)
T Watkins (Senior Technician)

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e-mail: rberriman@prosoils.co.uk
awatkins@prosoils.co.uk

SUMMARY OF LABORATORY SOIL DESCRIPTIONS

Hole Number	Sample Number	Sample Type	Top Depth m	Base Depth m	Description of Sample
Bulkfill 101 Area D for Area E		Bulk			Class 2A
Bulkfill 102 Area D for Area E		Bulk			Class 2C
Bulkfill 103 Area D for Area E		Bulk			Class 2A
Bulkfill 104 Area D for Area E		Bulk			Class 2C
Bulkfill 105 Area D for Area E		Bulk			Class 1A

UKAS TESTING 4043	PSL Professional Soils Laboratory	Don Street	Contract No: PSL22/6972 Client Ref: 003284

PARTICLE SIZE DISTRIBUTION TEST

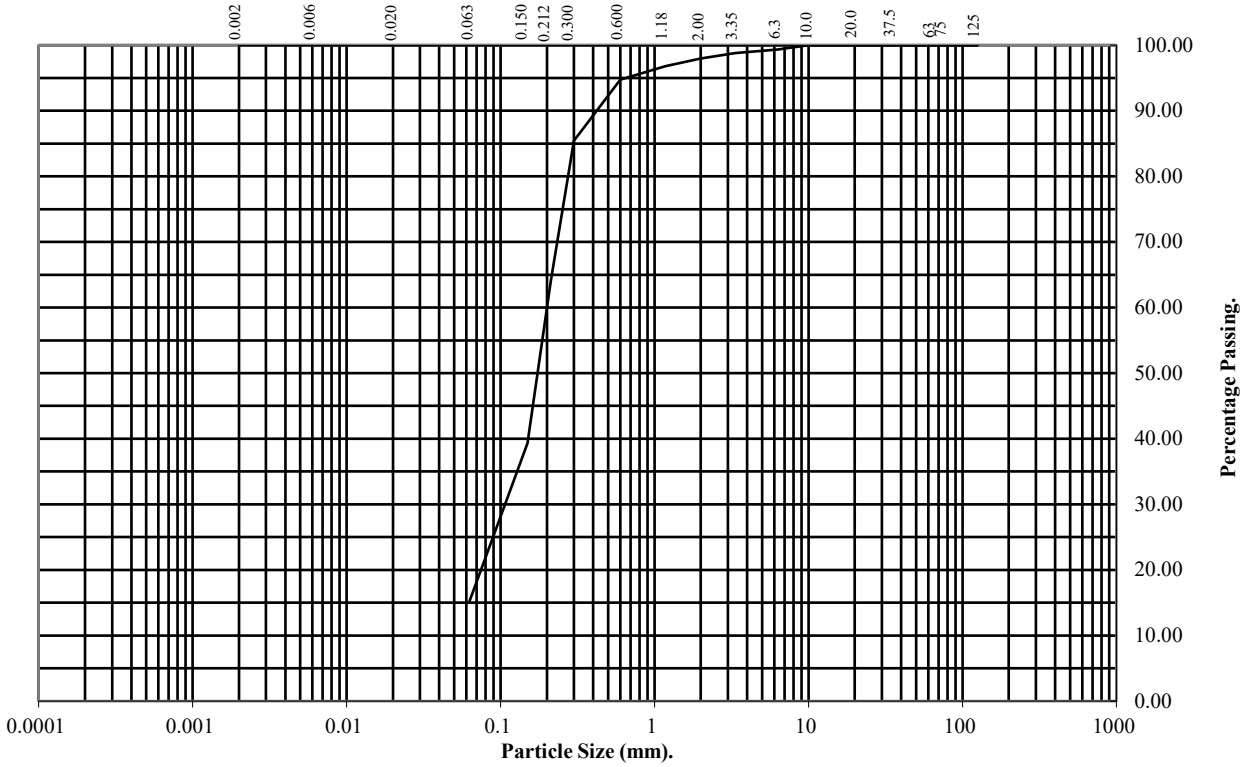
BS1377 : Part 2 : 1990

Wet Sieve, Clause 9.2

Hole Number: **Bulkfill 101 Area D for Area E** **Top Depth (m):**

Sample Number: **Base Depth(m):**

Sample Type: **Bulk**



BS Test Sieve (mm)	Percentage Passing
125	100
75	100
63	100
37.5	100
20	100
10	100
6.3	99
3.35	99
2	98
1.18	97
0.6	95
0.3	85
0.212	64
0.15	39
0.063	15

Soil Fraction	Total Percentage
Cobbles	0
Gravel	2
Sand	83
Silt/Clay	15

Remarks:

See Summary of Soil Descriptions

PARTICLE SIZE DISTRIBUTION TEST

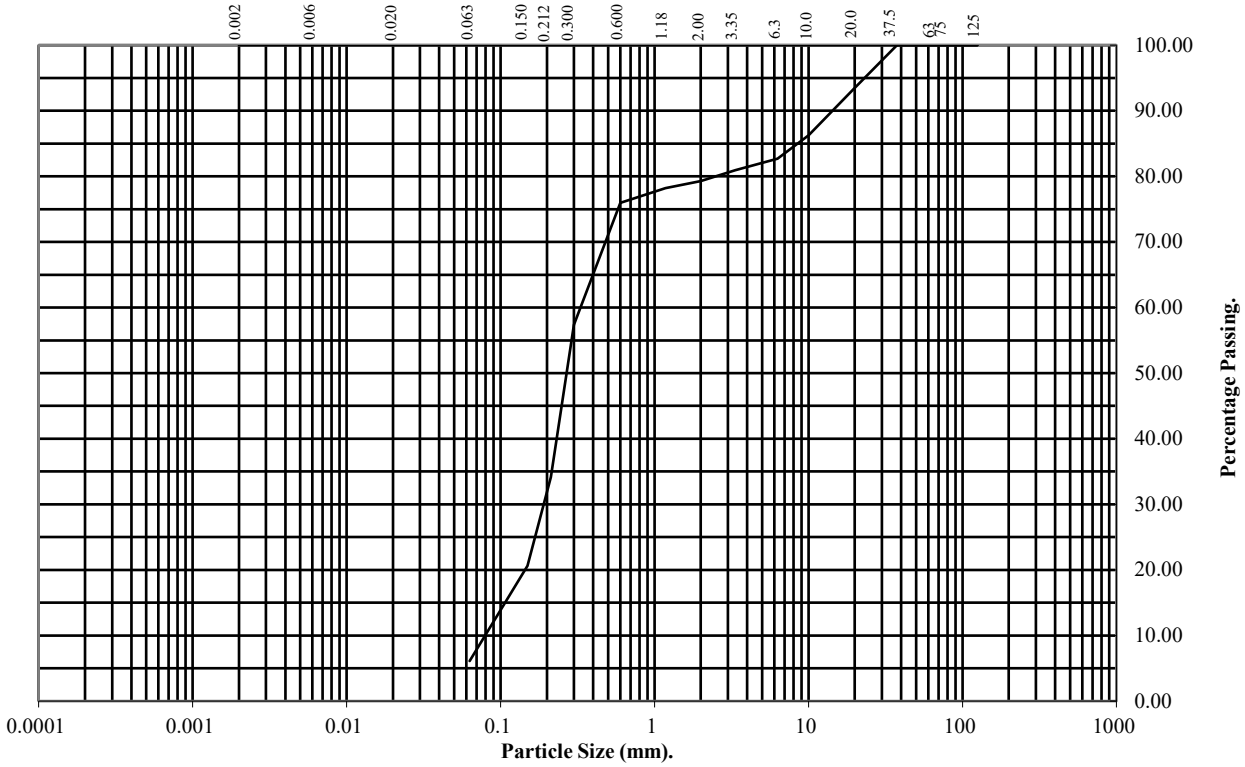
BS1377 : Part 2 : 1990

Wet Sieve, Clause 9.2

Hole Number: **Bulkfill 102 Area D for Area E** **Top Depth (m):**

Sample Number: **Base Depth(m):**

Sample Type: **Bulk**



BS Test Sieve (mm)	Percentage Passing
125	100
75	100
63	100
37.5	100
20	93
10	86
6.3	83
3.35	81
2	79
1.18	78
0.6	76
0.3	57
0.212	34
0.15	21
0.063	6

Soil Fraction	Total Percentage
Cobbles	0
Gravel	21
Sand	73
Silt/Clay	6

Remarks:

See Summary of Soil Descriptions

PARTICLE SIZE DISTRIBUTION TEST

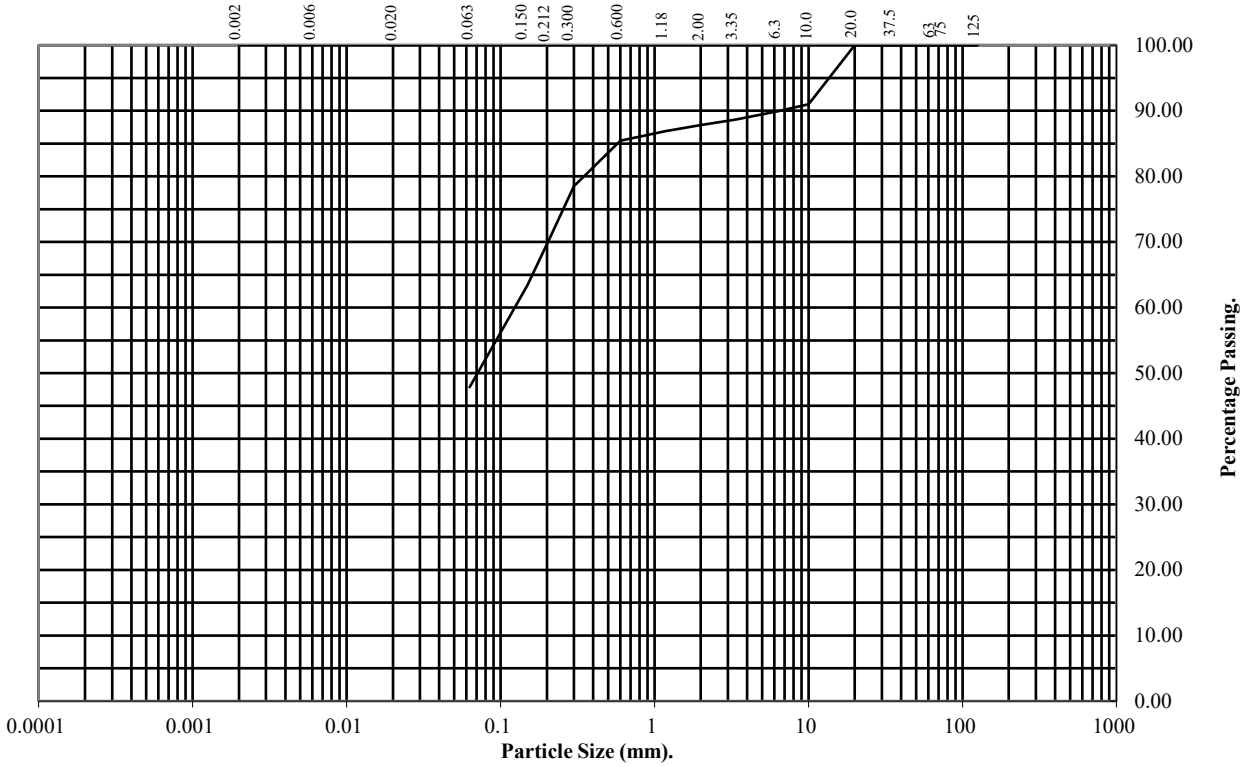
BS1377 : Part 2 : 1990

Wet Sieve, Clause 9.2

Hole Number: **Bulkfill 103 Area D for Area E** **Top Depth (m):**

Sample Number: **Base Depth(m):**

Sample Type: **Bulk**



BS Test Sieve (mm)	Percentage Passing
125	100
75	100
63	100
37.5	100
20	100
10	91
6.3	90
3.35	89
2	88
1.18	87
0.6	85
0.3	78
0.212	71
0.15	63
0.063	48

Soil Fraction	Total Percentage
Cobbles	0
Gravel	12
Sand	40
Silt/Clay	48

Remarks:

See Summary of Soil Descriptions

PARTICLE SIZE DISTRIBUTION TEST

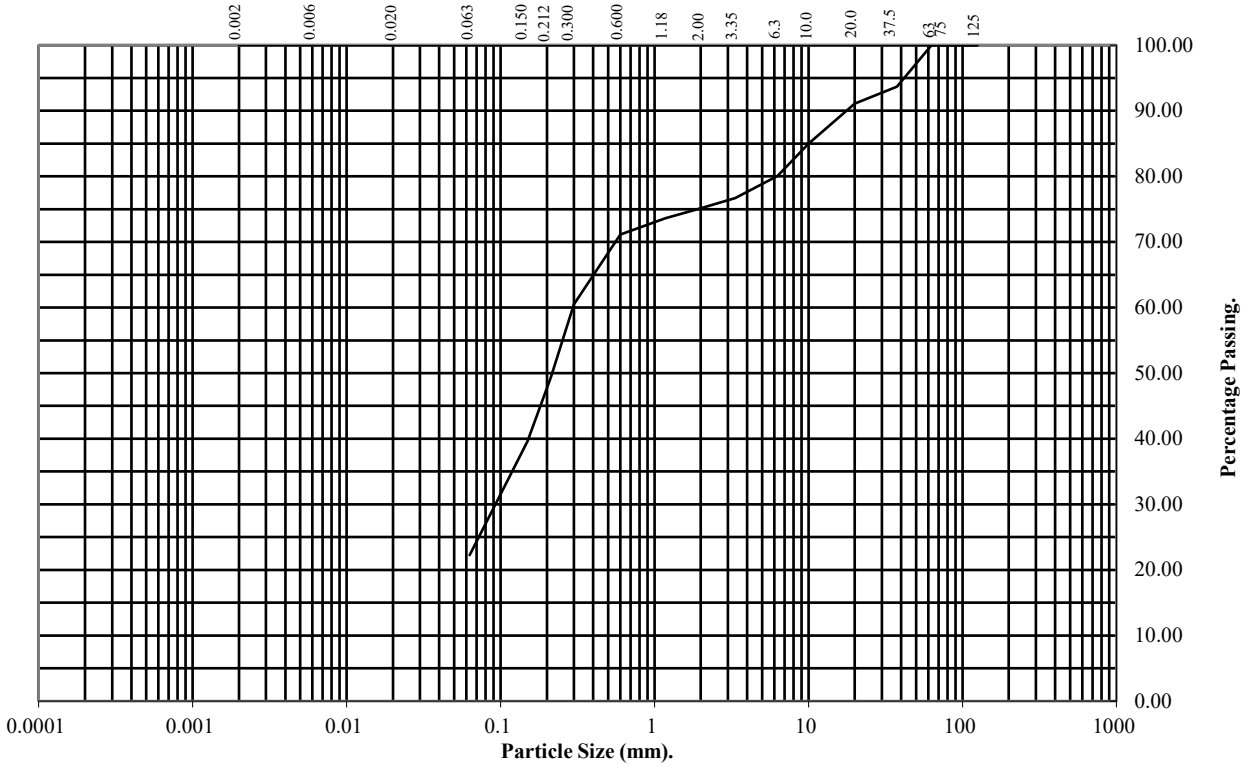
BS1377 : Part 2 : 1990

Wet Sieve, Clause 9.2

Hole Number: **Bulkfill 104 Area D for Area E** **Top Depth (m):**

Sample Number: **Base Depth(m):**

Sample Type: **Bulk**



BS Test Sieve (mm)	Percentage Passing
125	100
75	100
63	100
37.5	94
20	91
10	85
6.3	80
3.35	77
2	75
1.18	74
0.6	71
0.3	60
0.212	49
0.15	40
0.063	22

Soil Fraction	Total Percentage
Cobbles	0
Gravel	25
Sand	53
Silt/Clay	22

Remarks:

See Summary of Soil Descriptions

PARTICLE SIZE DISTRIBUTION TEST

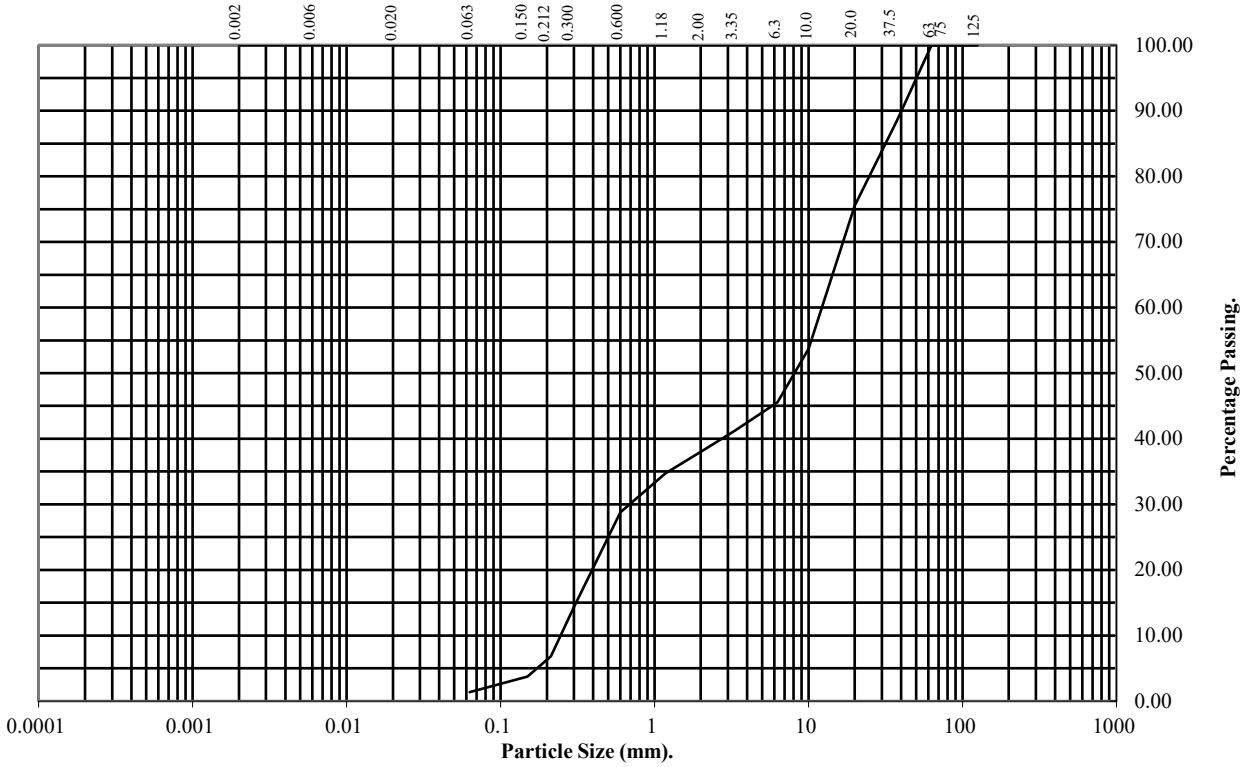
BS1377 : Part 2 : 1990

Wet Sieve, Clause 9.2

Hole Number: **Bulkfill 105 Area D for Area E** **Top Depth (m):**

Sample Number: **Base Depth(m):**

Sample Type: **Bulk**



BS Test Sieve (mm)	Percentage Passing
125	100
75	100
63	100
37.5	89
20	76
10	54
6.3	46
3.35	41
2	38
1.18	35
0.6	29
0.3	14
0.212	7
0.15	4
0.063	1

Soil Fraction	Total Percentage
Cobbles	0
Gravel	62
Sand	37
Silt/Clay	1

Remarks:

See Summary of Soil Descriptions

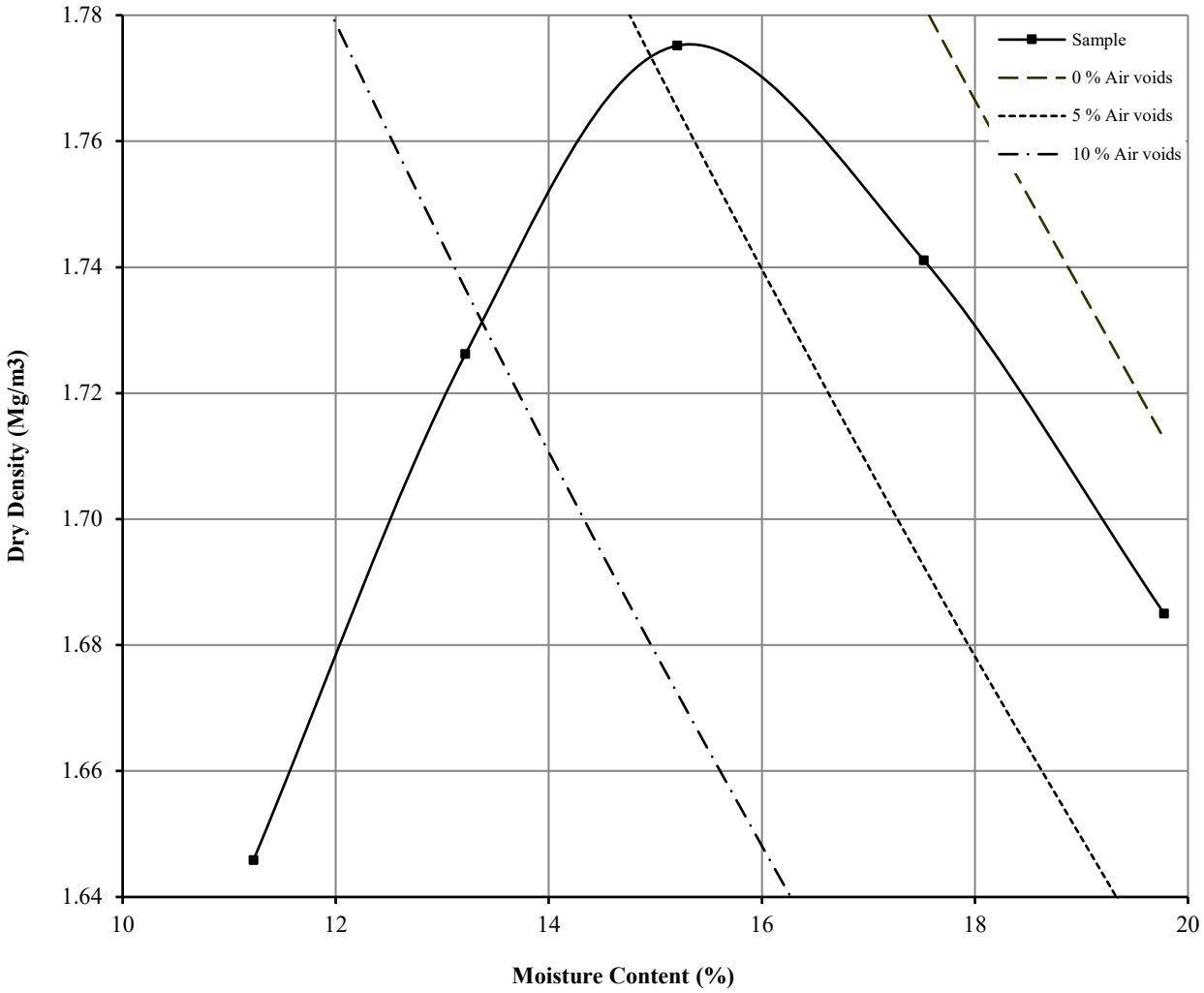
DRY DENSITY / MOISTURE CONTENT RELATIONSHIP

BS 1377 : Part 4 : Clause 3.5 : 1990

Hole Number: Bulkfill 101 Area D for Area E **Top Depth (m) :**

Sample Number: **Base Depth (m) :**

Sample Type: Bulk



Initial Moisture Content:		18	Method of Compaction:	4.5kg	Separate Samples
Particle Density (Mg/m3):	2.59	Assumed	Material Retained on 37.5 mm Test Sieve (%):		0
Maximum Dry Density (Mg/m3):		1.78	Material Retained on 20.0 mm Test Sieve (%):		0
Optimum Moisture Content (%):		15			
Remarks See summary of soil descriptions					

DRY DENSITY / MOISTURE CONTENT RELATIONSHIP

BS 1377 : Part 4 : Clause 3.6 : 1990

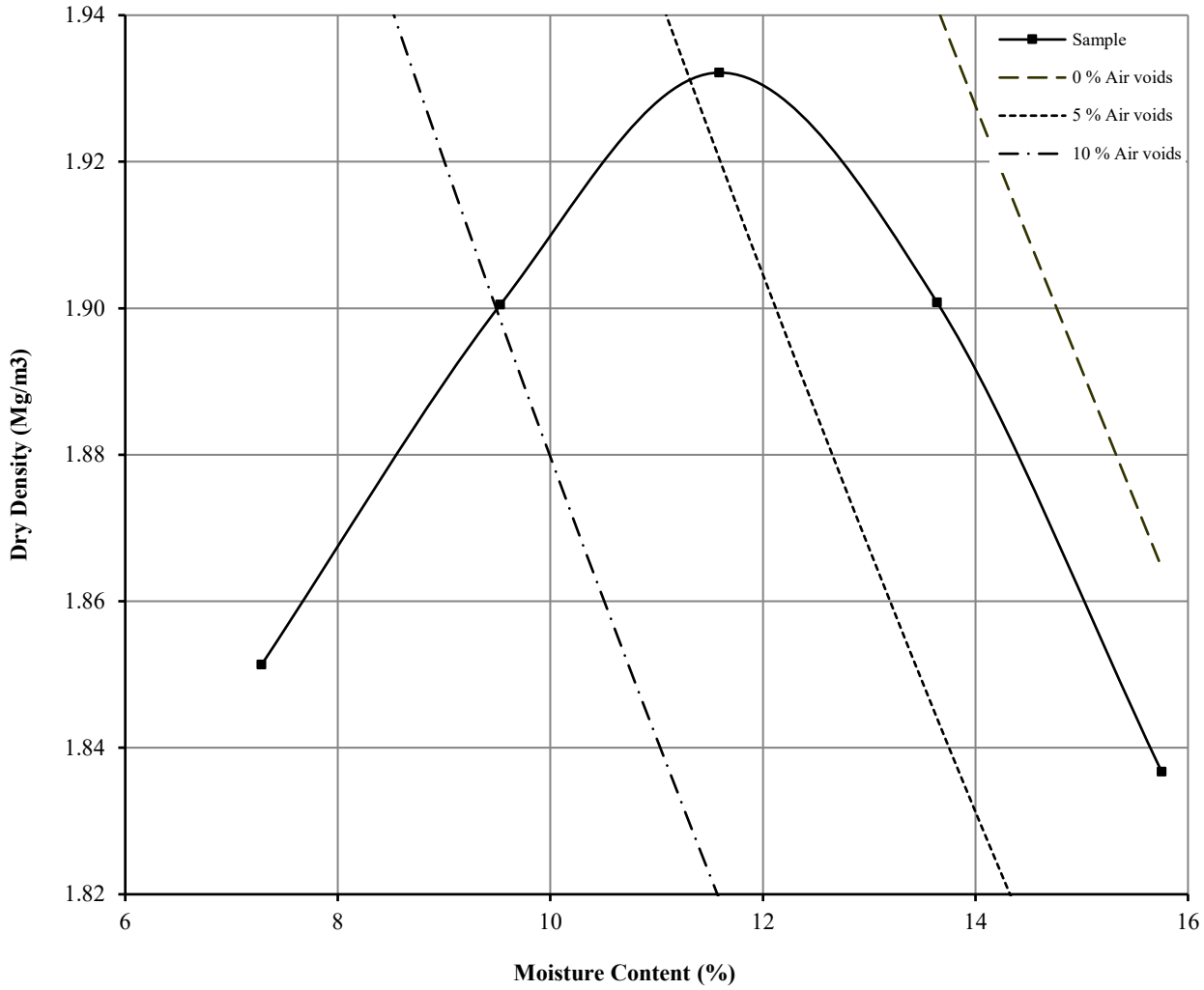
Hole Number: Bulkfill 102 Area D for Area E

Top Depth (m) :

Sample Number:

Base Depth (m) :

Sample Type: Bulk



Initial Moisture Content:		12	Method of Compaction:	4.5kg	Separate Samples
Particle Density (Mg/m3):	2.64	Assumed	Material Retained on 37.5 mm Test Sieve (%):		0
Maximum Dry Density (Mg/m3):		1.93	Material Retained on 20.0 mm Test Sieve (%):		7
Optimum Moisture Content (%):		12			
Remarks See summary of soil descriptions					

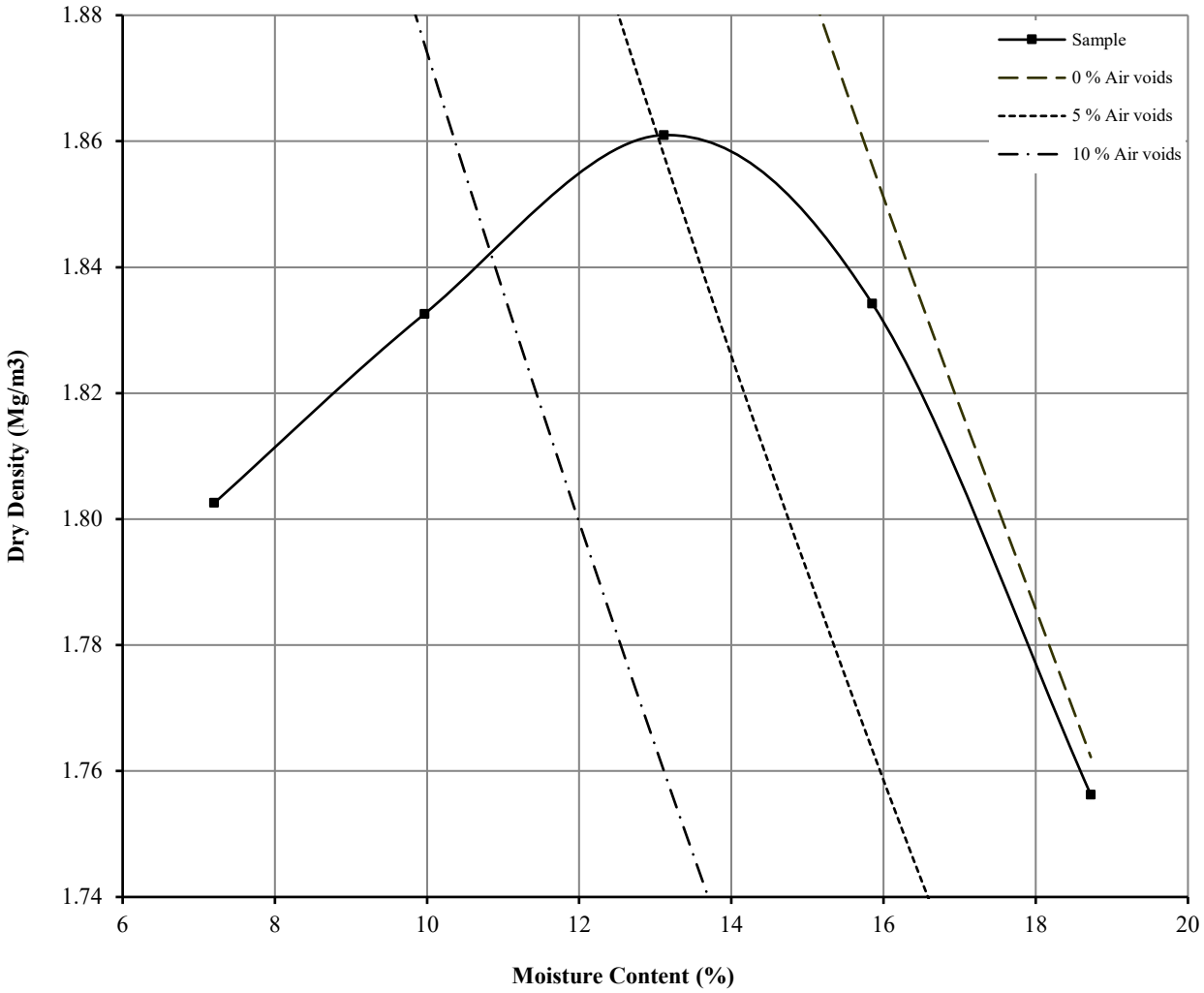
DRY DENSITY / MOISTURE CONTENT RELATIONSHIP

BS 1377 : Part 4 : Clause 3.5 : 1990

Hole Number: Bulkfill 103 Area D for Area E **Top Depth (m) :**

Sample Number: **Base Depth (m) :**

Sample Type: Bulk



Initial Moisture Content:		16	Method of Compaction:	4.5kg	Separate Samples
Particle Density (Mg/m3):	2.63	Assumed	Material Retained on 37.5 mm Test Sieve (%):		0
Maximum Dry Density (Mg/m3):		1.86	Material Retained on 20.0 mm Test Sieve (%):		0
Optimum Moisture Content (%):		13			
Remarks See summary of soil descriptions					

DRY DENSITY / MOISTURE CONTENT RELATIONSHIP

BS 1377 : Part 4 : Clause 3.6 : 1990

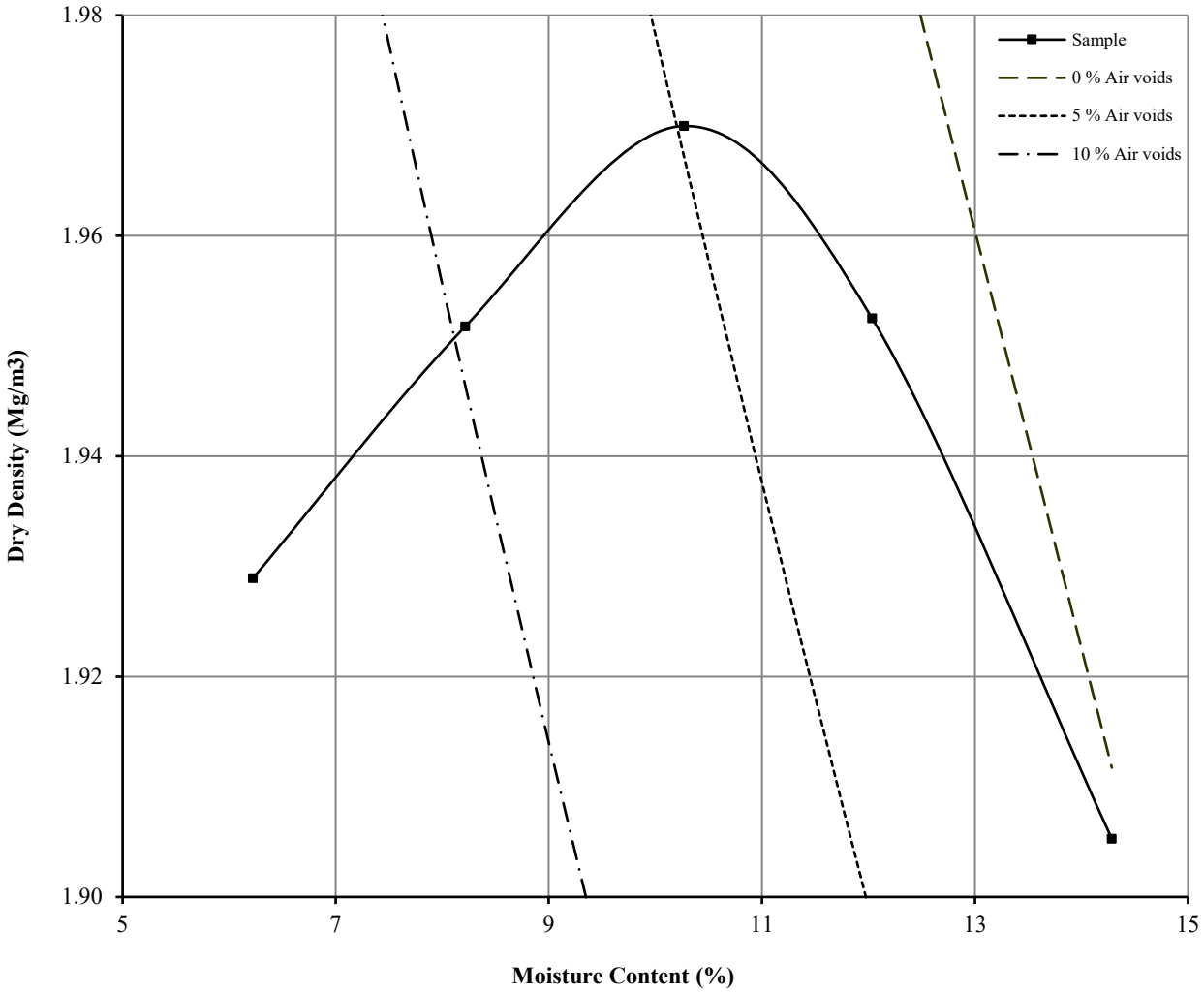
Hole Number: Bulkfill 104 Area D for Area E

Top Depth (m) :

Sample Number:

Base Depth (m) :

Sample Type: Bulk



Initial Moisture Content:		14	Method of Compaction:	4.5kg	Separate Samples
Particle Density (Mg/m3):	2.63	Assumed	Material Retained on 37.5 mm Test Sieve (%):		6
Maximum Dry Density (Mg/m3):		1.97	Material Retained on 20.0 mm Test Sieve (%):		3
Optimum Moisture Content (%):		10			
Remarks See summary of soil descriptions					

DRY DENSITY / MOISTURE CONTENT RELATIONSHIP

Non compliance with BS 1377 : Part 4 : Clause 3.6 : 1990

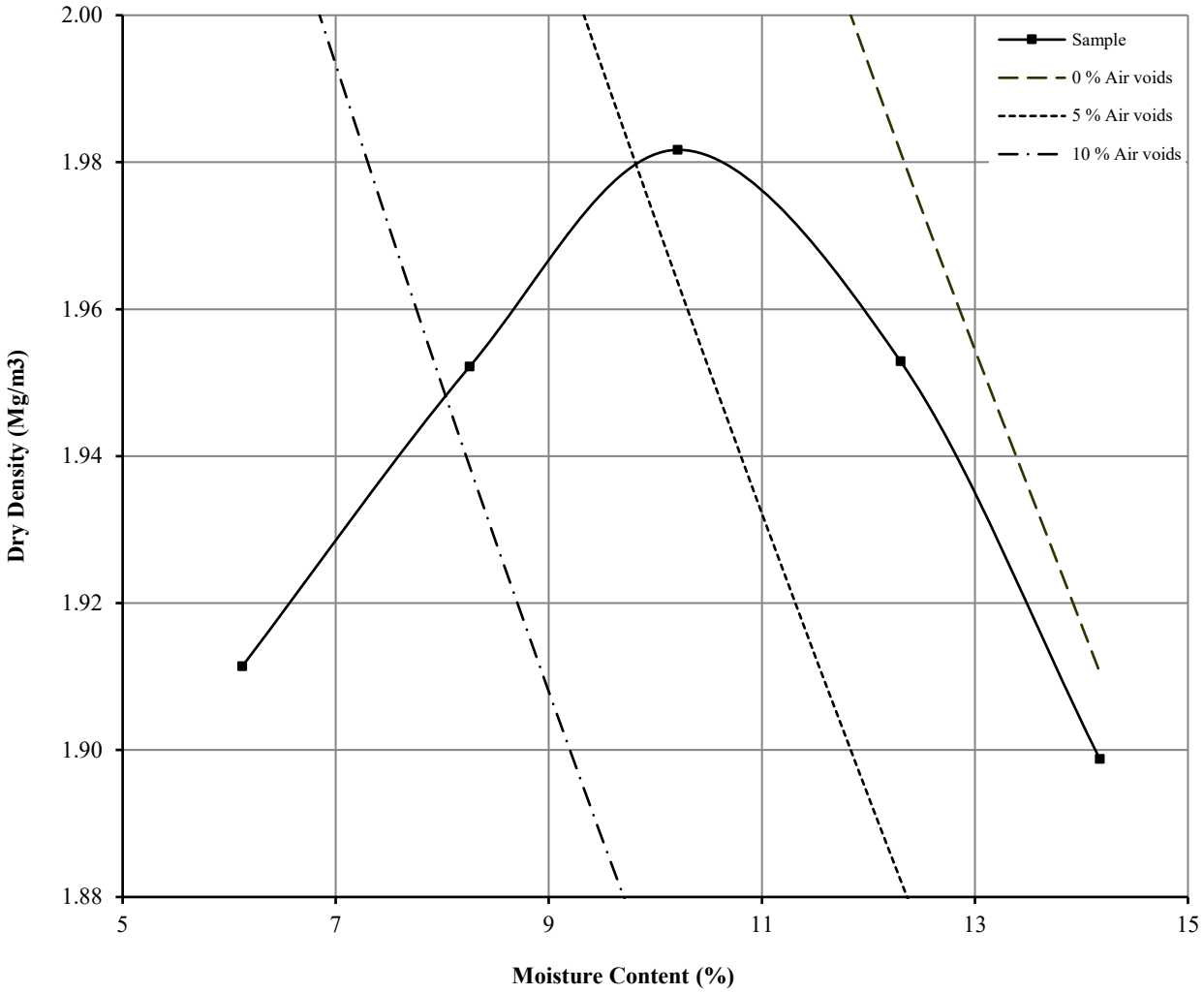
Hole Number: Bulkfill 105 Area D for Area E

Top Depth (m) :

Sample Number:

Base Depth (m) :

Sample Type: Bulk



Initial Moisture Content:		7.4	Method of Compaction:	4.5kg	Separate Samples
Particle Density (Mg/m3):	2.62	Assumed	Material Retained on 37.5 mm Test Sieve (%):		11
Maximum Dry Density (Mg/m3):		1.98	Material Retained on 20.0 mm Test Sieve (%):		13
Optimum Moisture Content (%):		10			
Remarks See summary of soil descriptions					

ANALYTICAL TEST REPORT

Contract no: 115690

Contract name: Don Street

Client reference: PSL22/6972

Clients name: Professional Soils Laboratory

Clients address: 5/7 Hexthorpe Road
Doncaster
DN4 0AR

Samples received: 11 November 2022

Analysis started: 11 November 2022

Analysis completed: 17 November 2022

Report issued: 17 November 2022

Key

U	UKAS accredited test
M	MCERTS & UKAS accredited test
$	Test carried out by an approved subcontractor
I/S	Insufficient sample to carry out test
N/S	Sample not suitable for testing

Approved by:

ANeasham-Bourn

Abbie Neasham-Bourn

Senior Reporting Administrator

Chemtech Environmental Limited

SOILS

Lab number			115690-1	115690-2	115690-3	115690-4	115690-5
Sample id			Bulkfill 101	Bulkfill 102	Bulkfill 103	Bulkfill 104	Bulkfill 105
Depth (m)			-	-	-	-	-
Sample Type			B	B	B	B	B
Date sampled			-	-	-	-	-
Test	**Method**	**Units**					
Total Organic Carbon (TOC)	CE197	% w/w C	0.6	1.0	0.8	1.0	0.2
Estimate of OMC (calculated from TOC)	CE197	% w/w	1.1	1.7	1.4	1.7	0.3

Chemtech Environmental Limited

METHOD DETAILS

METHOD	SOILS	METHOD SUMMARY	SAMPLE	STATUS	LOD	UNITS
CE197	Total Organic Carbon (TOC)	Carbon Analyser	Dry		0.1	% w/w C
CE197	Estimate of OMC (calculated from TOC)	Calculation from Total Organic Carbon	Dry		0.1	% w/w

Chemtech Environmental Limited

ADDITIONAL INFORMATION

Notes

Opinions and interpretations expressed herein are outside the UKAS accreditation scope.

Unless otherwise stated, Chemtech Environmental Ltd was not responsible for sampling.

All testing carried out at Unit 6 Parkhead, Stanley, DH9 7YB, except for subcontracted testing.

Methods, procedures and performance data are available on request.

Results reported herein relate only to the material supplied to the laboratory.

This report shall not be reproduced except in full, without prior written approval.

Samples will be disposed of 4 weeks from initial receipt unless otherwise instructed.

For soils and solids, all results are reported on a dry basis. Samples dried at no more than 30°C in a drying cabinet.

Analytical results are inclusive of stones, where applicable.

LABORATORY REPORT

4043

Contract Number: PSL22/7079

Report Date: 28 November 2022

Client's Reference: 14-554

Client Name: E3P
Taylor Road
Urmston
Manchester
M41 7JQ

For the attention of: Matt Jackson

Contract Title: Don Street

Date Received: 2/11/2022
Date Commenced: 2/11/2022
Date Completed: 21/11/2022

Notes: Opinions and Interpretations are outside the UKAS Accreditation

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Checked and Approved Signatories:

A Watkins (Director)
R Berriman (Quality Manager)
S Royle (Laboratory Manager)

L Knight (Assistant Laboratory Manager)
S Eyre (Senior Technician)
T Watkins (Senior Technician)

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tel: +44 (0)844 815 6641
fax: +44 (0)844 815 6642
e-mail: rgunson@prosoils.co.uk
awatkins@prosoils.co.uk

SUMMARY OF LABORATORY SOIL DESCRIPTIONS

Hole Number	Sample Number	Sample Type	Top Depth m	Base Depth m	Description of Sample
101		Bulk	0.80		Class 2C.
102		Bulk	0.50		Class 2C.
103		Bulk	0.40		Class 2A.
104		Bulk	0.55		Class 2A.
105		Bulk	0.50		Class 2A.

PARTICLE SIZE DISTRIBUTION TEST

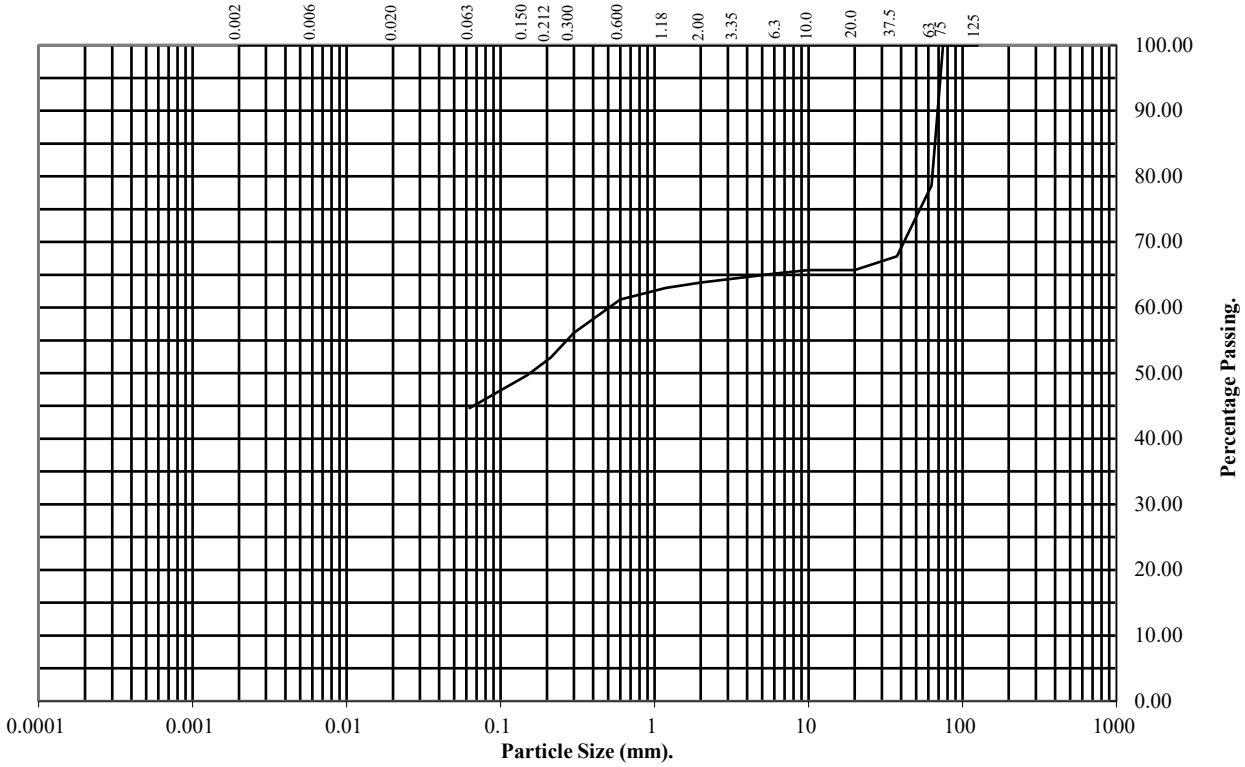
BS1377 : Part 2 : 1990

Wet Sieve, Clause 9.2

Hole Number: 101 **Top Depth (m):** 0.80

Sample Number: **Base Depth(m):**

Sample Type: Bulk



BS Test Sieve (mm)	Percentage Passing
125	100
75	100
63	79
37.5	68
20	66
10	66
6.3	65
3.35	64
2	64
1.18	63
0.6	61
0.3	56
0.212	52
0.15	50
0.063	45

Soil Fraction	Total Percentage
Cobbles	21
Gravel	15
Sand	19
Silt/Clay	45

Remarks:

See Summary of Soil Descriptions

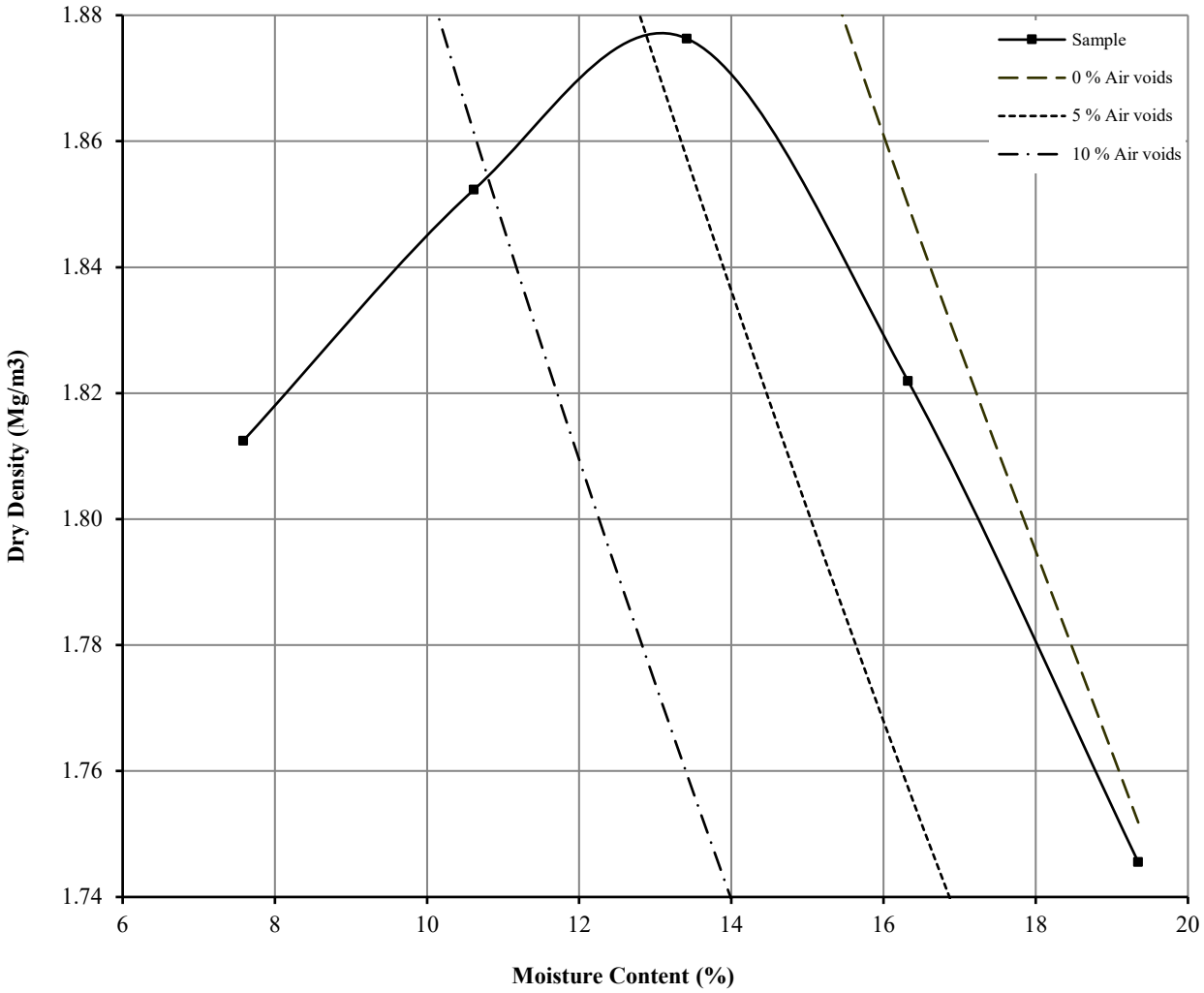
DRY DENSITY / MOISTURE CONTENT RELATIONSHIP

Non compliance with BS 1377 : Part 4 : Clause 3.6 : 1990

Hole Number: 101 **Top Depth (m) :** 0.80

Sample Number: **Base Depth (m) :**

Sample Type: Bulk



Initial Moisture Content:		19	Method of Compaction:	4.5kg	Separate Samples
Particle Density (Mg/m3):	2.65	Assumed	Material Retained on 37.5 mm Test Sieve (%):		32
Maximum Dry Density (Mg/m3):		1.88	Material Retained on 20.0 mm Test Sieve (%):		2
Optimum Moisture Content (%):		13			
Remarks See summary of soil descriptions					

PARTICLE SIZE DISTRIBUTION TEST

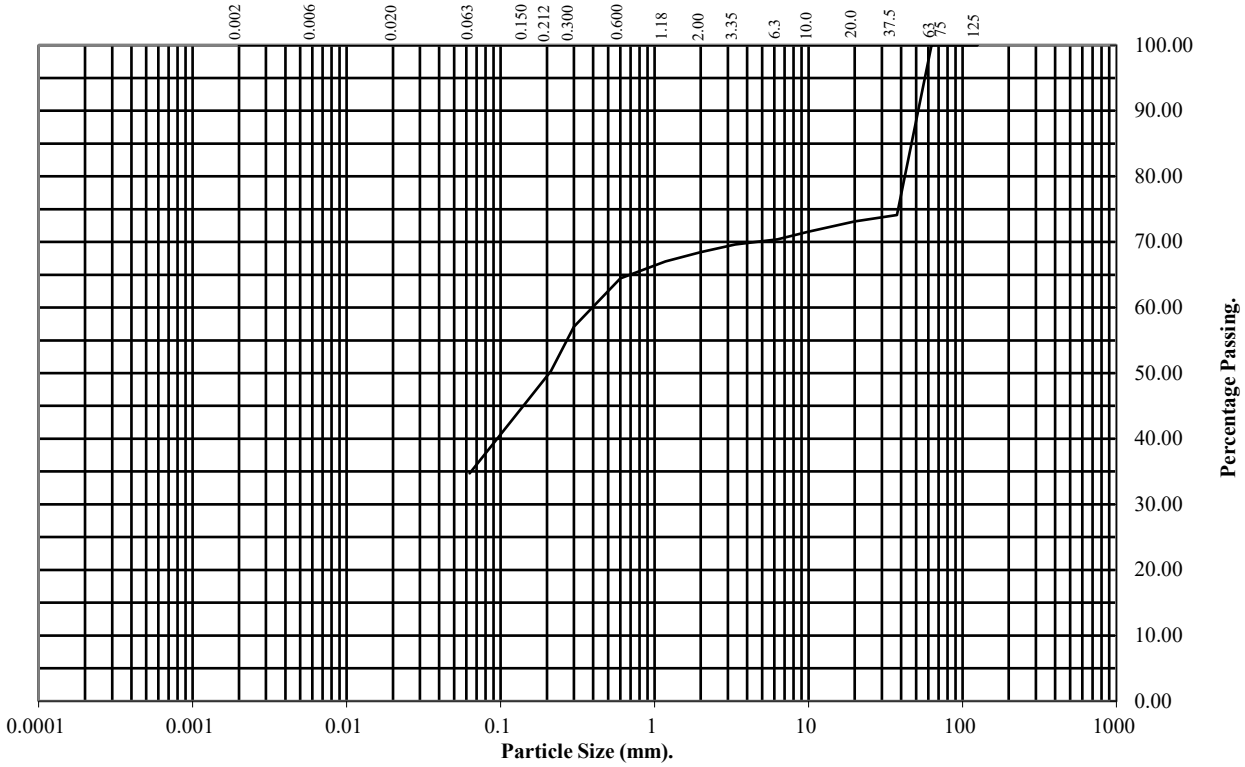
BS1377 : Part 2 : 1990

Wet Sieve, Clause 9.2

Hole Number: 102 **Top Depth (m):** 0.50

Sample Number: **Base Depth(m):**

Sample Type: Bulk



BS Test Sieve (mm)	Percentage Passing
125	100
75	100
63	100
37.5	74
20	73
10	72
6.3	70
3.35	70
2	68
1.18	67
0.6	64
0.3	57
0.212	50
0.15	46
0.063	35

Soil Fraction	Total Percentage
Cobbles	0
Gravel	32
Sand	33
Silt/Clay	35

Remarks:

See Summary of Soil Descriptions

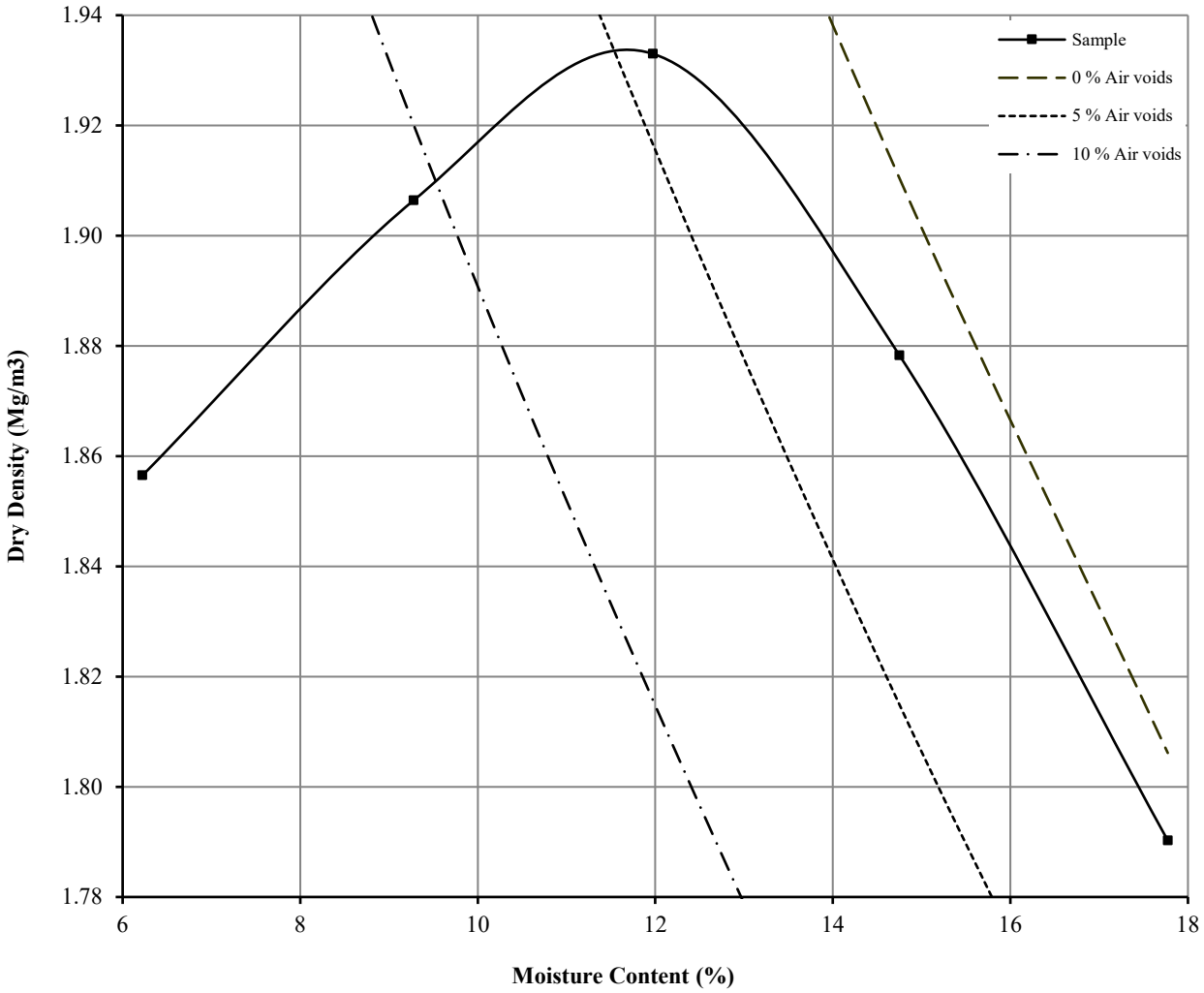
DRY DENSITY / MOISTURE CONTENT RELATIONSHIP

Non compliance with BS 1377 : Part 4 : Clause 3.6 : 1990

Hole Number: 102 **Top Depth (m) :** 0.50

Sample Number: **Base Depth (m) :**

Sample Type: Bulk



Initial Moisture Content:		18	Method of Compaction:	4.5kg	Separate Samples
Particle Density (Mg/m3):	2.66	Assumed	Material Retained on 37.5 mm Test Sieve (%):		26
Maximum Dry Density (Mg/m3):		1.93	Material Retained on 20.0 mm Test Sieve (%):		1
Optimum Moisture Content (%):		12			
Remarks See summary of soil descriptions					

PARTICLE SIZE DISTRIBUTION TEST

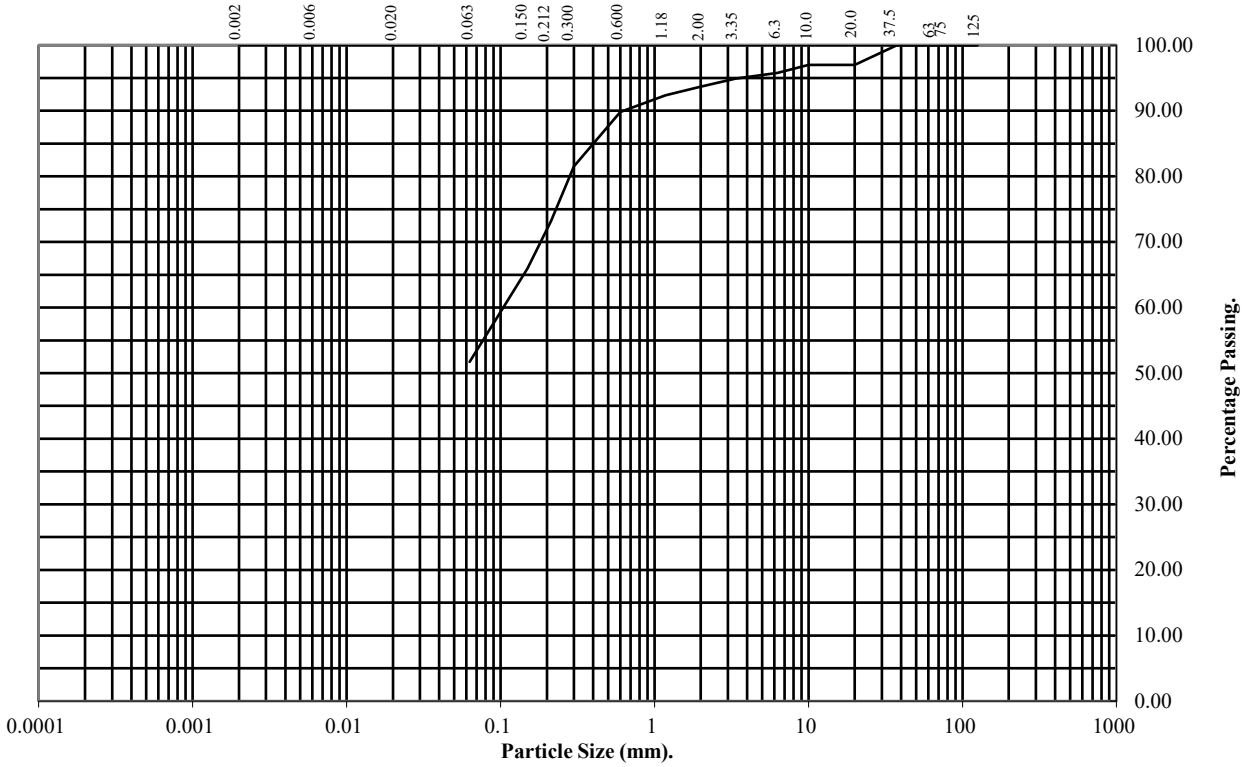
BS1377 : Part 2 : 1990

Wet Sieve, Clause 9.2

Hole Number: 103 **Top Depth (m):** 0.40

Sample Number: **Base Depth(m):**

Sample Type: Bulk



BS Test Sieve (mm)	Percentage Passing
125	100
75	100
63	100
37.5	100
20	97
10	97
6.3	96
3.35	95
2	94
1.18	92
0.6	90
0.3	82
0.212	73
0.15	66
0.063	52

Soil Fraction	Total Percentage
Cobbles	0
Gravel	6
Sand	42
Silt/Clay	52

Remarks:

See Summary of Soil Descriptions

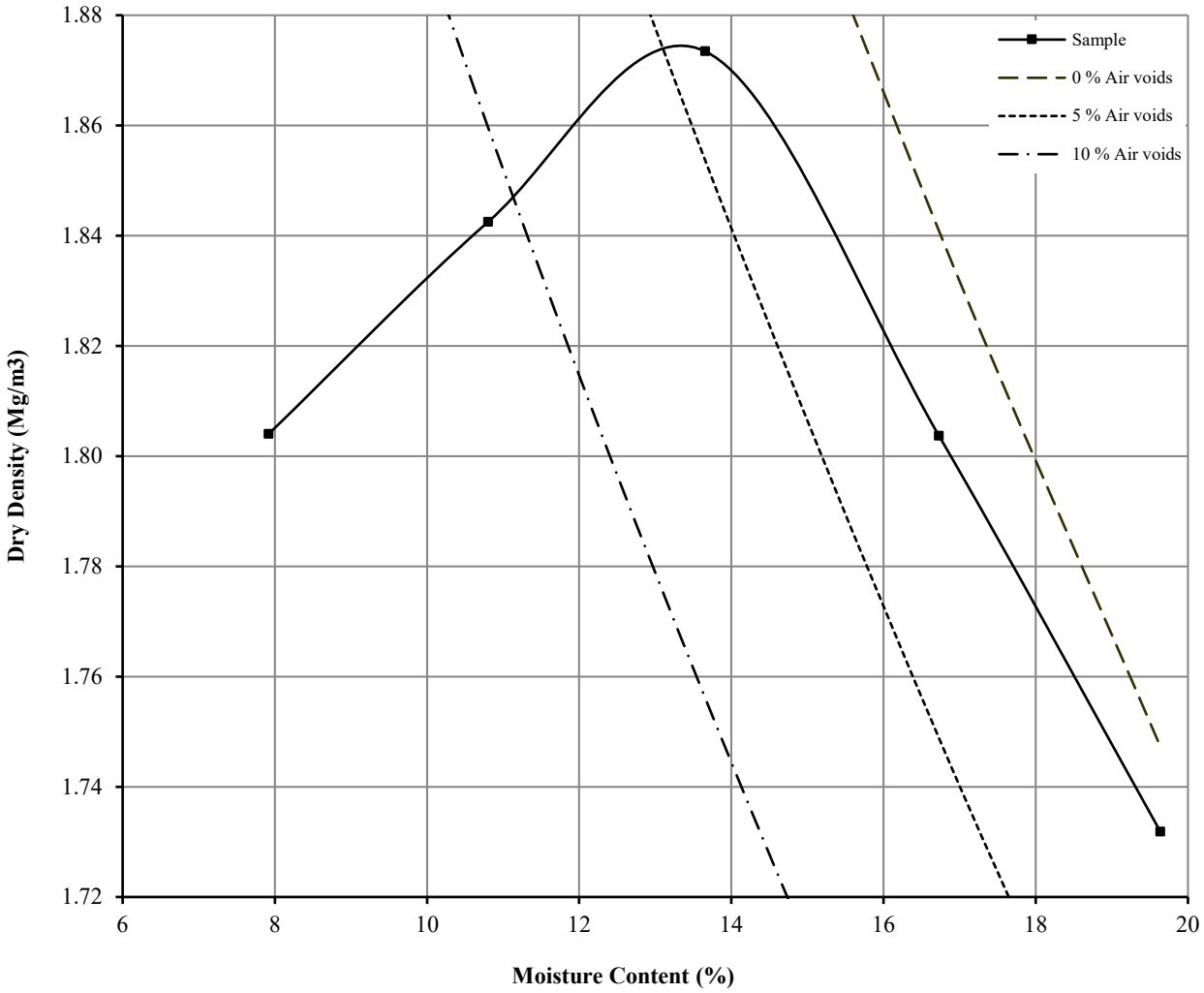
DRY DENSITY / MOISTURE CONTENT RELATIONSHIP

BS 1377 : Part 4 : Clause 3.5 : 1990

Hole Number: 103 **Top Depth (m) :** 0.40

Sample Number: **Base Depth (m) :**

Sample Type: Bulk



Initial Moisture Content:		14	Method of Compaction:	4.5kg	Separate Samples
Particle Density (Mg/m3):	2.66	Assumed	Material Retained on 37.5 mm Test Sieve (%):		0
Maximum Dry Density (Mg/m3):		1.87	Material Retained on 20.0 mm Test Sieve (%):		3
Optimum Moisture Content (%):		14			
Remarks See summary of soil descriptions					

PARTICLE SIZE DISTRIBUTION TEST

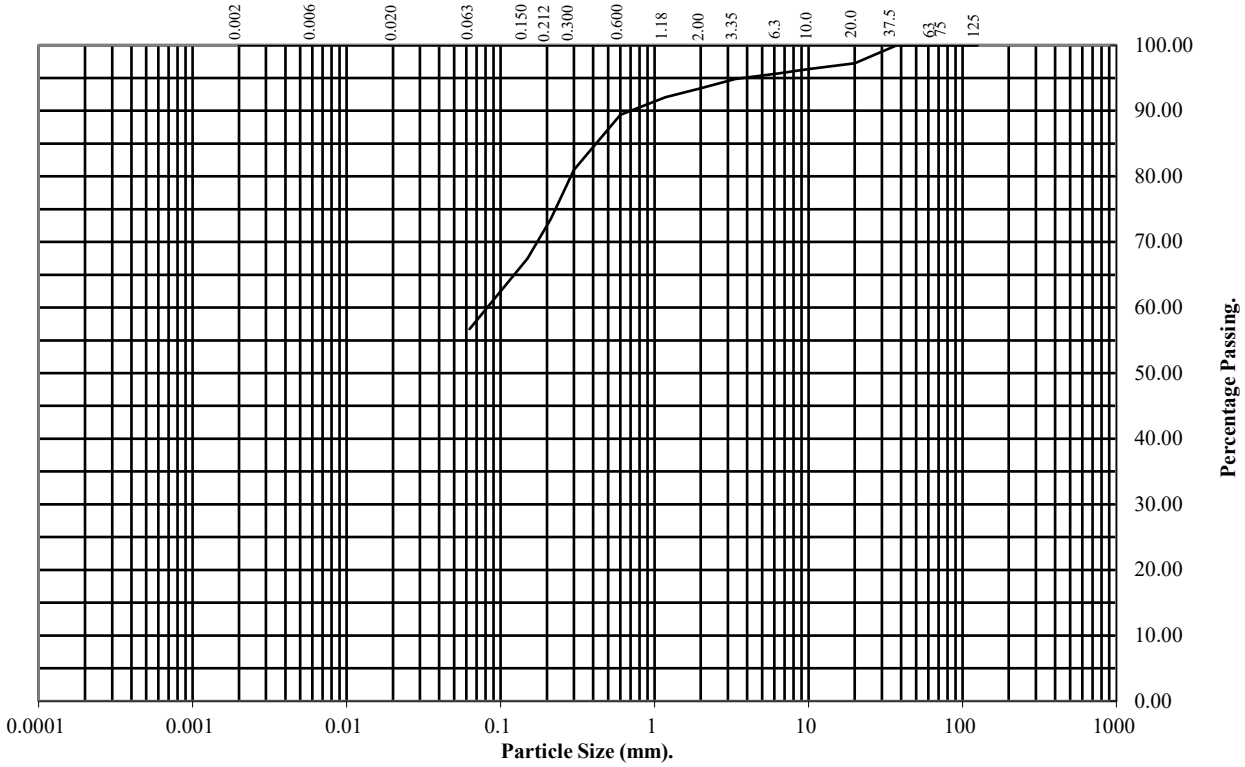
BS1377 : Part 2 : 1990

Wet Sieve, Clause 9.2

Hole Number: 104 **Top Depth (m):** 0.55

Sample Number: **Base Depth(m):**

Sample Type: Bulk



BS Test Sieve (mm)	Percentage Passing
125	100
75	100
63	100
37.5	100
20	97
10	96
6.3	96
3.35	95
2	93
1.18	92
0.6	89
0.3	81
0.212	74
0.15	67
0.063	57

Soil Fraction	Total Percentage
Cobbles	0
Gravel	7
Sand	36
Silt/Clay	57

Remarks:

See Summary of Soil Descriptions

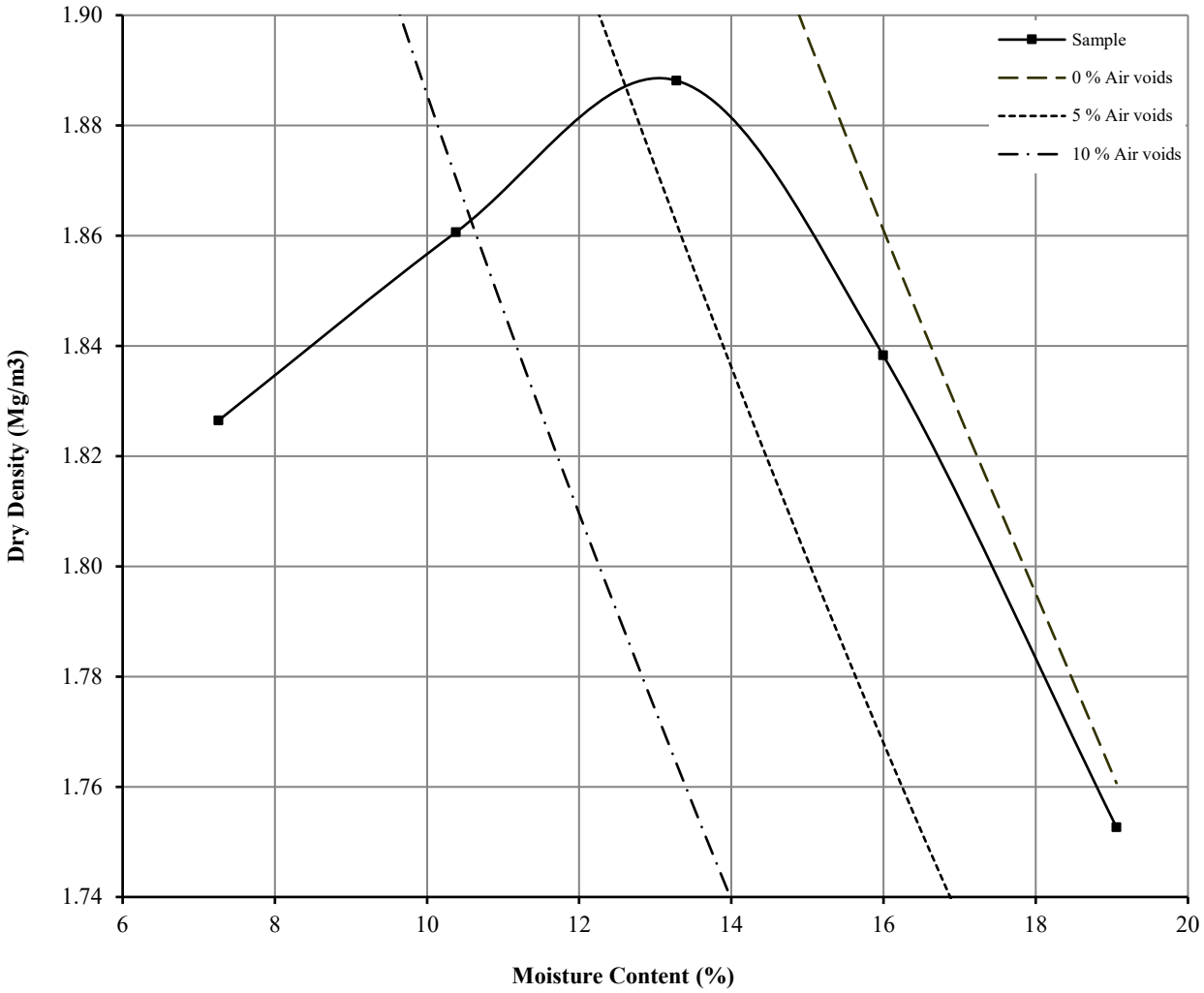
DRY DENSITY / MOISTURE CONTENT RELATIONSHIP

BS 1377 : Part 4 : Clause 3.5 : 1990

Hole Number: 104 **Top Depth (m) :** 0.55

Sample Number: **Base Depth (m) :**

Sample Type: Bulk



Initial Moisture Content:		22	Method of Compaction:	4.5kg	Separate Samples
Particle Density (Mg/m3):	2.65	Assumed	Material Retained on 37.5 mm Test Sieve (%):		0
Maximum Dry Density (Mg/m3):		1.89	Material Retained on 20.0 mm Test Sieve (%):		3
Optimum Moisture Content (%):		13			
Remarks See summary of soil descriptions					

UKAS TESTING 4043	PSL Professional Soils Laboratory	**Don Street**	**Contract** PSL22/7079 **Client Ref** 14-554

PARTICLE SIZE DISTRIBUTION TEST

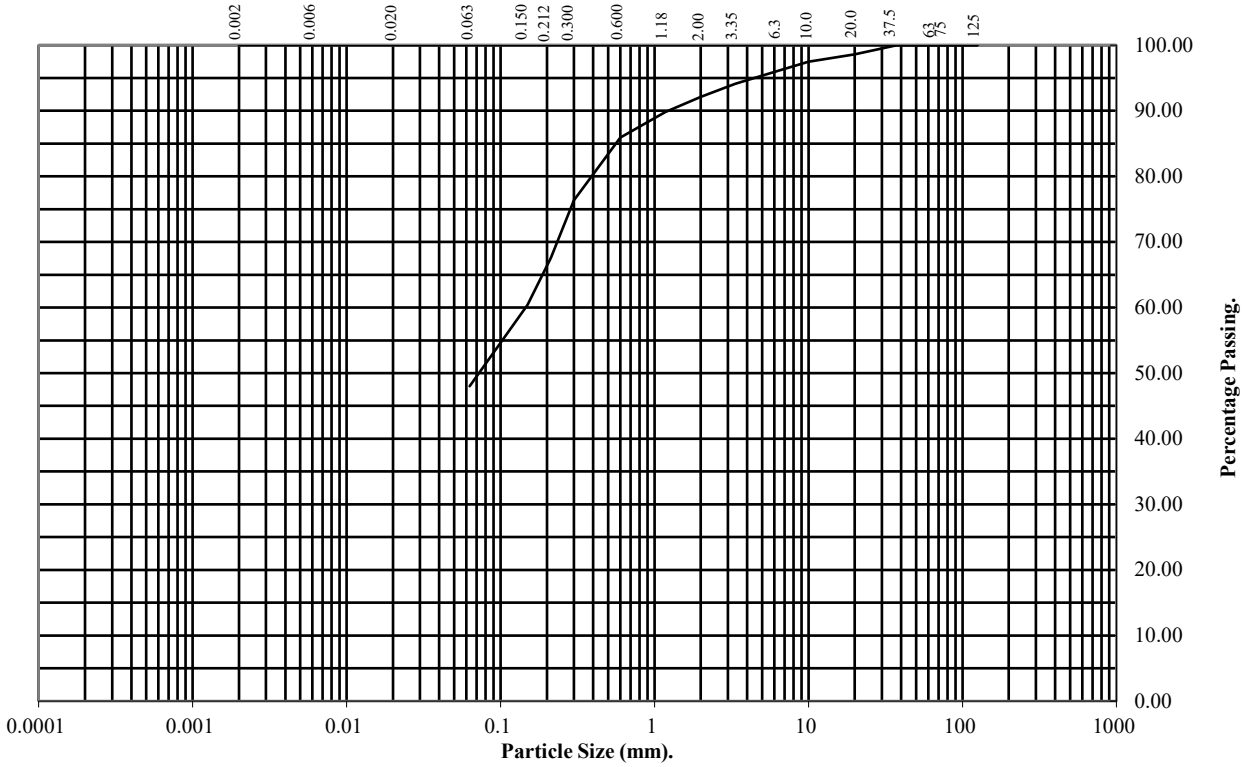
BS1377 : Part 2 : 1990

Wet Sieve, Clause 9.2

Hole Number: 105 **Top Depth (m):** 0.50

Sample Number: **Base Depth(m):**

Sample Type: Bulk



BS Test Sieve (mm)	Percentage Passing
125	100
75	100
63	100
37.5	100
20	99
10	97
6.3	96
3.35	94
2	92
1.18	90
0.6	86
0.3	76
0.212	68
0.15	60
0.063	48

Soil Fraction	Total Percentage
Cobbles	0
Gravel	8
Sand	44
Silt/Clay	48

Remarks:

See Summary of Soil Descriptions

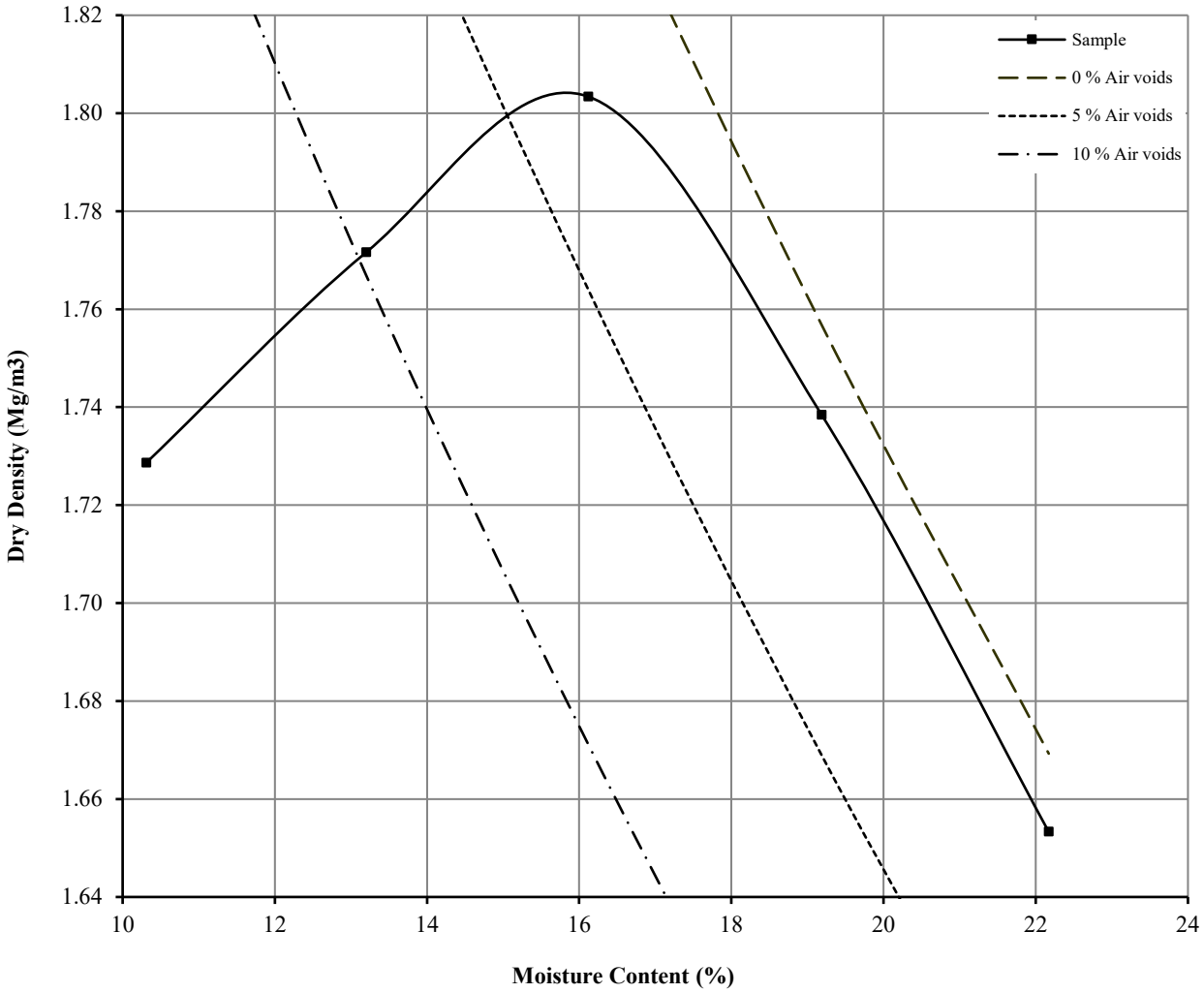
DRY DENSITY / MOISTURE CONTENT RELATIONSHIP

BS 1377 : Part 4 : Clause 3.5 : 1990

Hole Number: 105 **Top Depth (m) :** 0.50

Sample Number: **Base Depth (m) :**

Sample Type: Bulk



Initial Moisture Content:		28	Method of Compaction:	4.5kg	Separate Samples
Particle Density (Mg/m3):	2.65	Assumed	Material Retained on 37.5 mm Test Sieve (%):		0
Maximum Dry Density (Mg/m3):		1.80	Material Retained on 20.0 mm Test Sieve (%):		1
Optimum Moisture Content (%):		16			
Remarks See summary of soil descriptions					

ANALYTICAL TEST REPORT

Contract no: 115798

Contract name: Donn Street 14-554

Client reference: PSL22/7079

Clients name: Professional Soils Laboratory

Clients address: 5/7 Hexthorpe Road
Doncaster
DN4 0AR

Samples received: 15 November 2022

Analysis started: 15 November 2022

Analysis completed: 21 November 2022

Report issued: 21 November 2022

Key

U	UKAS accredited test
M	MCERTS & UKAS accredited test
$	Test carried out by an approved subcontractor
I/S	Insufficient sample to carry out test
N/S	Sample not suitable for testing

Approved by:

ANeasham-Bourn

Abbie Neasham-Bourn

Senior Reporting Administrator

Chemtech Environmental Limited

SOILS

Lab number			115798-1	115798-2	115798-3	115798-4	115798-5
Sample id			Bulk 101	Bulk 102	Bulk 103	Bulk 104	Bulk 105
Depth (m)			0.80	0.50	0.40	0.55	0.50
Date sampled			-	-	-	-	-
Test	**Method**	**Units**					
Total Organic Carbon (TOC)	CE197	% w/w C	1.8	1.7	1.2	2.5	0.9
Estimate of OMC (calculated from TOC)	CE197	% w/w	3.1	3.0	2.1	4.4	1.5

Chemtech Environmental Limited

METHOD DETAILS

METHOD	SOILS	METHOD SUMMARY	SAMPLE	STATUS	LOD	UNITS
CE197	Total Organic Carbon (TOC)	Carbon Analyser	Dry		0.1	% w/w C
CE197	Estimate of OMC (calculated from TOC)	Calculation from Total Organic Carbon	Dry		0.1	% w/w

Chemtech Environmental Limited

ADDITIONAL INFORMATION

Notes

Opinions and interpretations expressed herein are outside the UKAS accreditation scope.

Unless otherwise stated, Chemtech Environmental Ltd was not responsible for sampling.

All testing carried out at Unit 6 Parkhead, Stanley, DH9 7YB, except for subcontracted testing.

Methods, procedures and performance data are available on request.

Results reported herein relate only to the material supplied to the laboratory.

This report shall not be reproduced except in full, without prior written approval.

Samples will be disposed of 4 weeks from initial receipt unless otherwise instructed.

For soils and solids, all results are reported on a dry basis. Samples dried at no more than 30°C in a drying cabinet.

Analytical results are inclusive of stones, where applicable.

LABORATORY REPORT

4043

Contract Number: PSL22/7248

Report Date: 22 November 2022

Client's Reference: 3457

Client Name: E3P
Taylor Road
Urmston
Manchester
M41 7JQ

For the attention of: Matt Dee/Georgia Calvert

Contract Title: Don Street

Date Received: 10/11/2022
Date Commenced: 10/11/2022
Date Completed: 22/11/2022

Notes: Opinions and Interpretations are outside the UKAS Accreditation

A copy of the Laboratory Schedule of accredited tests as issued by UKAS is attached to this report. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced other than in full, without the prior written approval of the laboratory.

Checked and Approved Signatories:

A Watkins (Director)
R Berriman (Quality Manager)
S Royle (Laboratory Manager)

L Knight (Assistant Laboratory Manager)
S Eyre (Senior Technician)
T Watkins (Senior Technician)

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Doncaster DN4 0AR
tel: +44 (0)844 815 6641
fax: +44 (0)844 815 6642
e-mail: rgunson@prosoils.co.uk
awatkins@prosoils.co.uk

SUMMARY OF LABORATORY SOIL DESCRIPTIONS

Hole Number	Sample Number	Sample Type	Top Depth m	Base Depth m	Description of Sample
Bulkfill fill 106 Area D					Class 1A

UKAS TESTING 4043	PSL Professional Soils Laboratory	Don Street	Contract No: PSL22/7248 Client Ref: 003457

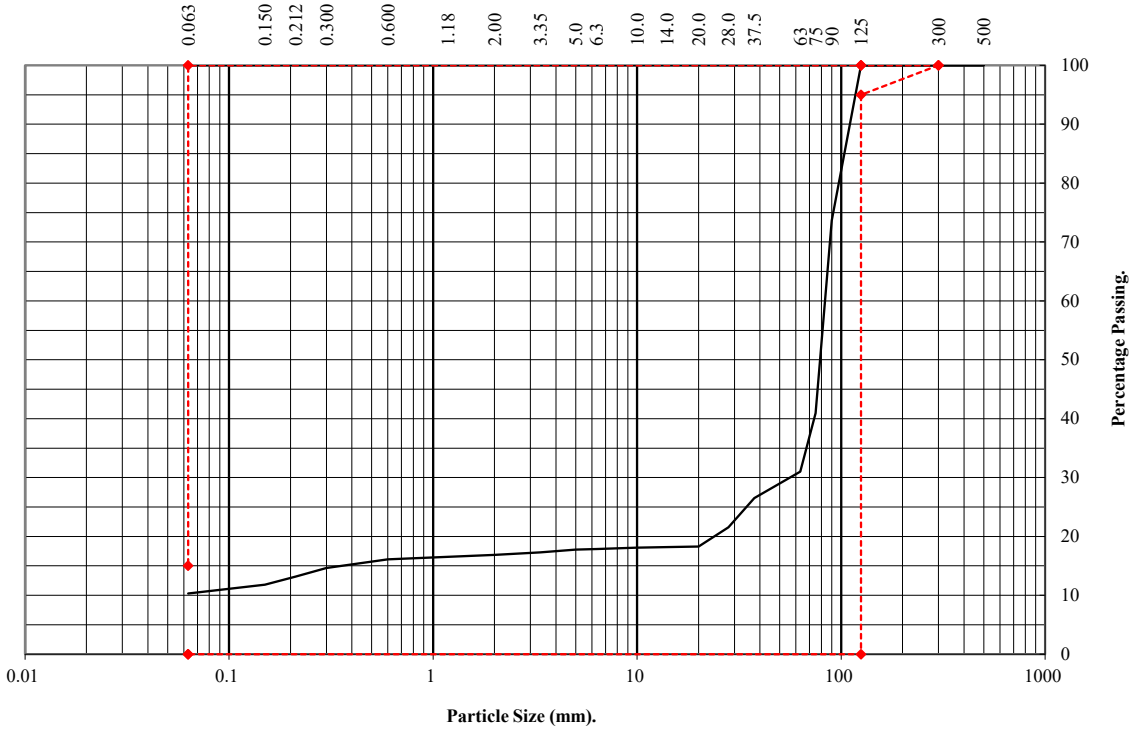
PARTICLE SIZE DISTRIBUTION TEST

BS1377:Part 2:1990

Wet Sieve: Clause 9.2

Classification for Acceptable Earthworks Materials

Sample Reference **Bulkfill Fill 106 Area D** **Classification Type:** **1A**



BS Test Sieve mm	Percentage Passing %	Table 6/2 Grading Requirements Lower	Upper
500	100		
300	100	100	100
125	100	95	100
90	74		
75	41		
63	31		
37.5	27		
28	22		
20	18		
14	18		
10	18		
6.3	18		
5	18		
3.35	17		
2	17		
1.18	17		
0.6	16		
0.3	15		
0.212	13		
0.15	12		
0.063	10	0	15

Remarks:
SHW Series 600 Table 6/2 :
Class 1A

UKAS TESTING 4043	PSL Professional Soils Laboratory	**Don Street**	**Contract No.:** PSL22/7248
			Client Ref: 003457

LABORATORY REPORT

4043

Contract Number: PSL22/7966

Report Date: 23 December 2022

Client's Reference: 003707

Client Name: E3P
Taylor Road
Urmston
Manchester
M41 7JQ

For the attention of: Matt Dee/Georgia Calvert

Contract Title: Don Street

Date Received: 15/12/2022
Date Commenced: 15/12/2022
Date Completed: 23/12/2022

Notes: Opinions and Interpretations are outside the UKAS Accreditation

A copy of the Laboratory Schedule of accredited tests as issued by UKAS is attached to this report. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced other than in full, without the prior written approval of the laboratory.

Checked and Approved Signatories:

A Watkins (Director)
R Berriman (Quality Manager)
S Royle (Laboratory Manager)

L Knight (Assistant Laboratory Manager)
S Eyre (Senior Technician)
T Watkins (Senior Technician)

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e-mail: rberriman@prosoils.co.uk
awatkins@prosoils.co.uk

SUMMARY OF LABORATORY SOIL DESCRIPTIONS

Hole Number	Sample Number	Sample Type	Top Depth m	Base Depth m	Description of Sample
Bulkfill Area A 101					Class 1A
Bulkfill Area A 102					6F2
Bulkfill Area A 103					6F2
Bulkfill Area A 104					Class 2C
Bulkfill Area A 105					Class 2C
Bulkfill Area A 106					Class 1A

UKAS TESTING 4043	PSL Professional Soils Laboratory	Don Street	Contract No: PSL22/7966 Client Ref: 003707

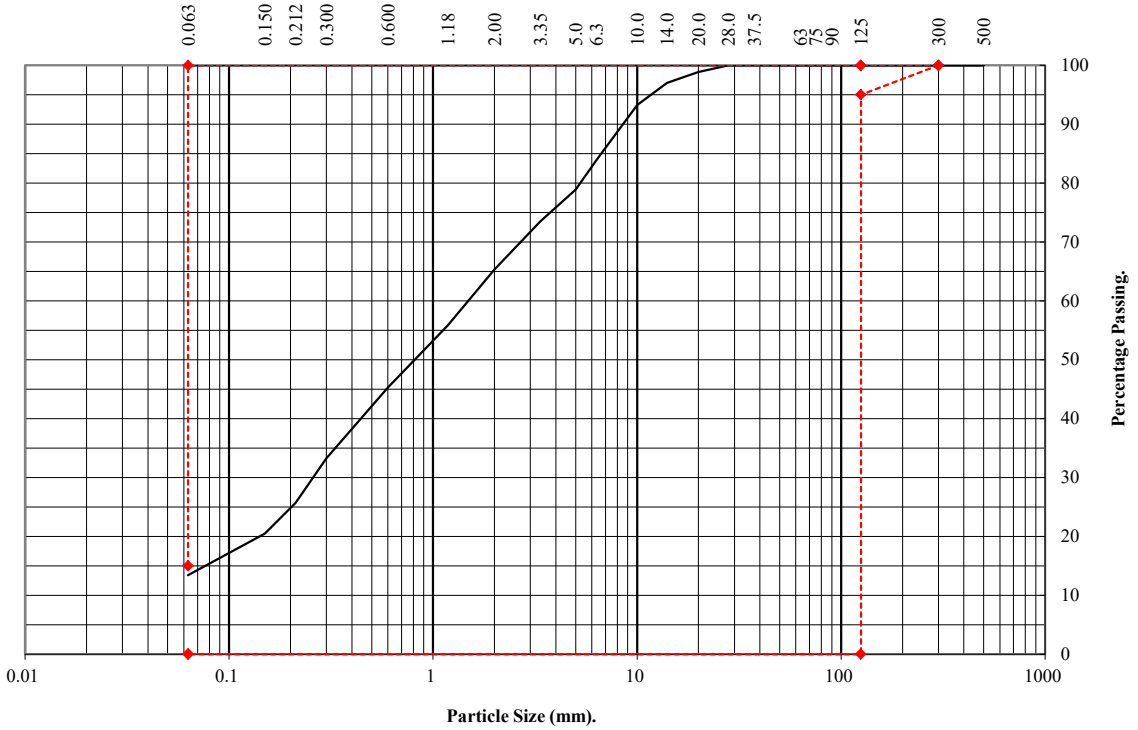
PARTICLE SIZE DISTRIBUTION TEST

BS1377:Part 2:1990

Wet Sieve: Clause 9.2

Classification for Acceptable Earthworks Materials

Sample Reference Bulkfill Area A 101 Classification Type: 1A



BS Test Sieve mm	Percentage Passing %	Table 6/2 Grading Requirements Lower	Upper
500	100		
300	100	100	100
125	100	95	100
90	100		
75	100		
63	100		
37.5	100		
28	100		
20	99		
14	97		
10	93		
6.3	84		
5	79		
3.35	73		
2	65		
1.18	56		
0.6	45		
0.3	33		
0.212	26		
0.15	20		
0.063	13	0	15

Remarks:
SHW Series 600 Table 6/2 :
Class 1A

UKAS TESTING 4043	PSL Professional Soils Laboratory	**Don Street**	**Contract No.:** PSL22/7966 **Client Ref:** 003707

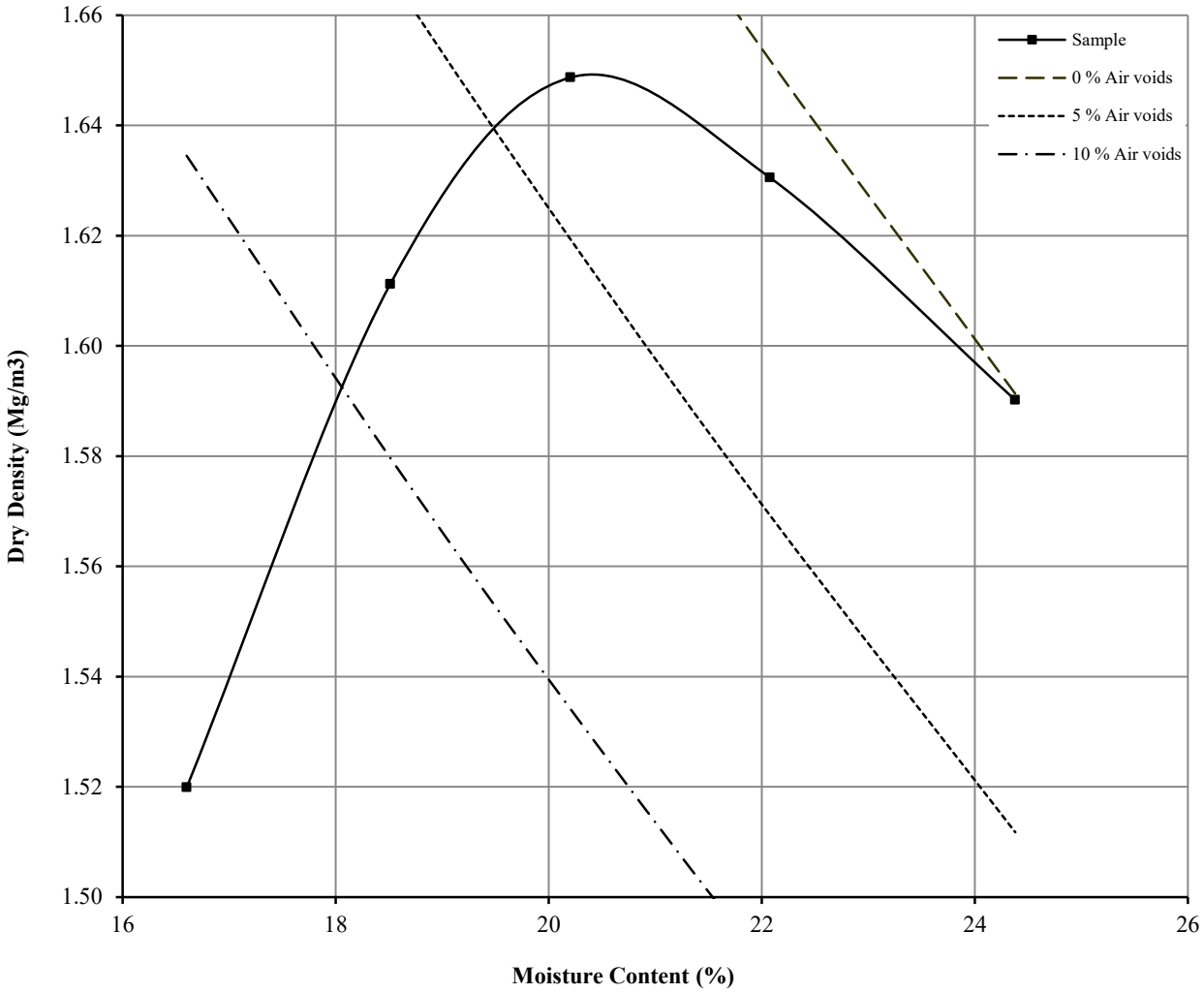
DRY DENSITY / MOISTURE CONTENT RELATIONSHIP

BS 1377 : Part 4 : Clause 3.5 : 1990

Hole Number: **Bulkfill Area A 101** **Top Depth (m) :**

Sample Number: **Base Depth (m) :**

Sample Type:



Initial Moisture Content:		20	Method of Compaction:	4.5kg	Separate Samples
Particle Density (Mg/m3):	2.60	Assumed	Material Retained on 37.5 mm Test Sieve (%):		0
Maximum Dry Density (Mg/m3):		1.65	Material Retained on 20.0 mm Test Sieve (%):		1
Optimum Moisture Content (%):		20			
Remarks See summary of soil descriptions					

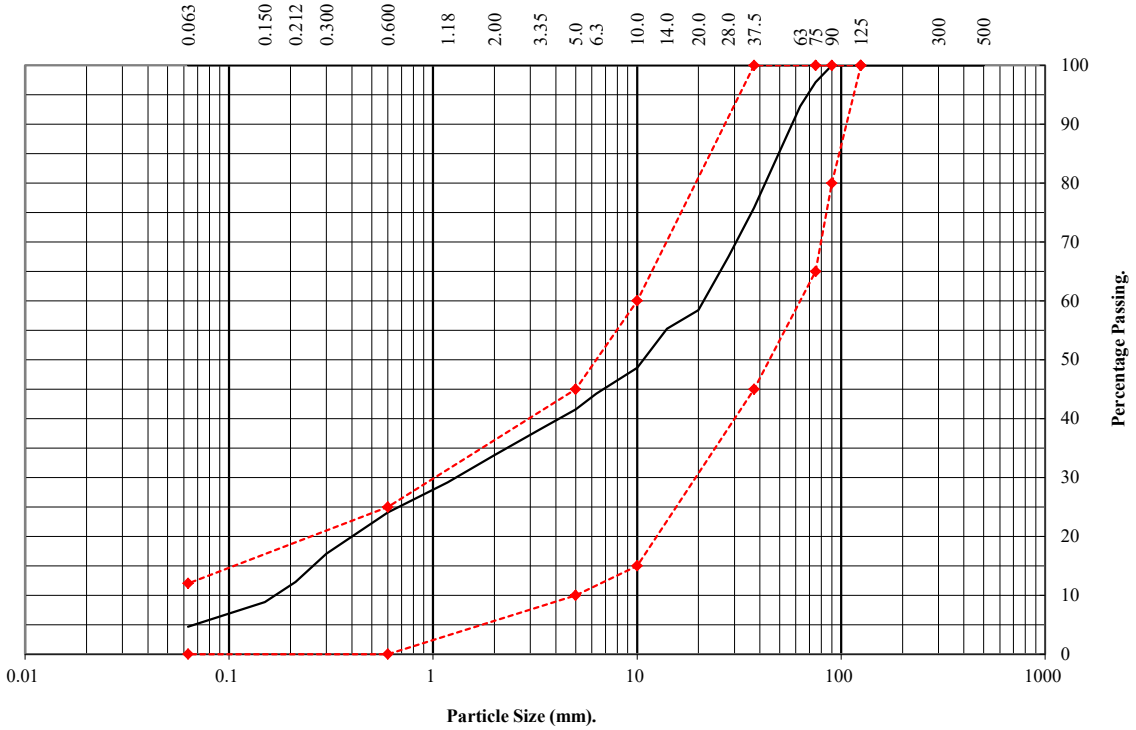
PARTICLE SIZE DISTRIBUTION TEST

BS1377:Part 2:1990

Wet Sieve: Clause 9.2

Classification for Acceptable Earthworks Materials

Sample Reference Bulkfill Area A 102 Classification Type: 6F2



BS Test Sieve mm	Percentage Passing %	Table 6/2 Grading Requirements Lower	Upper
500	100		
300	100		
125	100	100	100
90	100	80	100
75	97	65	100
63	93		
37.5	76	45	100
28	68		
20	58		
14	55		
10	49	15	60
6.3	44		
5	42	10	45
3.35	38		
2	34		
1.18	29		
0.6	24	0	25
0.3	17		
0.212	12		
0.15	9		
0.063	5	0	12

Remarks:
SHW Series 600 Table 6/2 :
Class 6F2

UKAS TESTING 4043	PSL Professional Soils Laboratory	**Don Street**	**Contract No.:** PSL22/7966 **Client Ref:** 003707

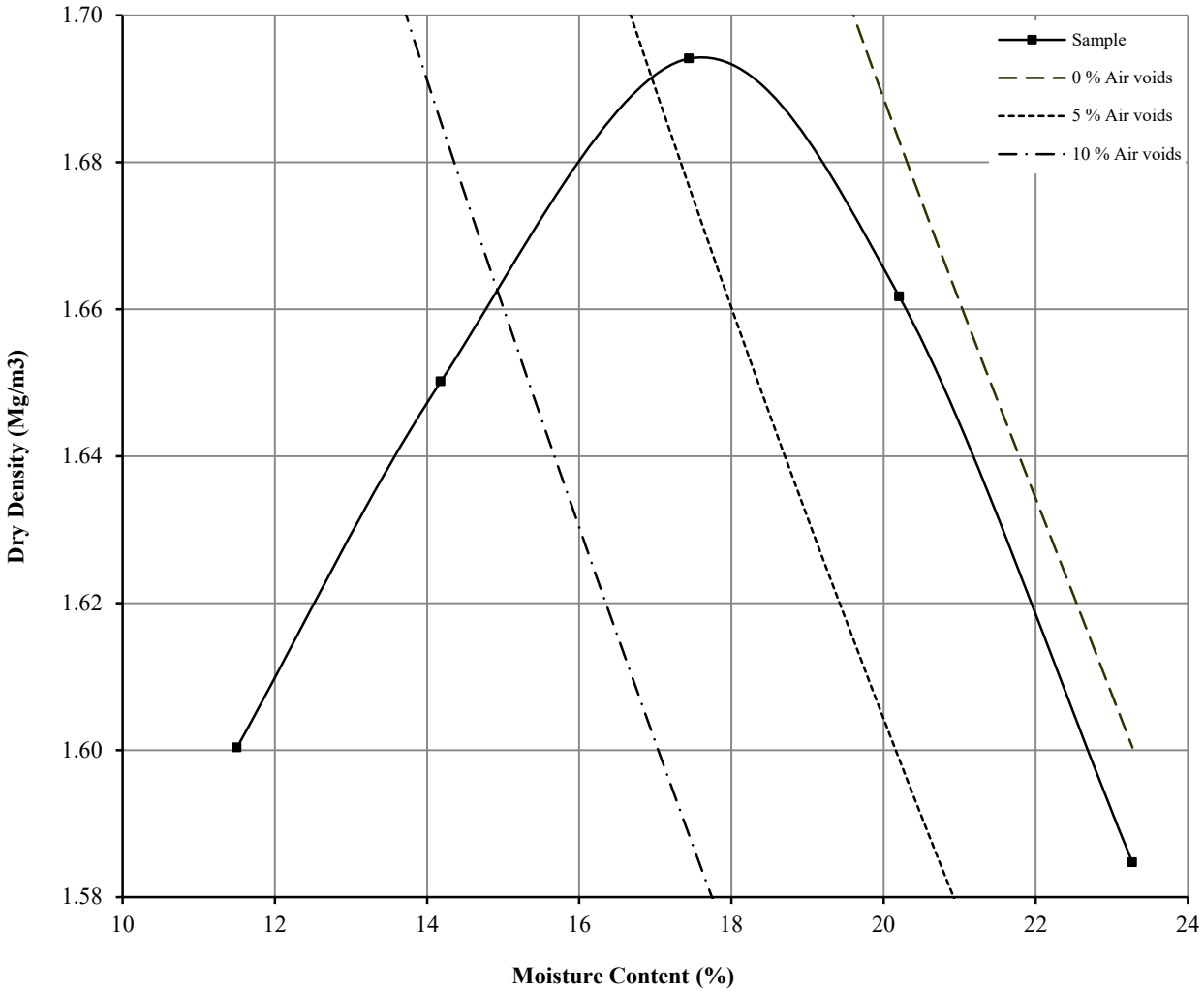
DRY DENSITY / MOISTURE CONTENT RELATIONSHIP

Non compliance with BS 1377 : Part 4 : Clause 3.6 : 1990

Hole Number: **Bulkfill Area A 102** **Top Depth (m) :**

Sample Number: **Base Depth (m) :**

Sample Type:



Initial Moisture Content:		29	Method of Compaction:	4.5kg	Separate Samples
Particle Density (Mg/m3):	2.55	Assumed	Material Retained on 37.5 mm Test Sieve (%):		24
Maximum Dry Density (Mg/m3):		1.69	Material Retained on 20.0 mm Test Sieve (%):		18
Optimum Moisture Content (%):		17			
Remarks See summary of soil descriptions					

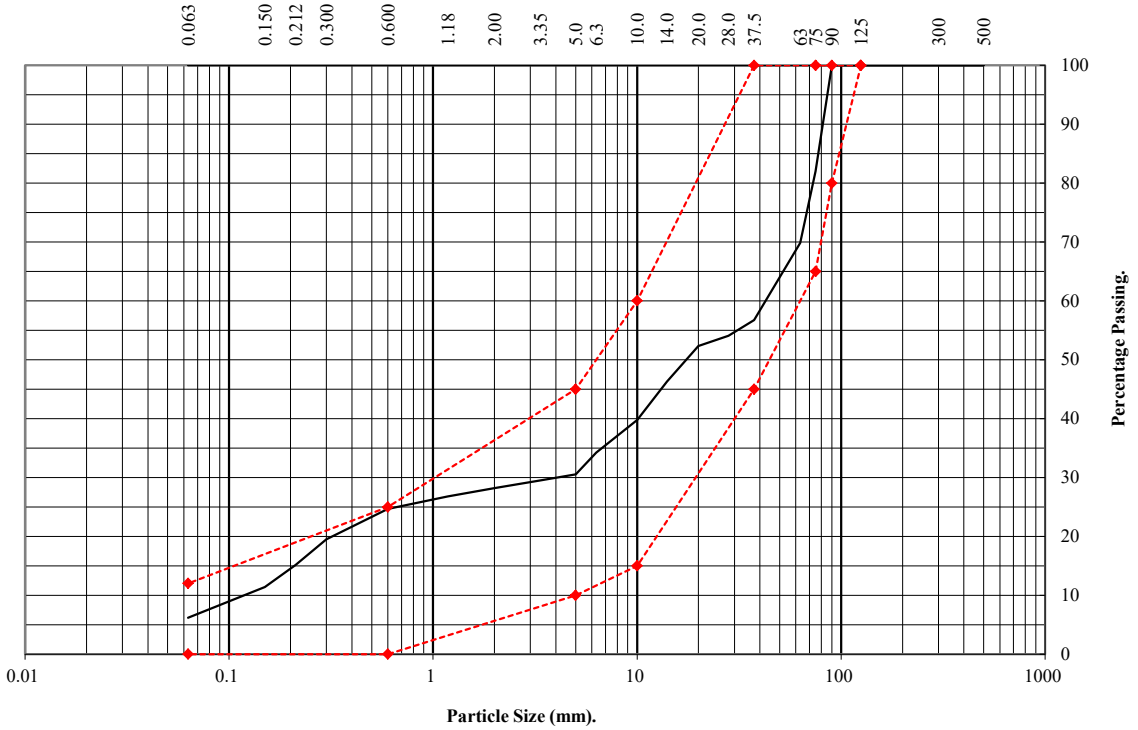
PARTICLE SIZE DISTRIBUTION TEST

BS1377:Part 2:1990

Wet Sieve: Clause 9.2

Classification for Acceptable Earthworks Materials

Sample Reference Bulkfill Area A 103 Classification Type: 6F2



BS Test Sieve mm	Percentage Passing %	Table 6/2 Grading Requirements Lower	Upper
500	100		
300	100		
125	100	100	100
90	100	80	100
75	82	65	100
63	70		
37.5	57	45	100
28	54		
20	52		
14	46		
10	40	15	60
6.3	34		
5	31	10	45
3.35	30		
2	28		
1.18	27		
0.6	25	0	25
0.3	19		
0.212	15		
0.15	11		
0.063	6	0	12

Remarks:
SHW Series 600 Table 6/2 :
Class 6F2

UKAS TESTING 4043	PSL Professional Soils Laboratory	**Don Street**	**Contract No.:** PSL22/7966
			Client Ref: 003707

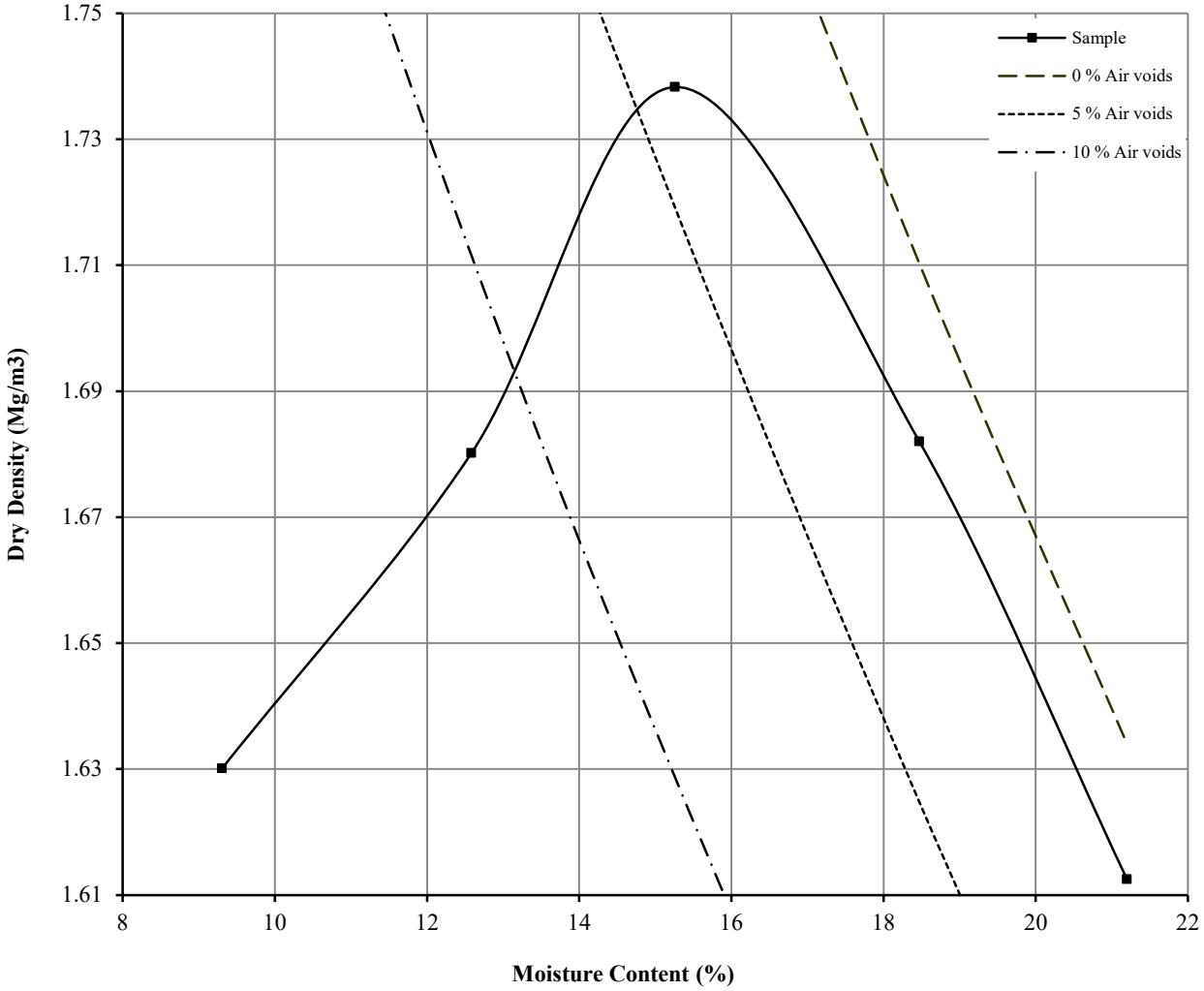
DRY DENSITY / MOISTURE CONTENT RELATIONSHIP

Non compliance with BS 1377 : Part 4 : Clause 3.6 : 1990

Hole Number: **Bulkfill Area A 103** **Top Depth (m) :**

Sample Number: **Base Depth (m) :**

Sample Type:



Initial Moisture Content:		25	Method of Compaction:	4.5kg	Separate Samples
Particle Density (Mg/m3):	2.5	Assumed	Material Retained on 37.5 mm Test Sieve (%):		43
Maximum Dry Density (Mg/m3):		1.74	Material Retained on 20.0 mm Test Sieve (%):		5
Optimum Moisture Content (%):		15			
Remarks See summary of soil descriptions					

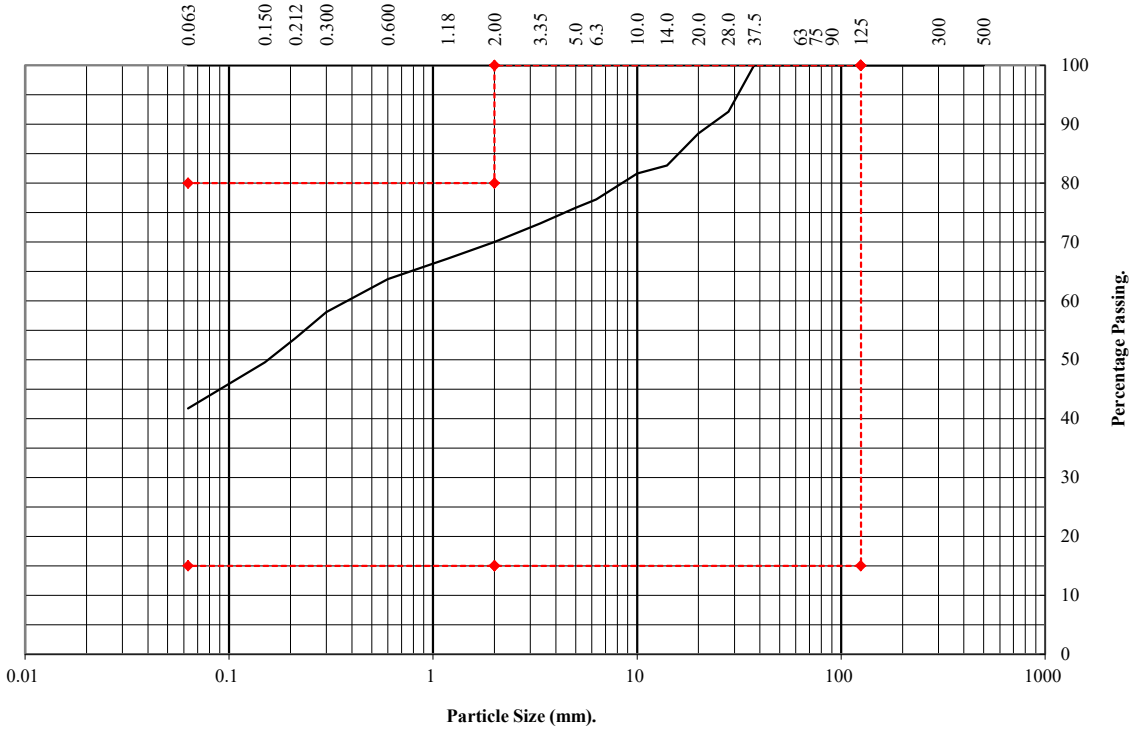
PARTICLE SIZE DISTRIBUTION TEST

BS1377:Part 2:1990

Wet Sieve: Clause 9.2

Classification for Acceptable Earthworks Materials

Sample Reference Bulkfill Area A 104 Classification Type: 2C



BS Test Sieve mm	Percentage Passing %	Table 6/2 Grading Requirements Lower	Upper
500	100		
300	100		
125	100	100	100
90	100		
75	100		
63	100		
37.5	100		
28	92		
20	88		
14	83		
10	82		
6.3	77		
5	76		
3.35	73		
2	70	15	80
1.18	67		
0.6	64		
0.3	58		
0.212	54		
0.15	50		
0.063	42	15	80

Remarks:
SHW Series 600 Table 6/2 :
Class 2C

UKAS TESTING 4043	PSL Professional Soils Laboratory	**Don Street**	**Contract No.:** PSL22/7966 **Client Ref:** 003707

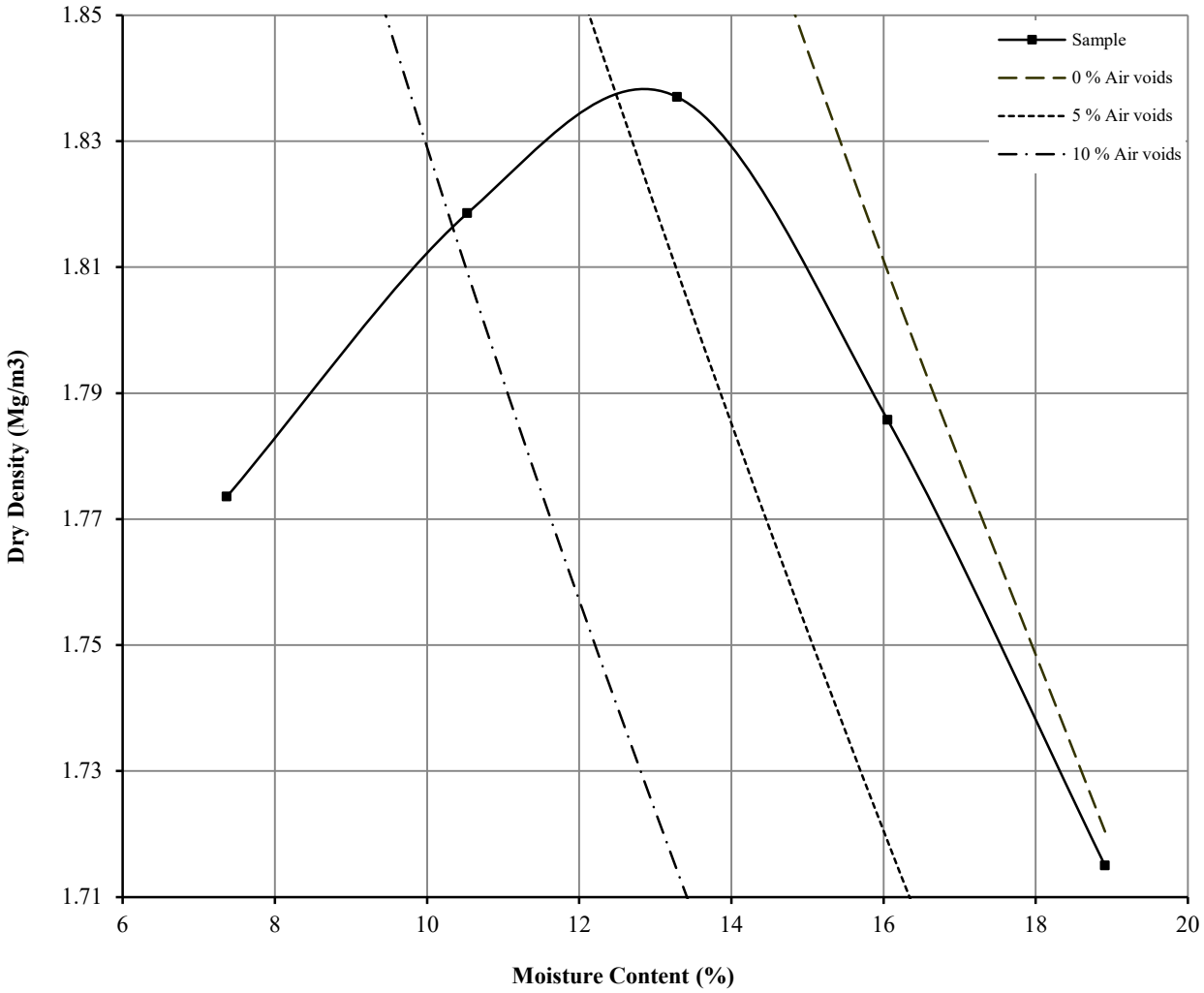
DRY DENSITY / MOISTURE CONTENT RELATIONSHIP

BS 1377 : Part 4 : Clause 3.6 : 1990

Hole Number: **Bulkfill Area A 104** **Top Depth (m) :**

Sample Number: **Base Depth (m) :**

Sample Type:



Initial Moisture Content:		19	Method of Compaction:	4.5kg	Separate Samples
Particle Density (Mg/m3):	2.55	Assumed	Material Retained on 37.5 mm Test Sieve (%):		0
Maximum Dry Density (Mg/m3):		1.84	Material Retained on 20.0 mm Test Sieve (%):		12
Optimum Moisture Content (%):		13			
Remarks See summary of soil descriptions					

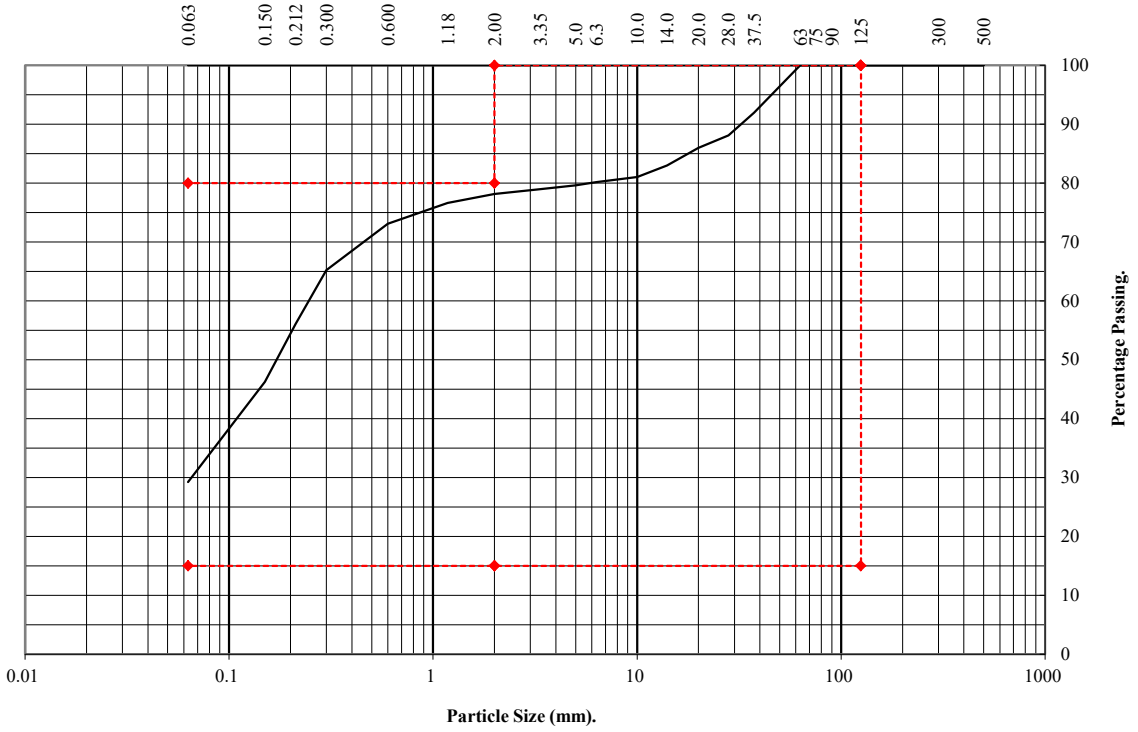
PARTICLE SIZE DISTRIBUTION TEST

BS1377:Part 2:1990

Wet Sieve: Clause 9.2

Classification for Acceptable Earthworks Materials

Sample Reference Bulkfill Area A 105 Classification Type: 2C



BS Test Sieve mm	Percentage Passing %	Table 6/2 Grading Requirements Lower	Upper
500	100		
300	100		
125	100	100	100
90	100		
75	100		
63	100		
37.5	92		
28	88		
20	86		
14	83		
10	81		
6.3	80		
5	80		
3.35	79		
2	78	15	80
1.18	77		
0.6	73		
0.3	65		
0.212	56		
0.15	46		
0.063	29	15	80

Remarks:
SHW Series 600 Table 6/2 :
Class 2C

UKAS TESTING 4043	PSL Professional Soils Laboratory	**Don Street**	**Contract No.:** PSL22/7966 **Client Ref:** 003707

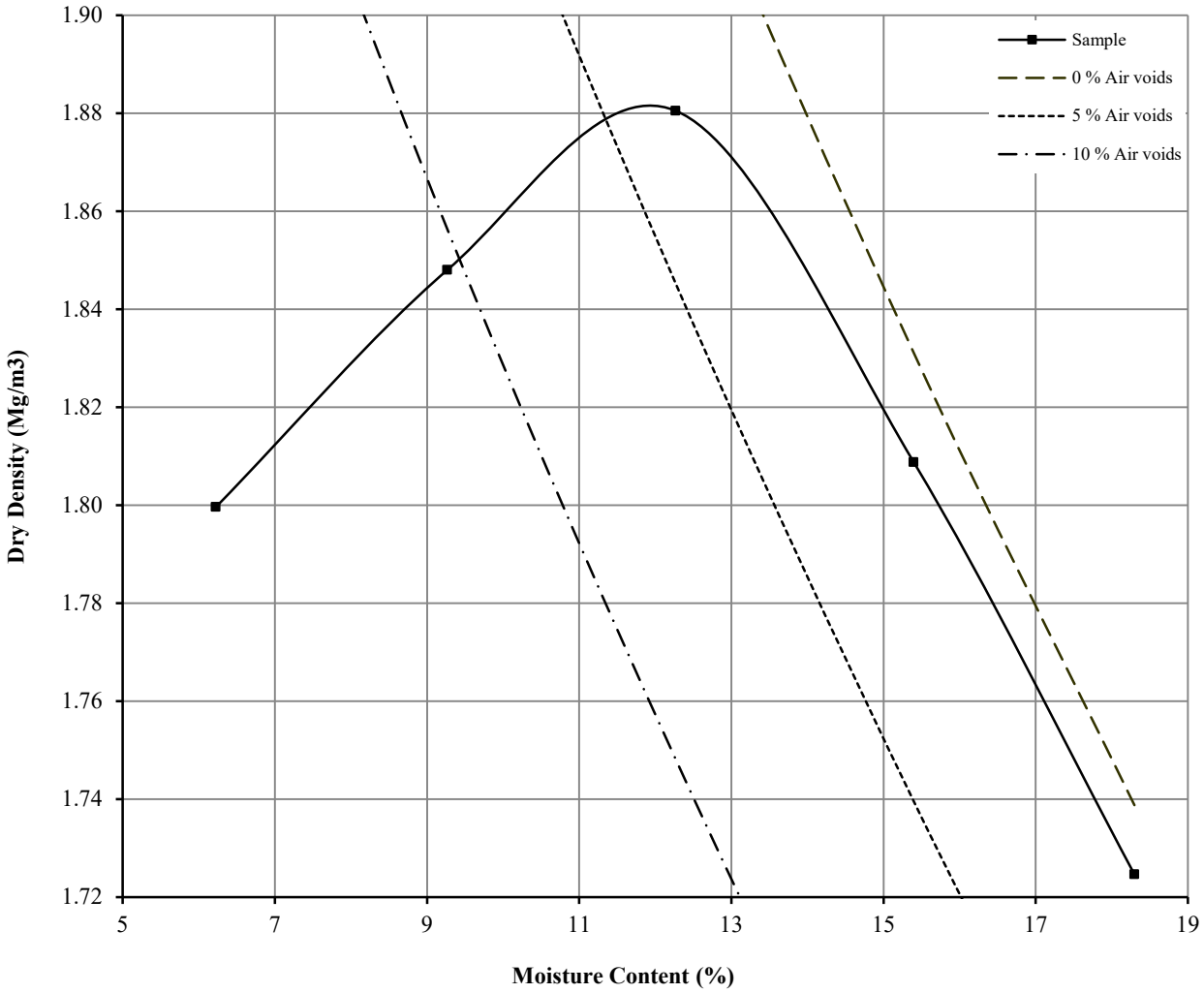
DRY DENSITY / MOISTURE CONTENT RELATIONSHIP

BS 1377 : Part 4 : Clause 3.6 : 1990

Hole Number: **Bulkfill Area A 105** **Top Depth (m) :**

Sample Number: **Base Depth (m) :**

Sample Type:



Initial Moisture Content:		21	Method of Compaction:	4.5kg	Separate Samples
Particle Density (Mg/m3):	2.55	Assumed	Material Retained on 37.5 mm Test Sieve (%):		8
Maximum Dry Density (Mg/m3):		1.88	Material Retained on 20.0 mm Test Sieve (%):		6
Optimum Moisture Content (%):		12			
Remarks See summary of soil descriptions					

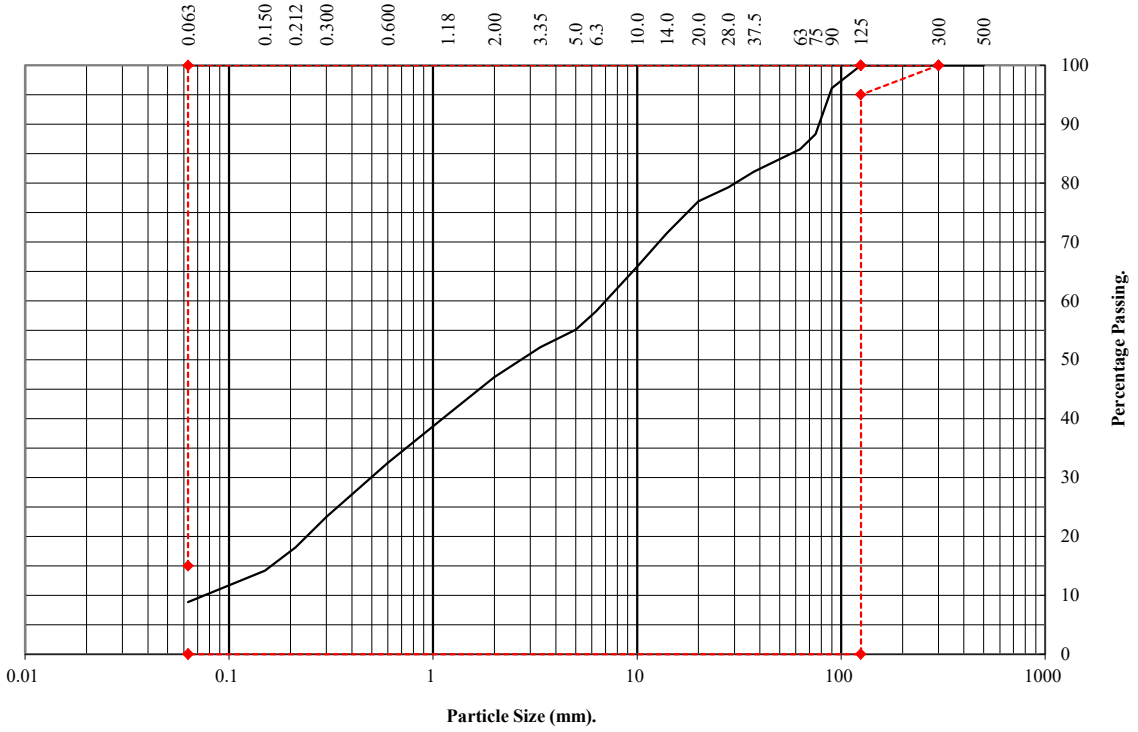
PARTICLE SIZE DISTRIBUTION TEST

BS1377:Part 2:1990

Wet Sieve: Clause 9.2

Classification for Acceptable Earthworks Materials

Sample Reference Bulkfill Area A 106 Classification Type: 1A



BS Test Sieve mm	Percentage Passing %	Table 6/2 Grading Requirements Lower	Upper
500	100		
300	100	100	100
125	100	95	100
90	96		
75	88		
63	86		
37.5	82		
28	79		
20	77		
14	72		
10	66		
6.3	58		
5	55		
3.35	52		
2	47		
1.18	41		
0.6	33		
0.3	23		
0.212	18		
0.15	14		
0.063	9	0	15

Remarks:
SHW Series 600 Table 6/2 :
Class 1A

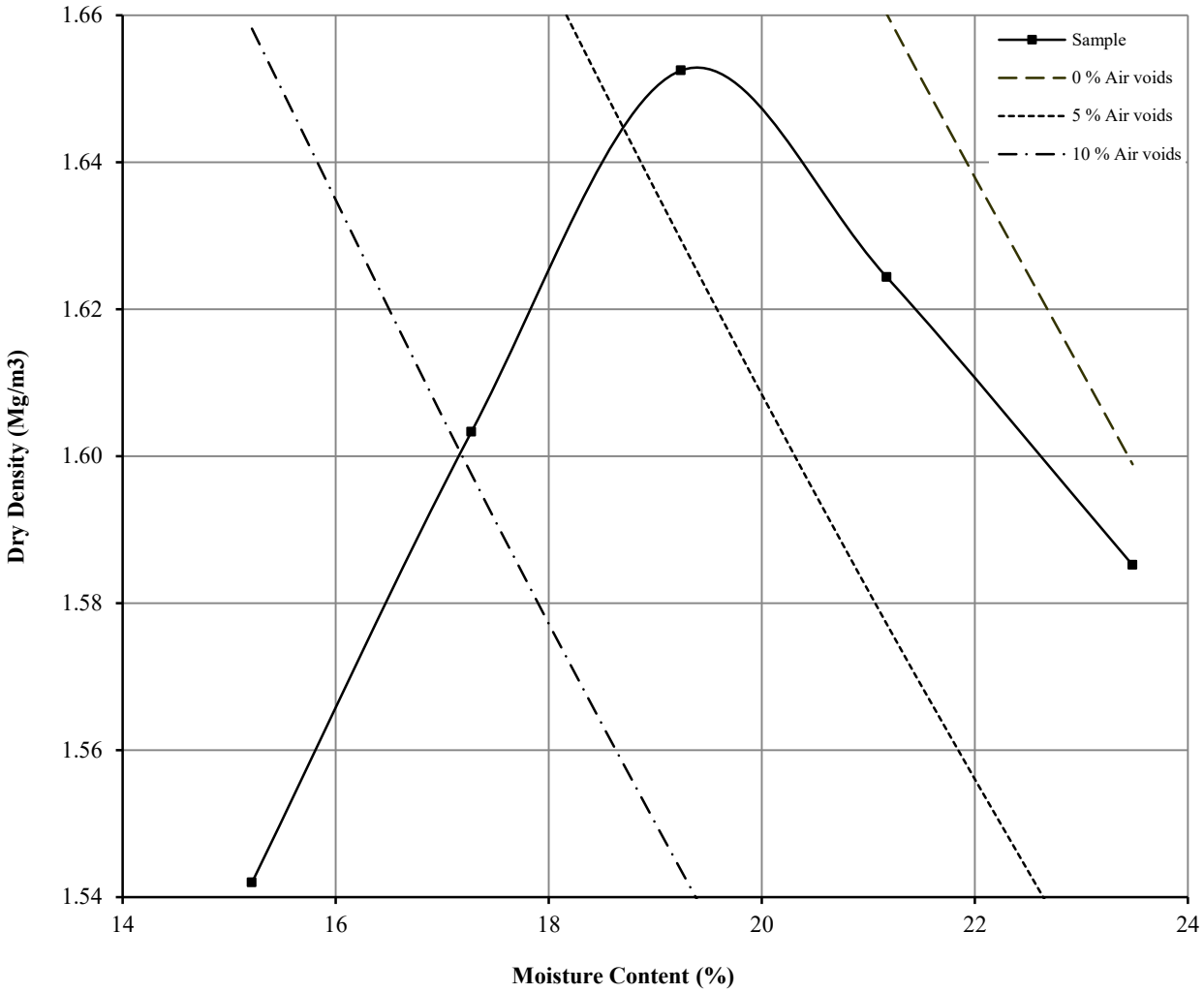
DRY DENSITY / MOISTURE CONTENT RELATIONSHIP

Non compliance with BS 1377 : Part 4 : Clause 3.6 : 1990

Hole Number: **Bulkfill Area A 106** **Top Depth (m) :**

Sample Number: **Base Depth (m) :**

Sample Type:



Initial Moisture Content:		21	Method of Compaction:	4.5kg	Separate Samples
Particle Density (Mg/m3):	2.56	Assumed	Material Retained on 37.5 mm Test Sieve (%):		18
Maximum Dry Density (Mg/m3):		1.65	Material Retained on 20.0 mm Test Sieve (%):		5
Optimum Moisture Content (%):		19			
Remarks See summary of soil descriptions					

LABORATORY REPORT

4043

Contract Number: PSL22/8101

Report Date: 13 January 2023

Client's Reference: 14-554

Client Name: E3P
Taylor Road
Urmston
Manchester
M41 7JQ

For the attention of: Matt Dee/Georgia Calvert

Contract Title: Don Street

Date Received: 21/12/2022
Date Commenced: 21/12/2022
Date Completed: 13/1/2023

Notes: Opinions and Interpretations are outside the UKAS Accreditation

A copy of the Laboratory Schedule of accredited tests as issued by UKAS is attached to this report. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced other than in full, without the prior written approval of the laboratory.

Checked and Approved Signatories:

A Watkins (Director)
R Berriman (Quality Manager)
S Royle (Laboratory Manager)

L Knight (Assistant Laboratory Manager)
S Eyre (Senior Technician)
T Watkins (Senior Technician)

5 – 7 Hexthorpe Road, Hexthorpe,
Doncaster DN4 0AR
tel: +44 (0)844 815 6641
fax: +44 (0)844 815 6642
e-mail: rgunson@prosoils.co.uk
awatkins@prosoils.co.uk

SUMMARY OF LABORATORY SOIL DESCRIPTIONS

Hole Number	Sample Number	Sample Type	Top Depth m	Base Depth m	Description of Sample
CRUSH 001 Parcel C					MADE GROUND dark brown slightly sandy GRAVEL of cobbles (Class 1A)

UKAS TESTING
4043

PSL
Professional Soils Laboratory

Don Street

Contract No:
PSL22/8101
Client Ref:
14-544

PARTICLE SIZE DISTRIBUTION TEST

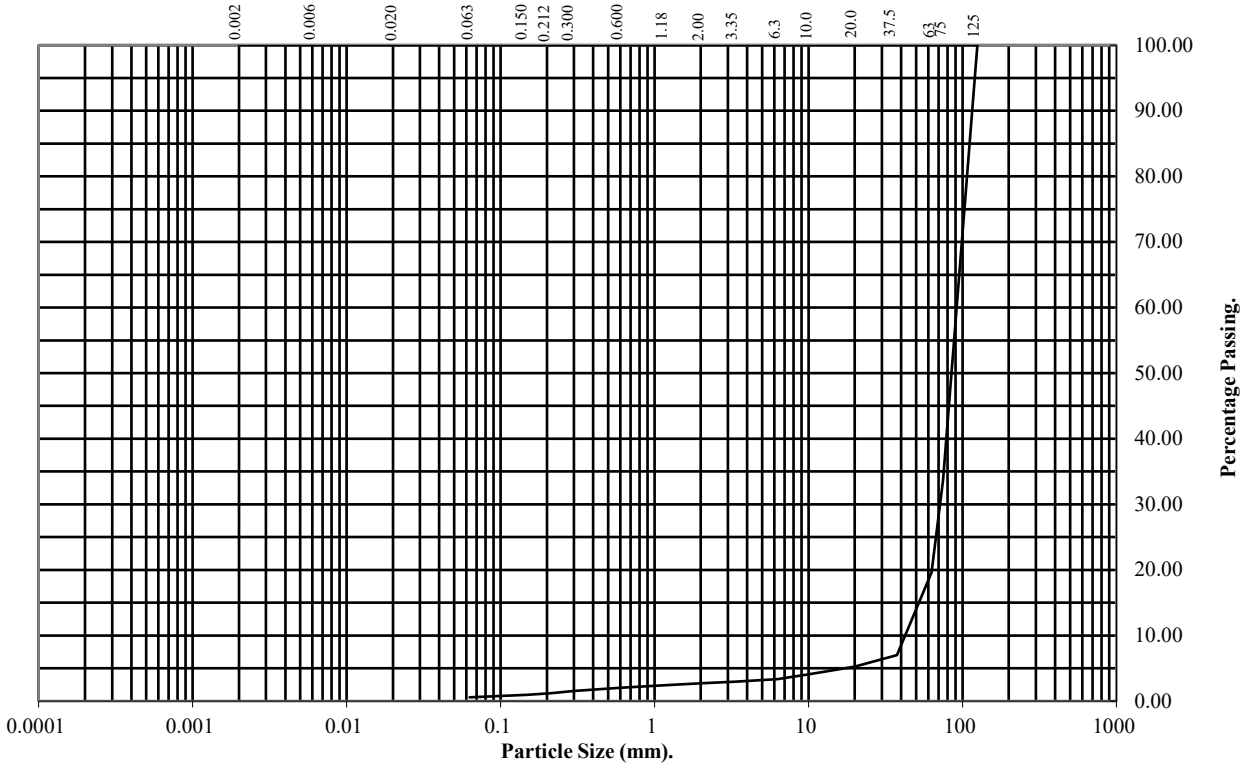
BS1377 : Part 2 : 1990

Wet Sieve, Clause 9.2

Hole Number: **CRUSH 001 Parcel C** **Top Depth (m):**

Sample Number: **Base Depth(m):**

Sample Type:



BS Test Sieve (mm)	Percentage Passing
125	100
75	34
63	20
37.5	7
20	5
10	4
6.3	3
3.35	3
2	3
1.18	2
0.6	2
0.3	2
0.212	1
0.15	1
0.063	1

Soil Fraction	Total Percentage
Cobbles	80
Gravel	17
Sand	2
Silt/Clay	1

Remarks:

See Summary of Soil Descriptions

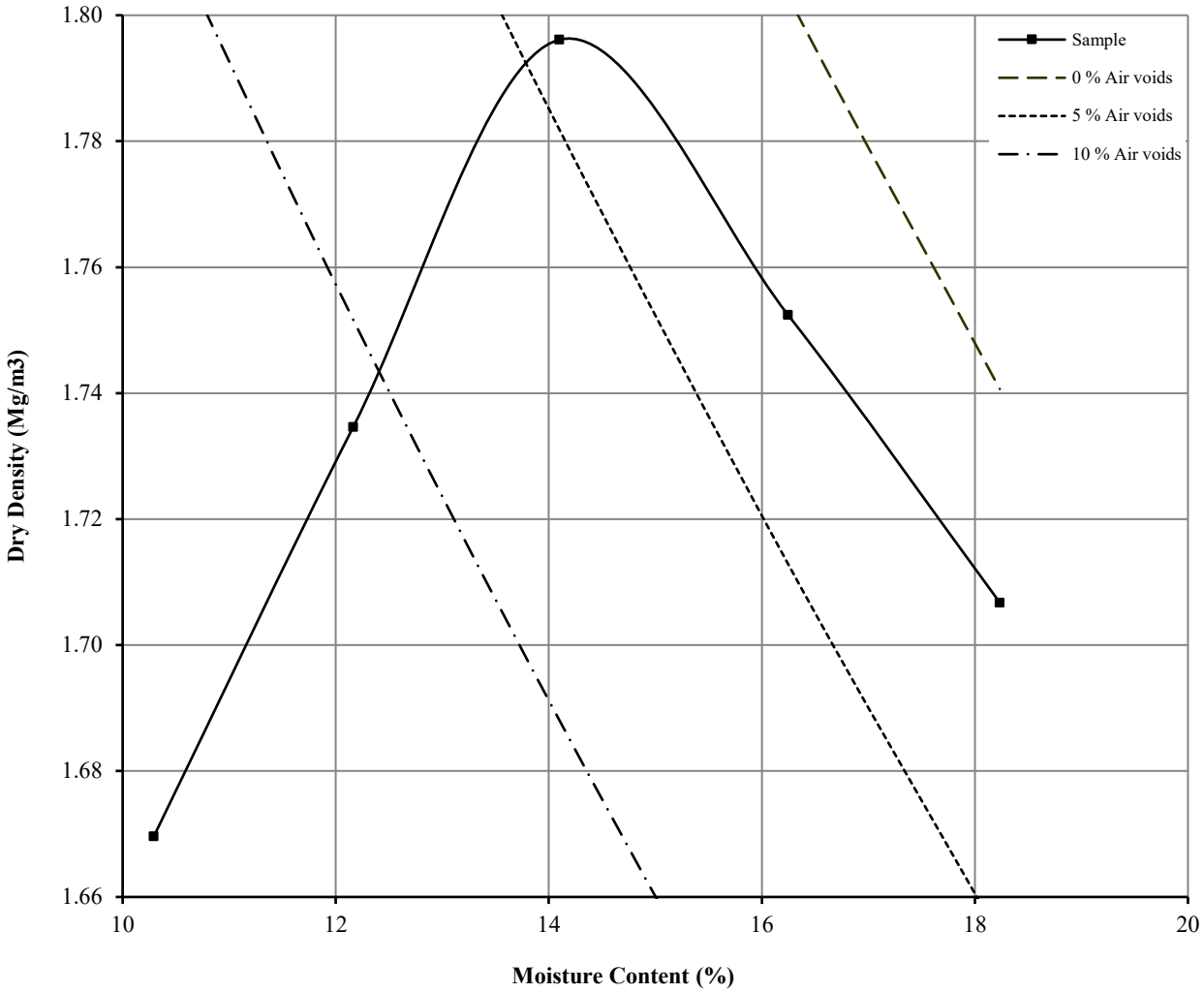
DRY DENSITY / MOISTURE CONTENT RELATIONSHIP

Non compliance with BS 1377 : Part 4 : Clause 3.6 : 1990

Hole Number: CRUSH 001 Parcel C **Top Depth (m) :**

Sample Number: **Base Depth (m) :**

Sample Type:



Initial Moisture Content:		16	Method of Compaction:	4.5kg	Separate Samples
Particle Density (Mg/m3):	2.55	Assumed	Material Retained on 37.5 mm Test Sieve (%):		93
Maximum Dry Density (Mg/m3):		1.80	Material Retained on 20.0 mm Test Sieve (%):		2
Optimum Moisture Content (%):		14			
Remarks See summary of soil descriptions					

MURRAY RIX

CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client e3p

Address Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

Contract 14-554 -
Don Street

Job Number MRN 4287/110
Date of Issue 30 November 2022
Page 1 of 25

Approved Signatories

S J Hutchings, O P Davies

Notes

1 All remaining samples and remnants from this contract will be disposed 28 days from the date of this report unless you notify us to the contrary.

2 Result certificates, in this report, not bearing a UKAS mark, are not included in our UKAS accreditation schedule.

3 Opinions and interpretations expressed herein are outside the scope of our UKAS accreditation.

4 Certified that the samples have been examined and tested in accordance with the terms of the contract/order and unless otherwise stated conform to the standards/specifications quoted.

5 The results included within the report are representative of the samples submitted for analysis.

6 This certificate should not be reproduced, except in full, without the express permission of the laboratory.

M U R R A Y R I X
ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

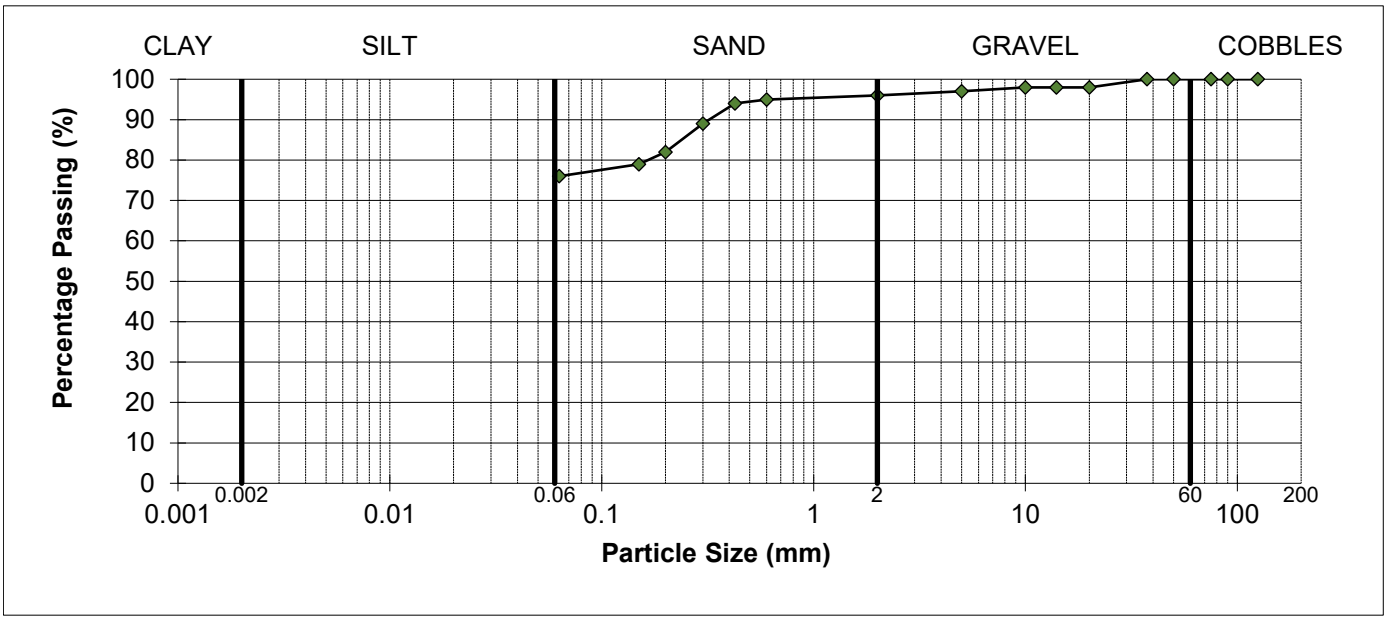
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	14-554 Don Street
JOB NUMBER	MRN 4287/110

SAMPLE LABEL	Parcel B Bulkfill 101	DATE SAMPLED	21-Nov-22
LAB SAMPLE No	119089	DATE RECEIVED	21-Nov-22
DATE TESTED	22-Nov-22	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site Won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	97	
90	100		2	96	80-100
75	100		0.6	95	
50	100		0.425	94	
37.5	100		0.3	89	
20	98		0.2	82	
14	98		0.15	79	
10	98		0.063	76	15-100



REMARKS
As received water content = 19.1%
Sample complies with the advised grading specification for a 2A/2B material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 30-Nov-22

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-4:1990
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

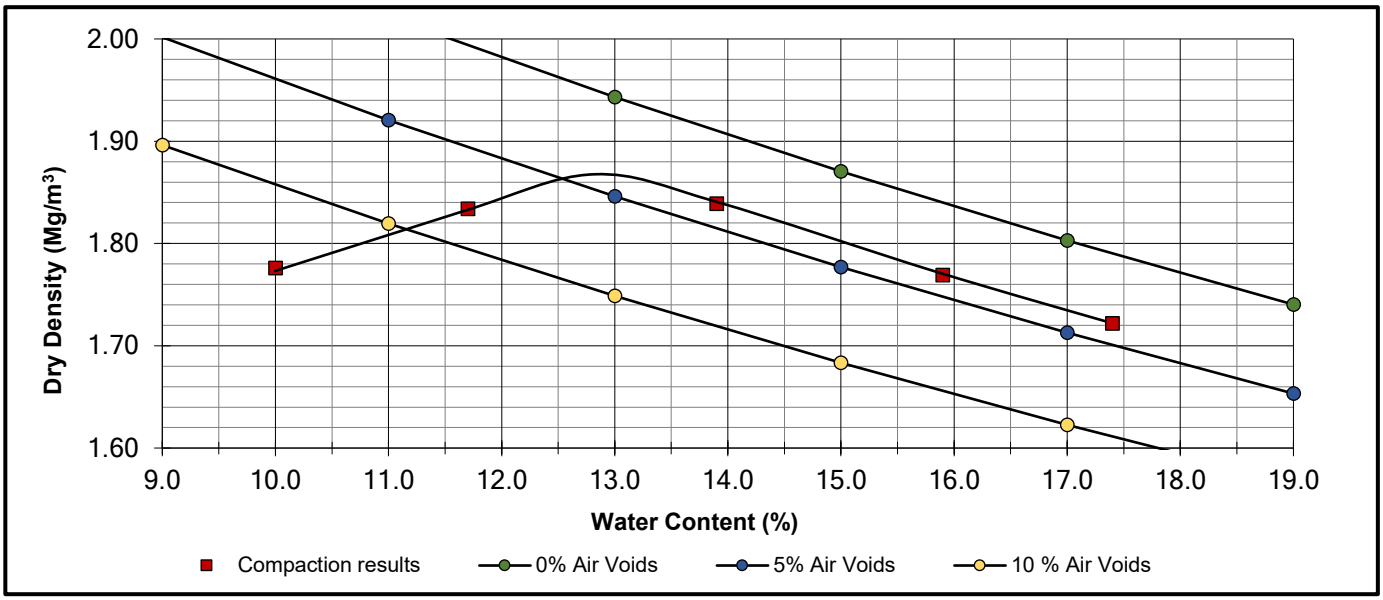
CLIENT	e3p
SITE	14-554 Don Street
JOB NUMBER	MRN 4287/110

SAMPLE LABEL	Parcel B Bulkfill 101	DATE SAMPLED	21-Nov-22
SAMPLE NUMBER	119089	DATE RECEIVED	21-Nov-22
DATE TESTED	18-Nov-22	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site Won
PRE TREATMENT	Air Dried / Separate Batches

RETAINED 37.5mm	0	%	GRADING ZONE	Zone 2	
RETAINED 20mm	2	%	PARTICLE DENSITY	2.60	Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	10.0	1.776
2	11.7	1.834
3	13.9	1.839
4	15.9	1.769
5	17.4	1.722



OPTIMUM WATER CONTENT	**13**	(%)
MAXIMUM DRY DENSITY	**1.87**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

SIGNED

DATE 30-Nov-22

M U R R A Y R I X

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

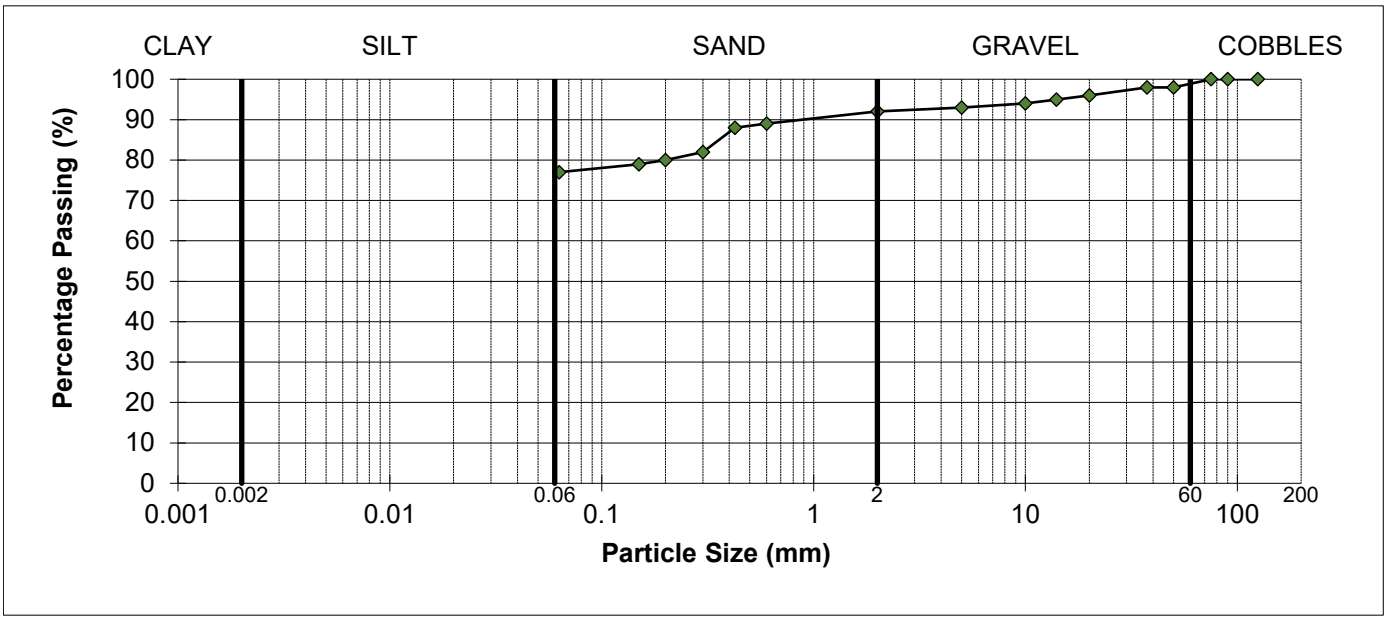
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	14-554 Don Street
JOB NUMBER	MRN 4287/110

SAMPLE LABEL	Parcel B Bulkfill 102	DATE SAMPLED	21-Nov-22
LAB SAMPLE No	119090	DATE RECEIVED	21-Nov-22
DATE TESTED	22-Nov-22	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site Won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	93	
90	100		2	92	80-100
75	100		0.6	89	
50	98		0.425	88	
37.5	98		0.3	82	
20	96		0.2	80	
14	95		0.15	79	
10	94		0.063	77	15-100



REMARKS

As received water content = 21.3%

Sample complies with the advised grading specification for a 2A/2B material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 30-Nov-22

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-4:1990
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

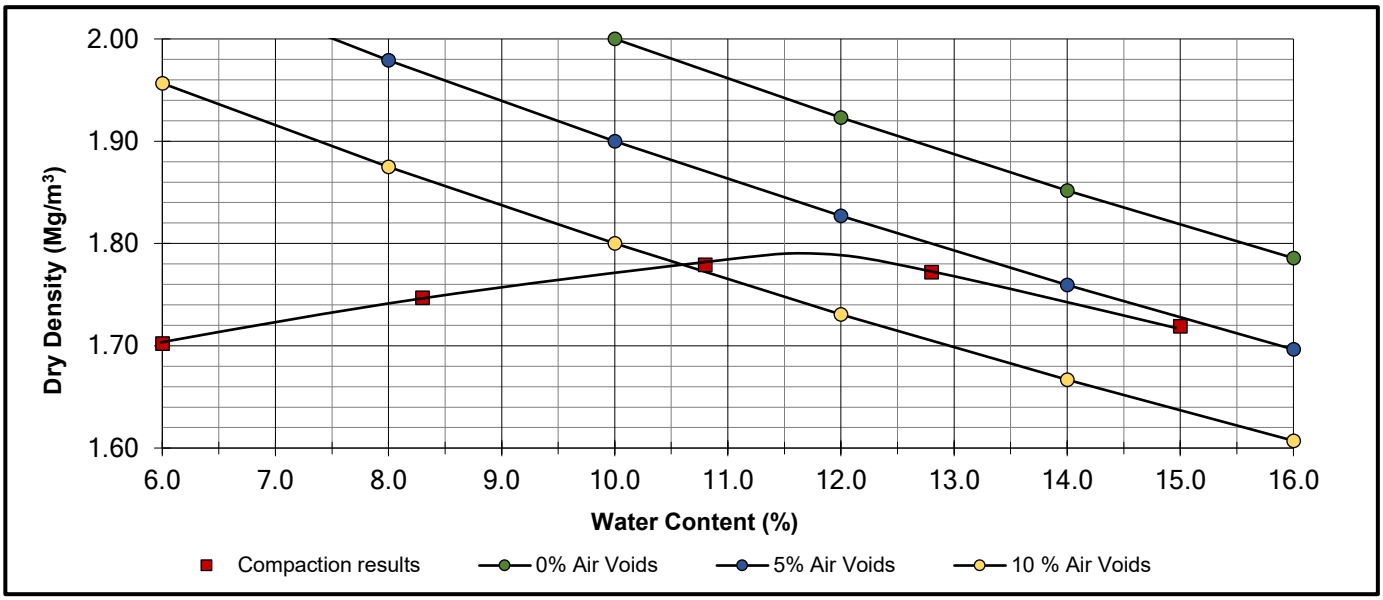
CLIENT	e3p
SITE	14-554 Don Street
JOB NUMBER	MRN 4287/110

SAMPLE LABEL	Parcel B Bulkfill 102	DATE SAMPLED	21-Nov-22
SAMPLE NUMBER	119090	DATE RECEIVED	21-Nov-22
DATE TESTED	18-Nov-22	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site Won
PRE TREATMENT	Air Dried / Separate Batches

RETAINED 37.5mm	2 %	GRADING ZONE	Zone 4
RETAINED 20mm	4 %	PARTICLE DENSITY	2.50 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	6.0	1.702
2	8.3	1.747
3	10.8	1.779
4	12.8	1.772
5	15.0	1.719



OPTIMUM WATER CONTENT	**12**	(%)
MAXIMUM DRY DENSITY	**1.79**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 30-Nov-22

M U R R A Y R I X
ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

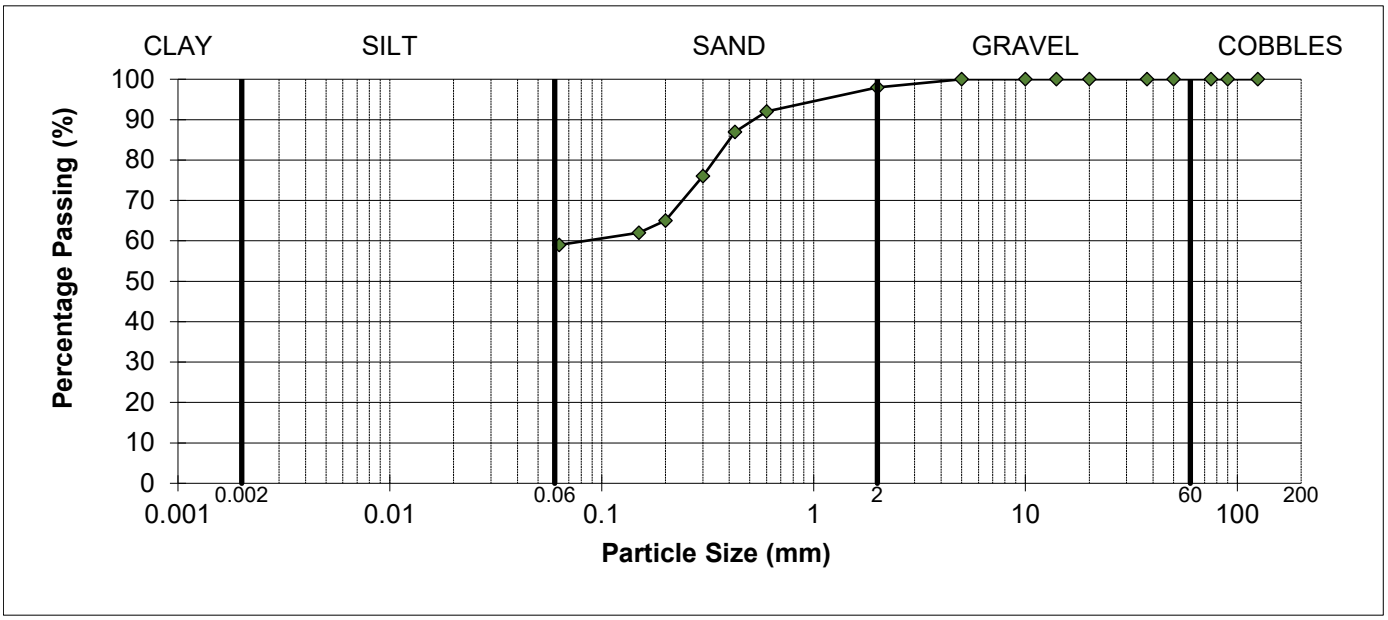
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	14-554 Don Street
JOB NUMBER	MRN 4287/110

SAMPLE LABEL	Parcel B Bulkfill 103	DATE SAMPLED	21-Nov-22
LAB SAMPLE No	119091	DATE RECEIVED	21-Nov-22
DATE TESTED	22-Nov-22	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site Won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	100	
90	100		2	98	80-100
75	100		0.6	92	
50	100		0.425	87	
37.5	100		0.3	76	
20	100		0.2	65	
14	100		0.15	62	
10	100		0.063	59	15-100



REMARKS
As received water content = 12.7%
Sample complies with the advised grading specification for a 2A/2B material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 30-Nov-22

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-4:1990
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

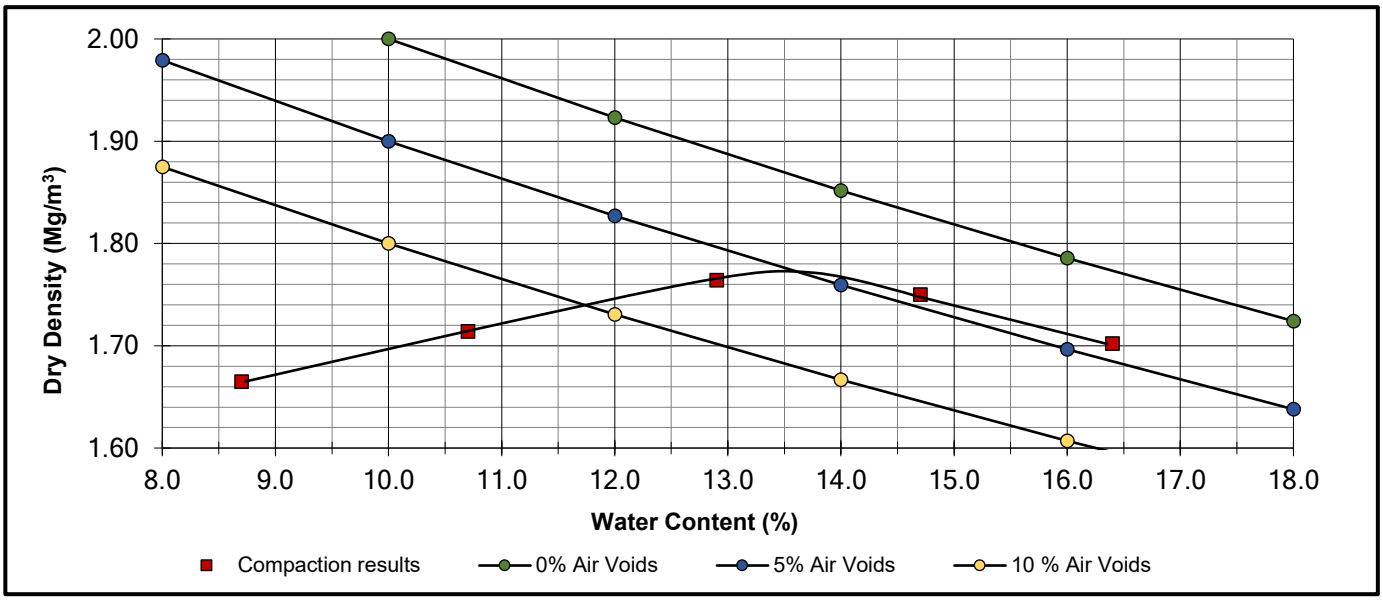
CLIENT	e3p
SITE	14-554 Don Street
JOB NUMBER	MRN 4287/110

SAMPLE LABEL	Parcel B Bulkfill 103	DATE SAMPLED	21-Nov-22
SAMPLE NUMBER	119091	DATE RECEIVED	21-Nov-22
DATE TESTED	18-Nov-22	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site Won
PRE TREATMENT	Air Dried / Separate Batches

RETAINED 37.5mm	0 %	GRADING ZONE	Zone 1
RETAINED 20mm	0 %	PARTICLE DENSITY	2.50 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	8.7	1.665
2	10.7	1.714
3	12.9	1.764
4	14.7	1.750
5	16.4	1.702



OPTIMUM WATER CONTENT	**14**	(%)
MAXIMUM DRY DENSITY	**1.77**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 30-Nov-22

M U R R A Y R I X
ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

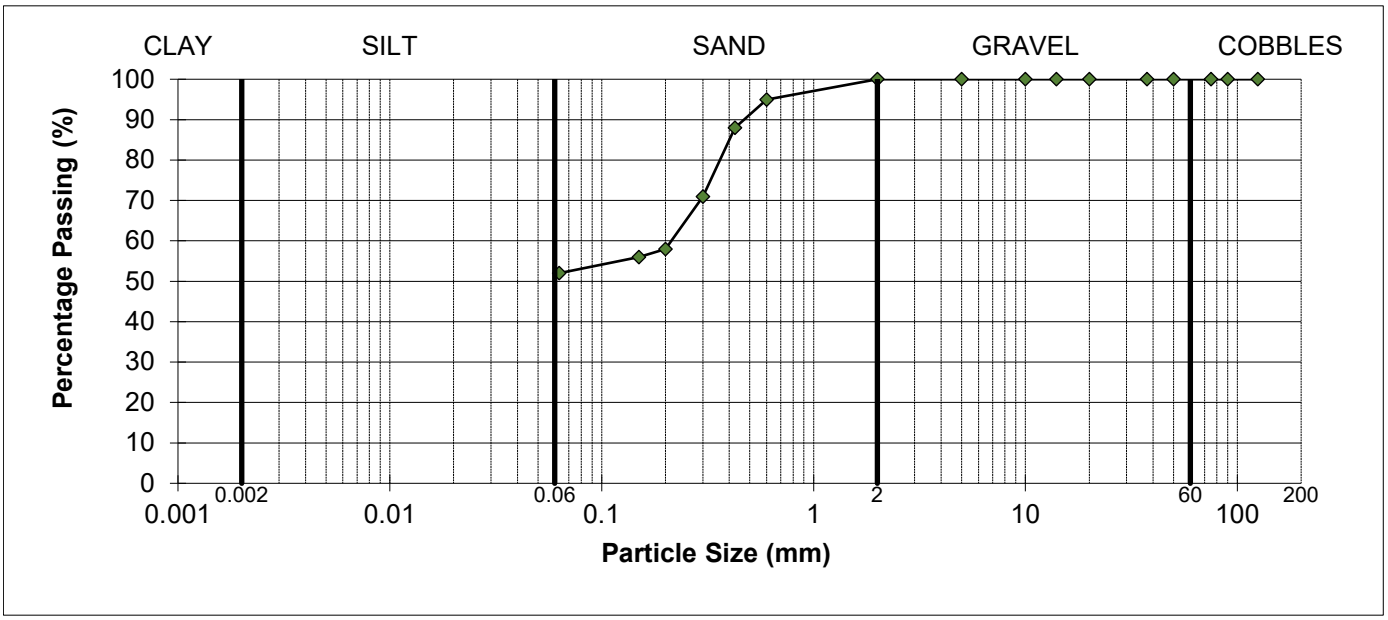
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	14-554 Don Street
JOB NUMBER	MRN 4287/110

SAMPLE LABEL	Parcel B Bulkfill 104	DATE SAMPLED	21-Nov-22
LAB SAMPLE No	119092	DATE RECEIVED	21-Nov-22
DATE TESTED	22-Nov-22	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site Won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	100	
90	100		2	100	80-100
75	100		0.6	95	
50	100		0.425	88	
37.5	100		0.3	71	
20	100		0.2	58	
14	100		0.15	56	
10	100		0.063	52	15-100



REMARKS
As received water content = 16.6%
Sample complies with the advised grading specification for a 2A/2B material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 30-Nov-22

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-4:1990
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

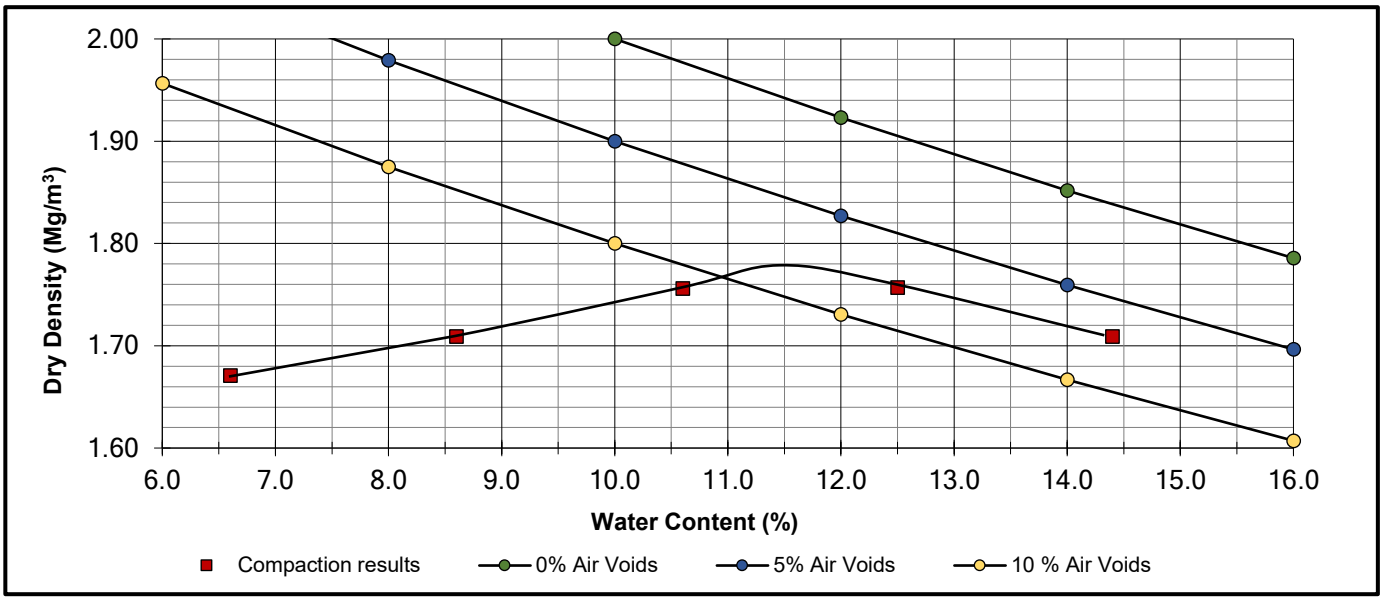
CLIENT	e3p
SITE	14-554 Don Street
JOB NUMBER	MRN 4287/110

SAMPLE LABEL	Parcel B Bulkfill 104	DATE SAMPLED	21-Nov-22
SAMPLE NUMBER	119092	DATE RECEIVED	21-Nov-22
DATE TESTED	18-Nov-22	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site Won
PRE TREATMENT	Air Dried / Separate Batches

RETAINED 37.5mm	0 %	GRADING ZONE	Zone 1
RETAINED 20mm	0 %	PARTICLE DENSITY	2.50 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	6.6	1.671
2	8.6	1.709
3	10.6	1.756
4	12.5	1.757
5	14.4	1.709



OPTIMUM WATER CONTENT	**12**	(%)
MAXIMUM DRY DENSITY	**1.78**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 30-Nov-22

M U R R A Y R I X
ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

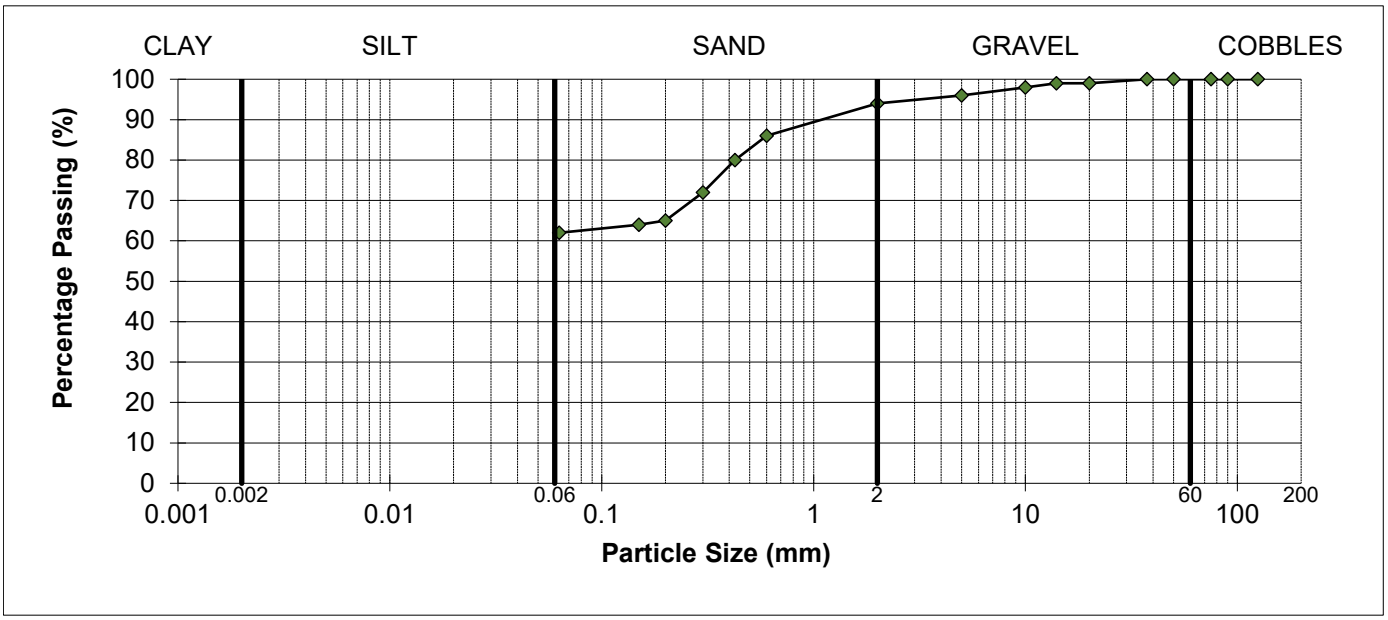
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	14-554 Don Street
JOB NUMBER	MRN 4287/110

SAMPLE LABEL	Parcel B Bulkfill 105	DATE SAMPLED	21-Nov-22
LAB SAMPLE No	119093	DATE RECEIVED	21-Nov-22
DATE TESTED	22-Nov-22	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site Won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	96	
90	100		2	94	80-100
75	100		0.6	86	
50	100		0.425	80	
37.5	100		0.3	72	
20	99		0.2	65	
14	99		0.15	64	
10	98		0.063	62	15-100



REMARKS
As received water content = 18.9%
Sample complies with the advised grading specification for a 2A/2B material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 30-Nov-22

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-4:1990
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

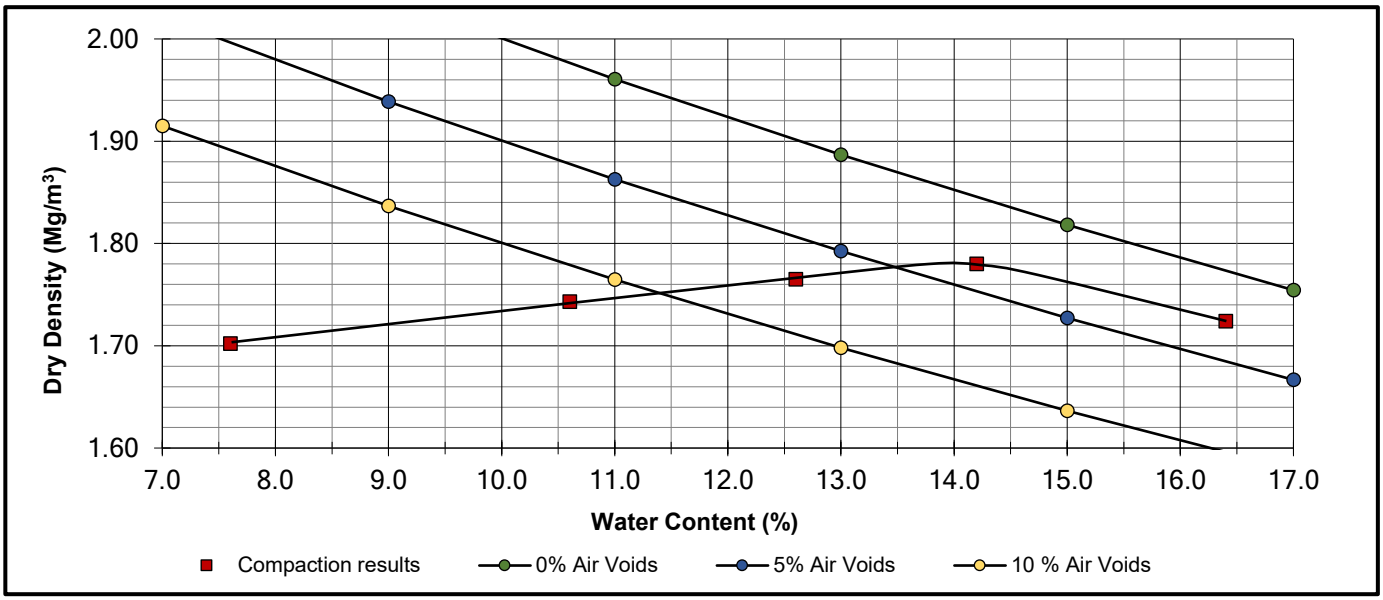
CLIENT	e3p
SITE	14-554 Don Street
JOB NUMBER	MRN 4287/110

SAMPLE LABEL	Parcel B Bulkfill 105	DATE SAMPLED	21-Nov-22
SAMPLE NUMBER	119093	DATE RECEIVED	21-Nov-22
DATE TESTED	18-Nov-22	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site Won
PRE TREATMENT	Air Dried / Separate Batches

RETAINED 37.5mm	0 %	GRADING ZONE	Zone 2
RETAINED 20mm	1 %	PARTICLE DENSITY	2.50 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	7.6	1.702
2	10.6	1.743
3	12.6	1.765
4	14.2	1.780
5	16.4	1.724



OPTIMUM WATER CONTENT	**14**	(%)
MAXIMUM DRY DENSITY	**1.78**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 30-Nov-22

M U R R A Y R I X
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DUKINFIELD, CHESHIRE SK16 4QX
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UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

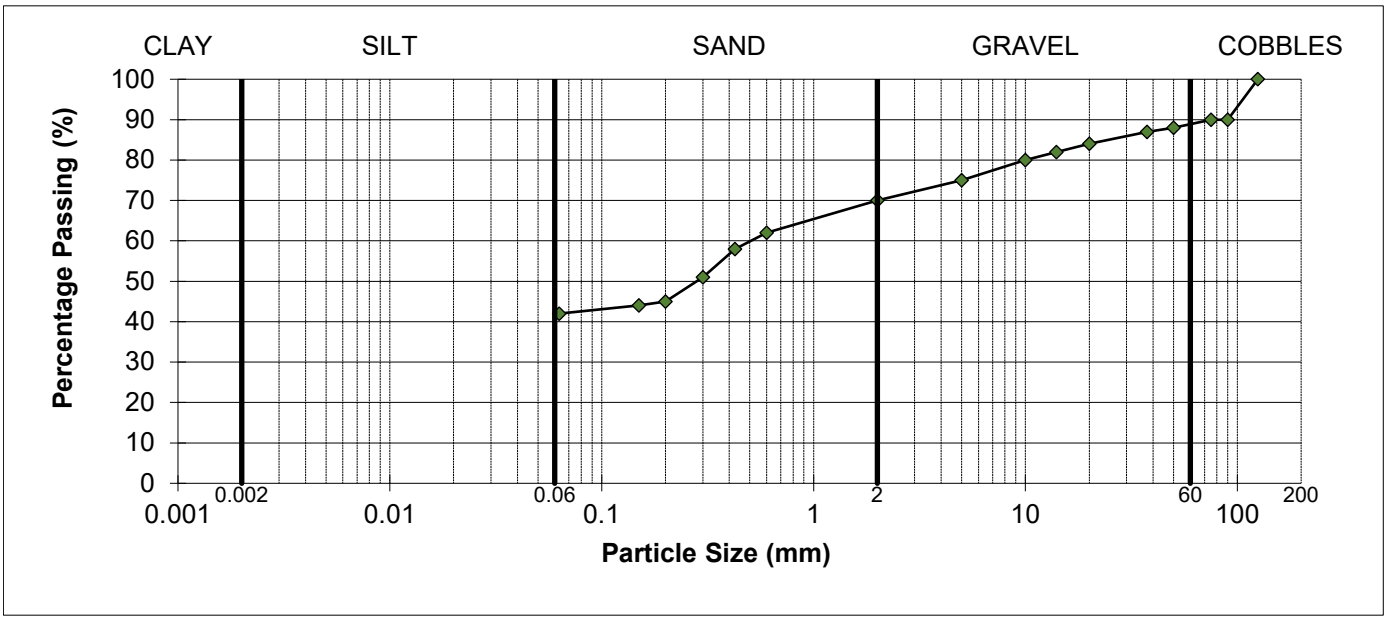
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	14-554 Don Street
JOB NUMBER	MRN 4287/110

SAMPLE LABEL	Parcel C Bulkfill 101	DATE SAMPLED	21-Nov-22
LAB SAMPLE No	119094	DATE RECEIVED	21-Nov-22
DATE TESTED	22-Nov-22	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site Won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	75	
90	90		2	70	15-80
75	90		0.6	62	
50	88		0.425	58	
37.5	87		0.3	51	
20	84		0.2	45	
14	82		0.15	44	
10	80		0.063	42	15-80



REMARKS
As received water content = 24.4%
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 30-Nov-22

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
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UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-4:1990
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

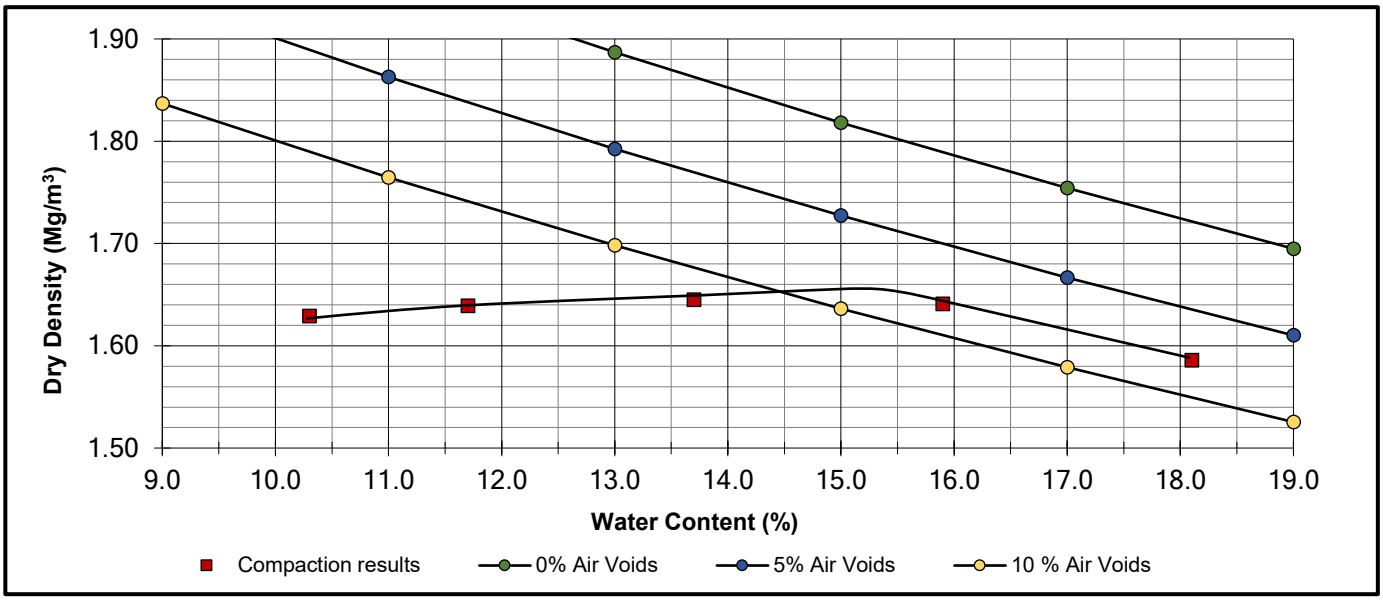
CLIENT	e3p
SITE	14-554 Don Street
JOB NUMBER	MRN 4287/110

SAMPLE LABEL	Parcel C Bulkfill 101	DATE SAMPLED	21-Nov-22
SAMPLE NUMBER	119094	DATE RECEIVED	21-Nov-22
DATE TESTED	18-Nov-22	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site Won
PRE TREATMENT	Air Dried / Separate Batches

RETAINED 37.5mm	13 %	GRADING ZONE	Zone X
RETAINED 20mm	16 %	PARTICLE DENSITY	2.50 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	10.3	1.629
2	11.7	1.639
3	13.7	1.645
4	15.9	1.641
5	18.1	1.586



OPTIMUM WATER CONTENT	**15**	(%)
MAXIMUM DRY DENSITY	**1.65**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 30-Nov-22

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UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

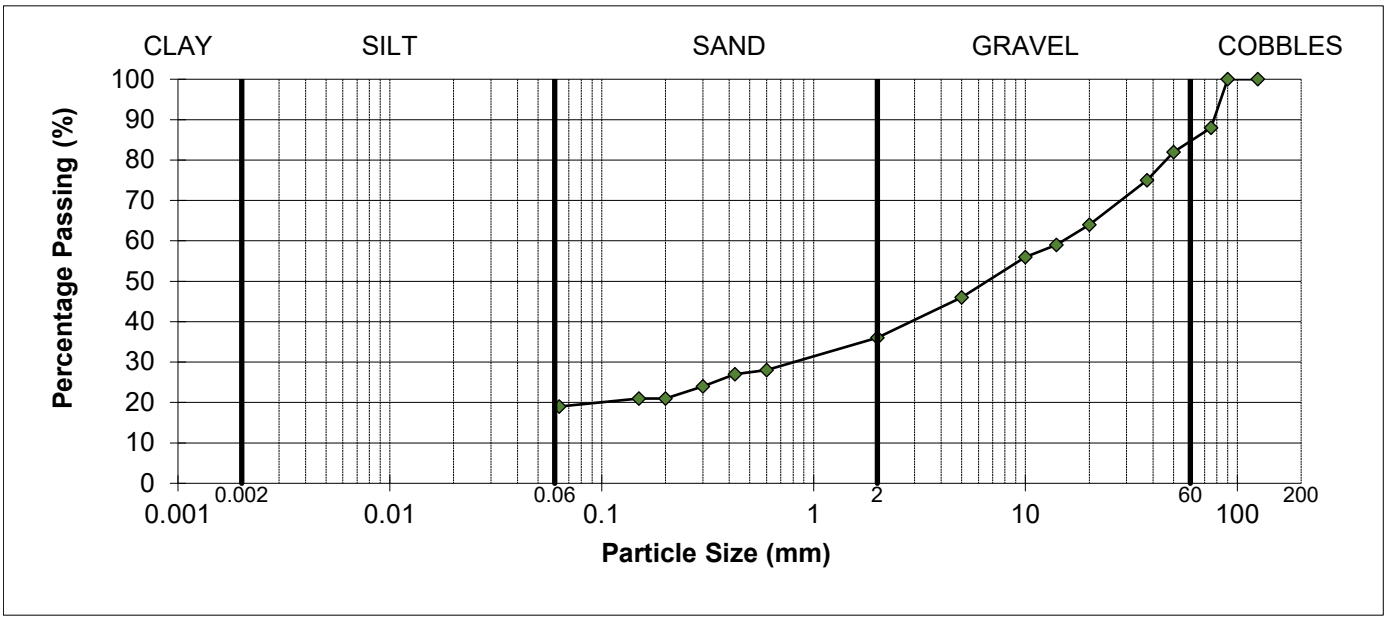
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	14-554 Don Street
JOB NUMBER	MRN 4287/110

SAMPLE LABEL	Parcel C Bulkfill 102	DATE SAMPLED	21-Nov-22
LAB SAMPLE No	119095	DATE RECEIVED	21-Nov-22
DATE TESTED	22-Nov-22	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site Won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	46	
90	100		2	36	15-80
75	88		0.6	28	
50	82		0.425	27	
37.5	75		0.3	24	
20	64		0.2	21	
14	59		0.15	21	
10	56		0.063	19	15-80



REMARKS
As received water content = 14.5%
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 30-Nov-22

MURRAY RIX

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UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-4:1990
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

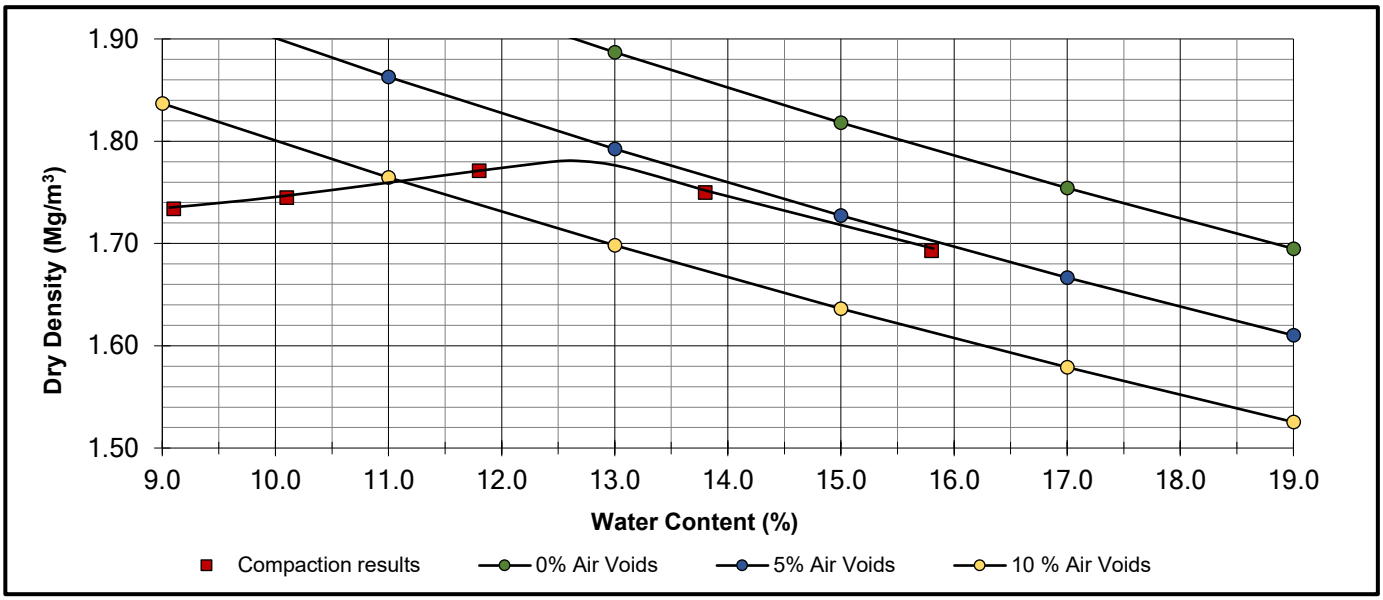
CLIENT	e3p
SITE	14-554 Don Street
JOB NUMBER	MRN 4287/110

SAMPLE LABEL	Parcel C Bulkfill 102	DATE SAMPLED	21-Nov-22
SAMPLE NUMBER	119095	DATE RECEIVED	21-Nov-22
DATE TESTED	18-Nov-22	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site Won
PRE TREATMENT	Air Dried / Separate Batches

RETAINED 37.5mm	25 %	GRADING ZONE	Zone X
RETAINED 20mm	36 %	PARTICLE DENSITY	2.50 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	9.1	1.734
2	10.1	1.745
3	11.8	1.771
4	13.8	1.750
5	15.8	1.693



OPTIMUM WATER CONTENT	**13**	(%)
MAXIMUM DRY DENSITY	**1.78**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 30-Nov-22

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UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

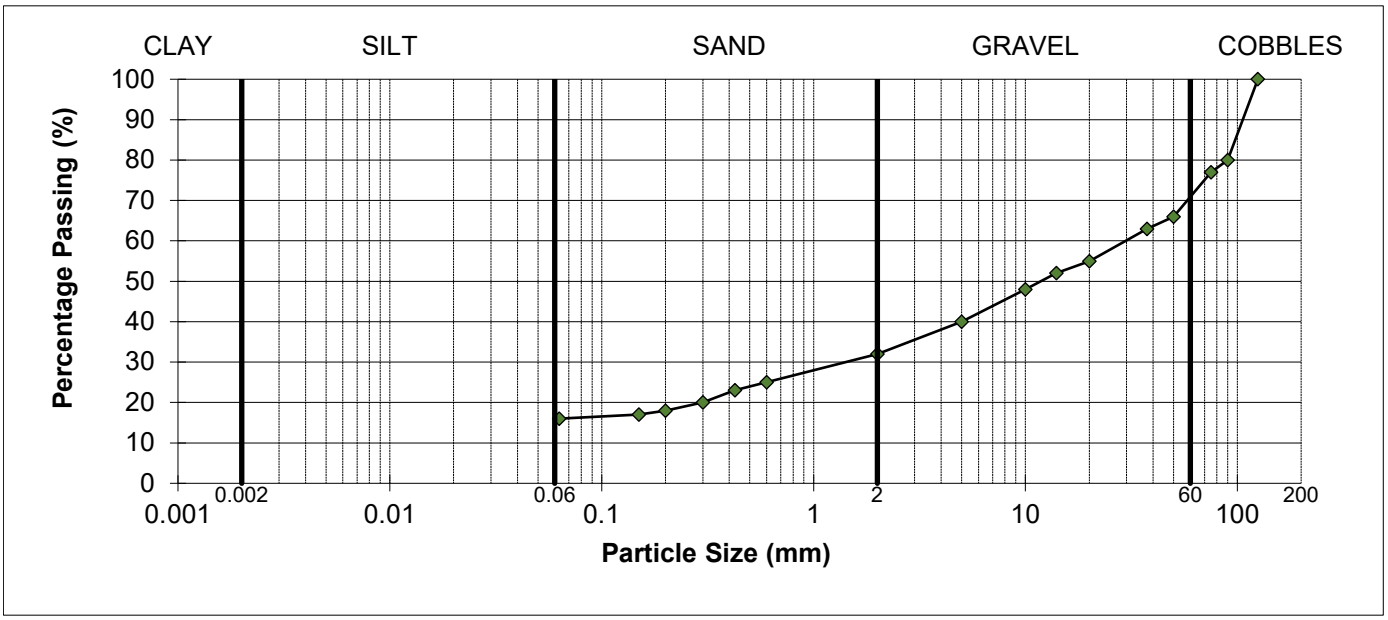
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	14-554 Don Street
JOB NUMBER	MRN 4287/110

SAMPLE LABEL	Parcel C Bulkfill 103	DATE SAMPLED	21-Nov-22
LAB SAMPLE No	119096	DATE RECEIVED	21-Nov-22
DATE TESTED	22-Nov-22	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site Won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	40	
90	80		2	32	15-80
75	77		0.6	25	
50	66		0.425	23	
37.5	63		0.3	20	
20	55		0.2	18	
14	52		0.15	17	
10	48		0.063	16	15-80



REMARKS
As received water content = 15.7%
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 30-Nov-22

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
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UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-4:1990
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

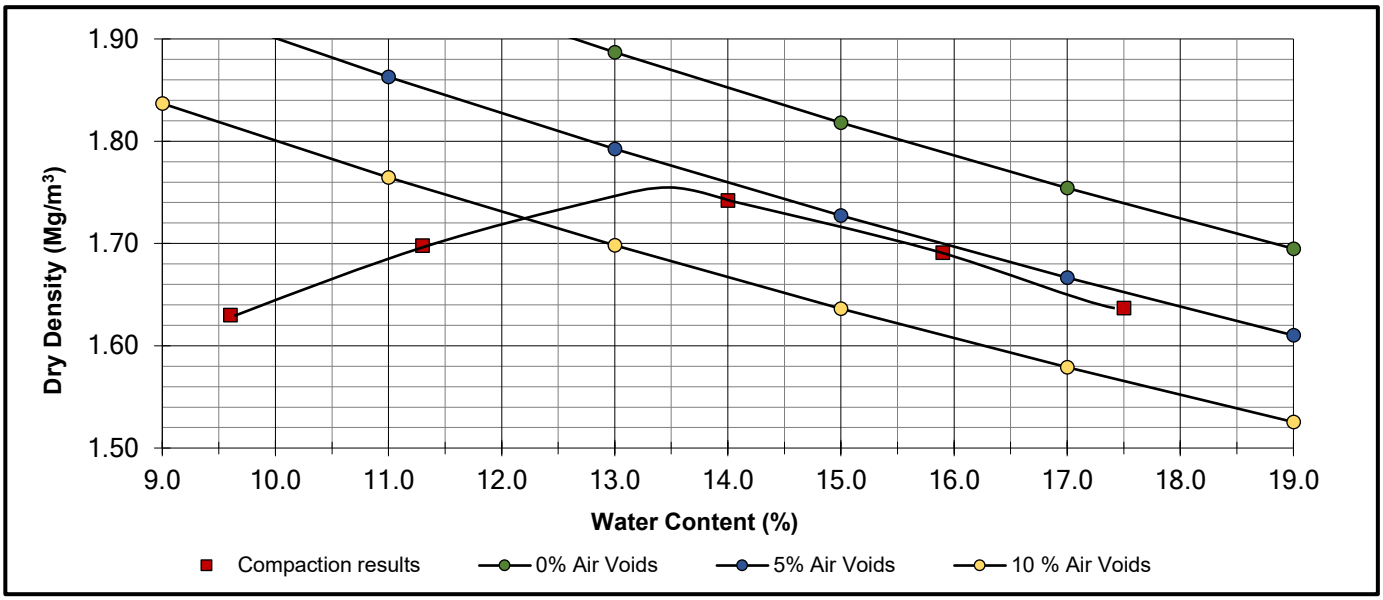
CLIENT	e3p
SITE	14-554 Don Street
JOB NUMBER	MRN 4287/110

SAMPLE LABEL	Parcel C Bulkfill 103	DATE SAMPLED	21-Nov-22
SAMPLE NUMBER	119096	DATE RECEIVED	21-Nov-22
DATE TESTED	18-Nov-22	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site Won
PRE TREATMENT	Air Dried / Separate Batches

RETAINED 37.5mm	37 %	GRADING ZONE	Zone X
RETAINED 20mm	45 %	PARTICLE DENSITY	2.50 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	9.6	1.630
2	11.3	1.698
3	14.0	1.742
4	15.9	1.691
5	17.5	1.637



OPTIMUM WATER CONTENT	**13**	(%)
MAXIMUM DRY DENSITY	**1.77**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 30-Nov-22

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UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

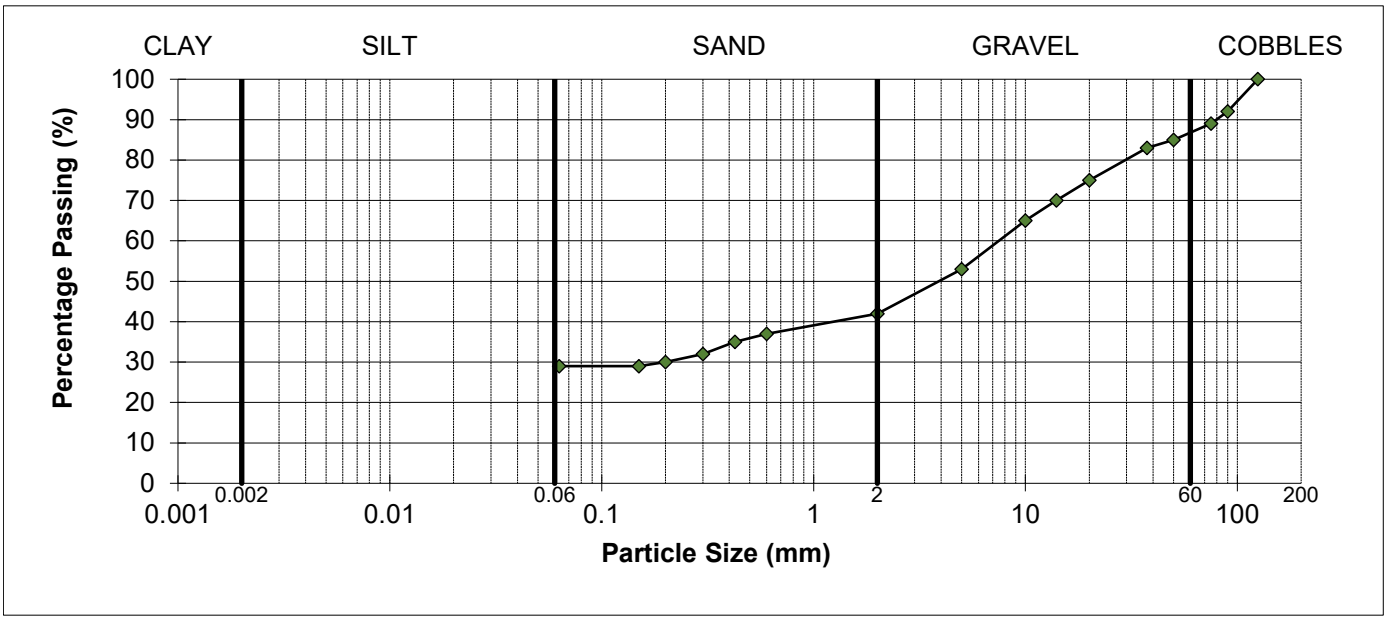
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	14-554 Don Street
JOB NUMBER	MRN 4287/110

SAMPLE LABEL	Parcel C Bulkfill 104	DATE SAMPLED	21-Nov-22
LAB SAMPLE No	119097	DATE RECEIVED	21-Nov-22
DATE TESTED	22-Nov-22	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site Won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	53	
90	92		2	42	15-80
75	89		0.6	37	
50	85		0.425	35	
37.5	83		0.3	32	
20	75		0.2	30	
14	70		0.15	29	
10	65		0.063	29	15-80



REMARKS
As received water content = 14.3%
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 30-Nov-22

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-4:1990
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

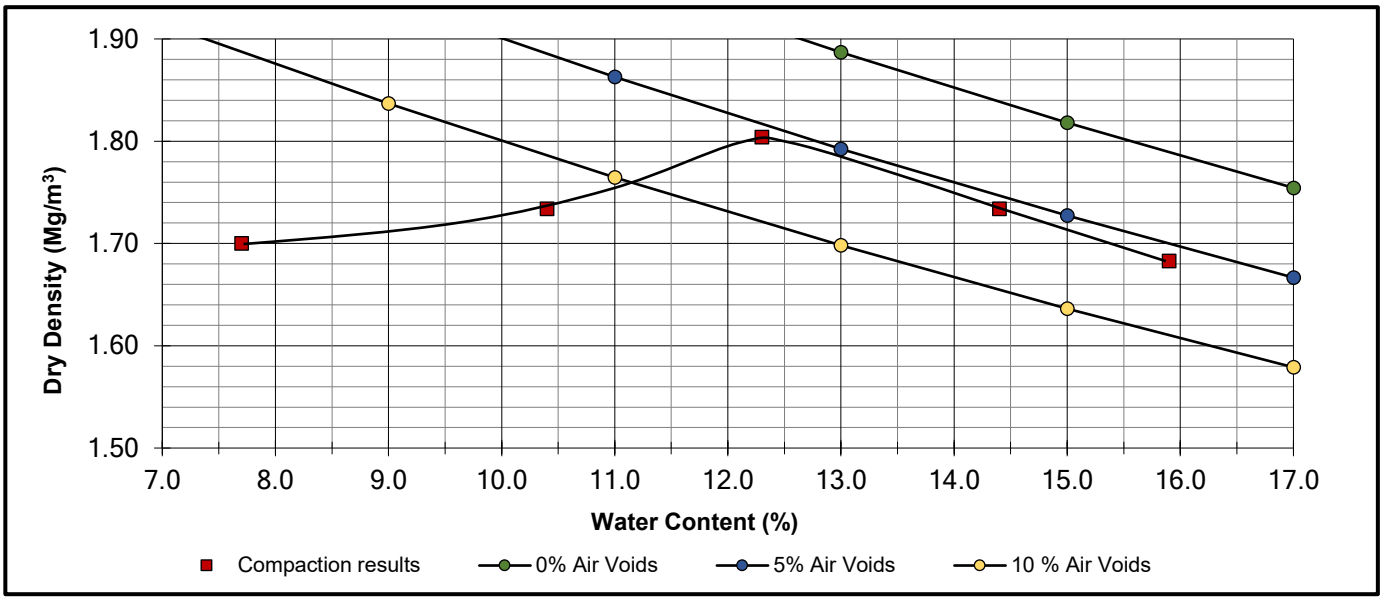
CLIENT	e3p
SITE	14-554 Don Street
JOB NUMBER	MRN 4287/110

SAMPLE LABEL	Parcel C Bulkfill 104	DATE SAMPLED	21-Nov-22
SAMPLE NUMBER	119097	DATE RECEIVED	21-Nov-22
DATE TESTED	18-Nov-22	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site Won
PRE TREATMENT	Air Dried / Separate Batches

RETAINED 37.5mm	17 %	GRADING ZONE	Zone X
RETAINED 20mm	25 %	PARTICLE DENSITY	2.50 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	7.7	1.700
2	10.4	1.734
3	12.3	1.804
4	14.4	1.734
5	15.9	1.683



OPTIMUM WATER CONTENT	**12**	(%)
MAXIMUM DRY DENSITY	**1.80**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 30-Nov-22

M U R R A Y R I X

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UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

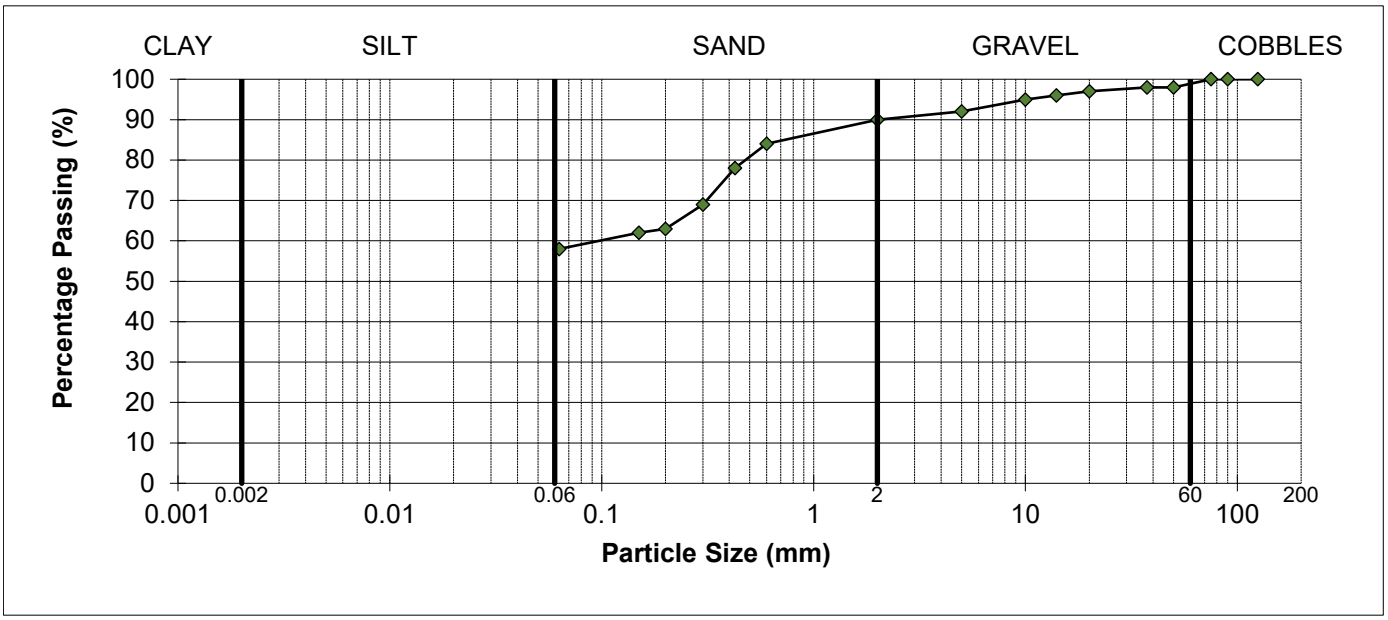
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	14-554 Don Street
JOB NUMBER	MRN 4287/110

SAMPLE LABEL	Parcel C Bulkfill 105	DATE SAMPLED	21-Nov-22
LAB SAMPLE No	119098	DATE RECEIVED	21-Nov-22
DATE TESTED	22-Nov-22	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site Won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	92	
90	100		2	90	15-80
75	100		0.6	84	
50	98		0.425	78	
37.5	98		0.3	69	
20	97		0.2	63	
14	96		0.15	62	
10	95		0.063	58	15-80



REMARKS

As received water content = 17.6%

Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 30-Nov-22

MURRAY RIX

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DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-4:1990
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

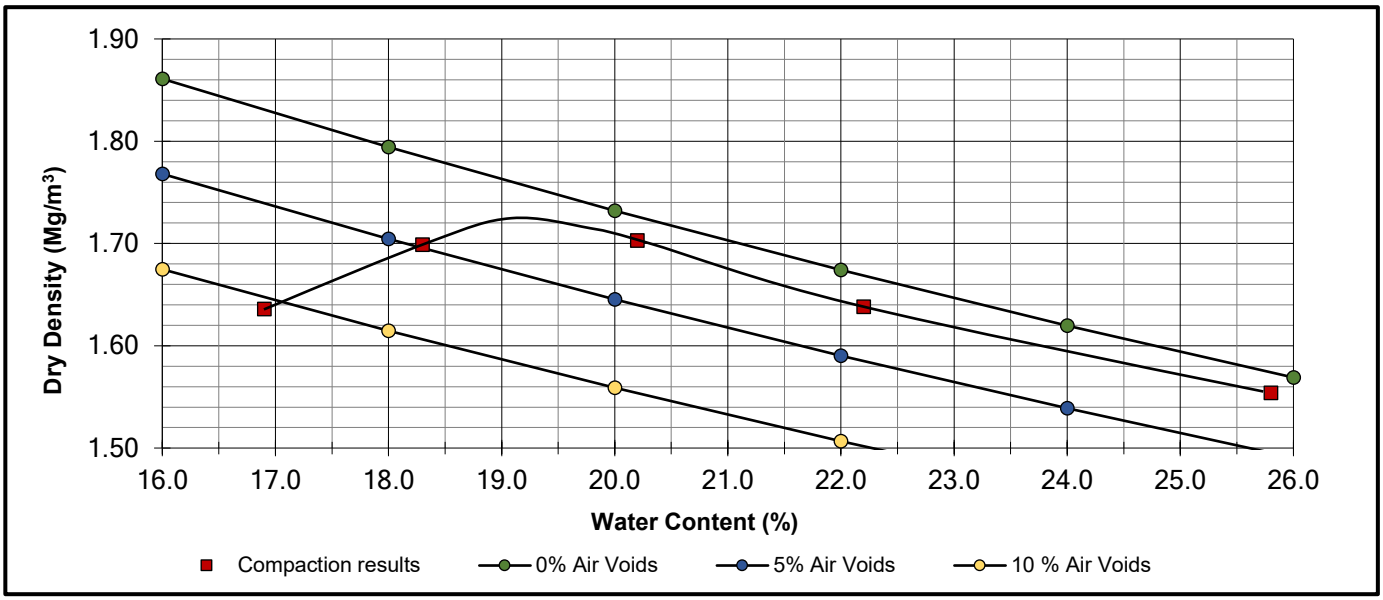
CLIENT	e3p
SITE	14-554 Don Street
JOB NUMBER	MRN 4287/110

SAMPLE LABEL	Parcel C Bulkfill 105	DATE SAMPLED	21-Nov-22
SAMPLE NUMBER	119098	DATE RECEIVED	21-Nov-22
DATE TESTED	18-Nov-22	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site Won
PRE TREATMENT	Air Dried / Separate Batches

RETAINED 37.5mm	2	%	GRADING ZONE	Zone 4	
RETAINED 20mm	3	%	PARTICLE DENSITY	2.65	Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	16.9	1.636
2	18.3	1.699
3	20.2	1.703
4	22.2	1.638
5	25.8	1.554



OPTIMUM WATER CONTENT	**19**	(%)
MAXIMUM DRY DENSITY	**1.72**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 30-Nov-22

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PARTICLE SIZE DISTRIBUTION

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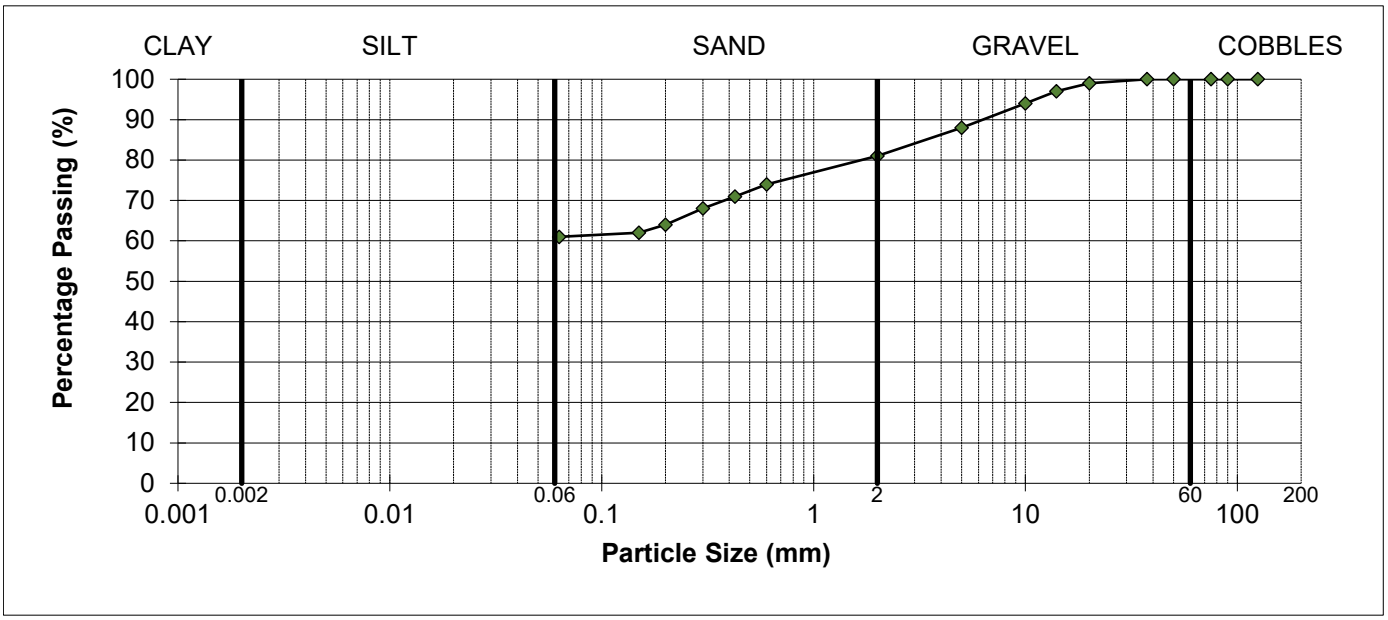
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	14-554 Don Street
JOB NUMBER	MRN 4287/110

SAMPLE LABEL	Parcel C Bulkfill 106	DATE SAMPLED	21-Nov-22
LAB SAMPLE No	119099	DATE RECEIVED	21-Nov-22
DATE TESTED	22-Nov-22	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site Won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	88	
90	100		2	81	80-100
75	100		0.6	74	
50	100		0.425	71	
37.5	100		0.3	68	
20	99		0.2	64	
14	97		0.15	62	
10	94		0.063	61	15-100



REMARKS
As received water content = 21.1%
Sample complies with the advised grading specification for a 2A/2B material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 30-Nov-22

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-4:1990
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

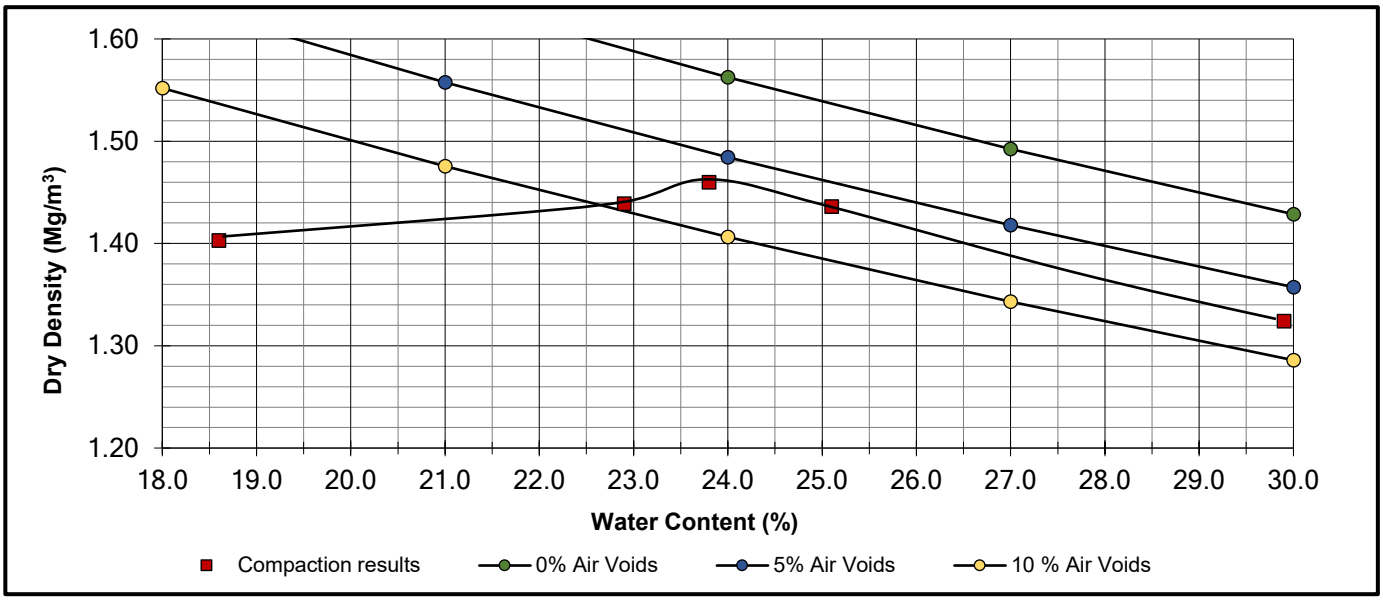
CLIENT	e3p
SITE	14-554 Don Street
JOB NUMBER	MRN 4287/110

SAMPLE LABEL	Parcel C Bulkfill 106	DATE SAMPLED	21-Nov-22
SAMPLE NUMBER	119099	DATE RECEIVED	21-Nov-22
DATE TESTED	18-Nov-22	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site Won
PRE TREATMENT	Air Dried / Separate Batches

RETAINED 37.5mm	0 %	GRADING ZONE	Zone 2
RETAINED 20mm	1 %	PARTICLE DENSITY	2.50 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	18.6	1.403
2	22.9	1.439
3	23.8	1.460
4	25.1	1.436
5	29.9	1.324



OPTIMUM WATER CONTENT	**24**	(%)
MAXIMUM DRY DENSITY	**1.46**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 30-Nov-22

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UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

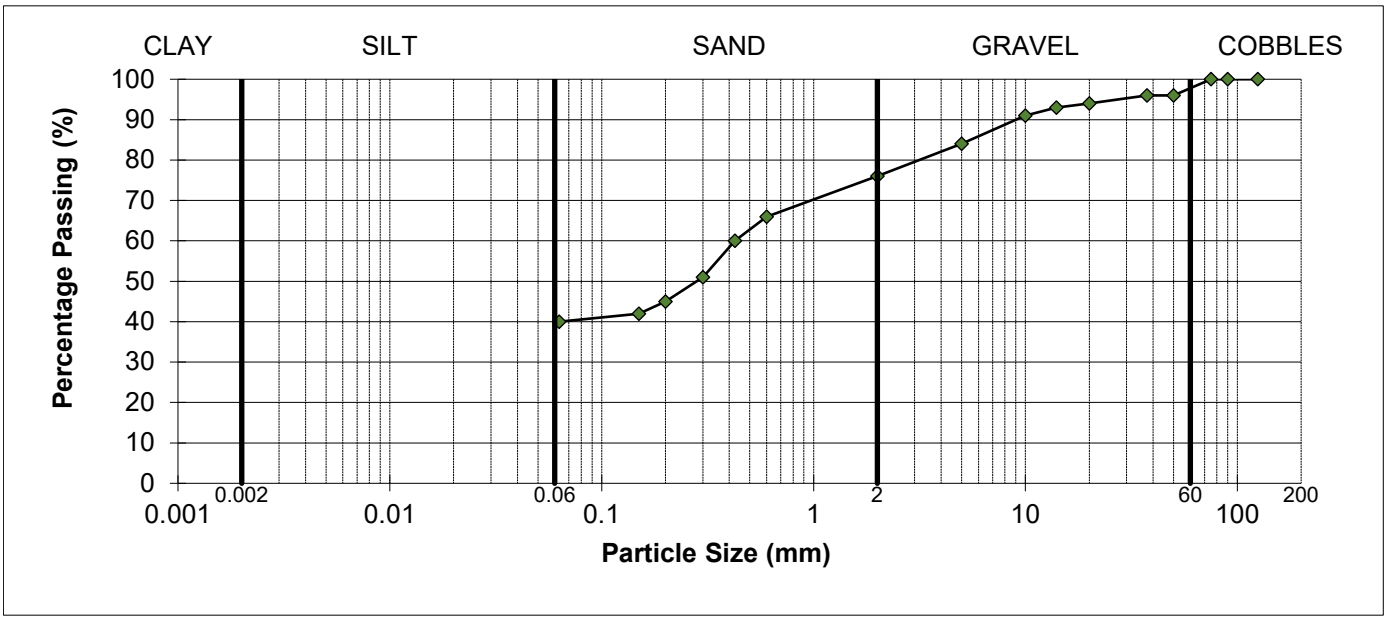
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	14-554 Don Street
JOB NUMBER	MRN 4287/110

SAMPLE LABEL	Parcel C Bulkfill 107	DATE SAMPLED	21-Nov-22
LAB SAMPLE No	119100	DATE RECEIVED	21-Nov-22
DATE TESTED	22-Nov-22	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site Won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	84	
90	100		2	76	15-80
75	100		0.6	66	
50	96		0.425	60	
37.5	96		0.3	51	
20	94		0.2	45	
14	93		0.15	42	
10	91		0.063	40	15-80



REMARKS
As received water content = 30.1%
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 30-Nov-22

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-4:1990
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

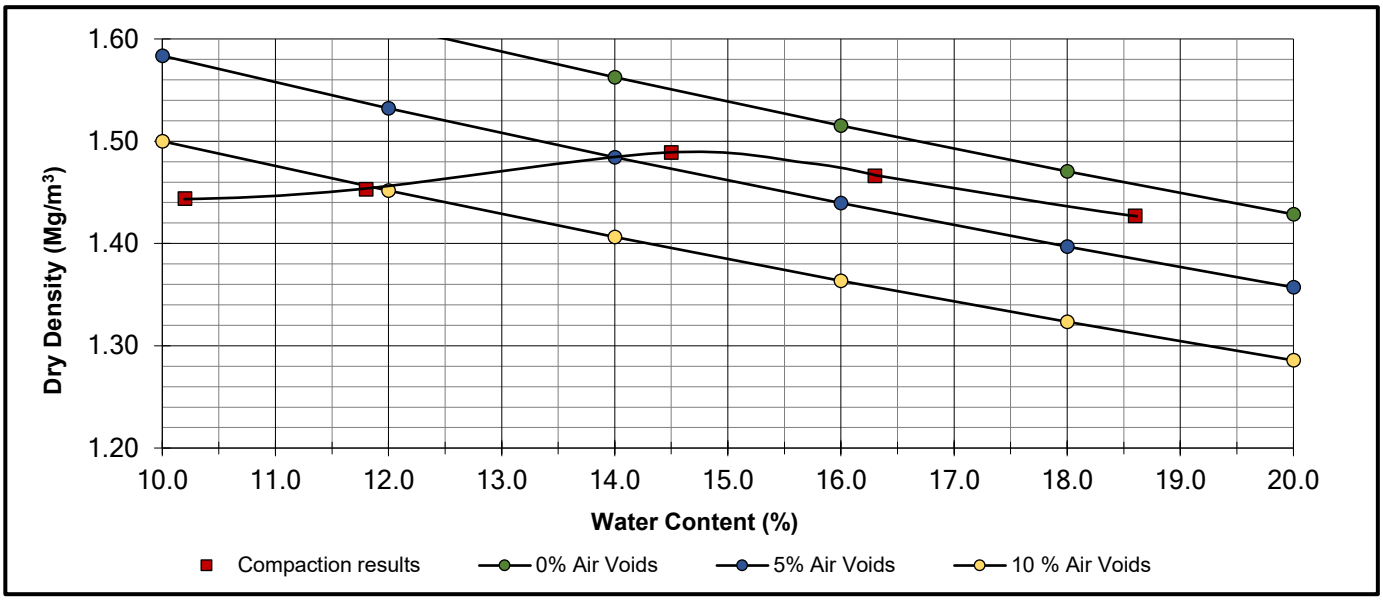
CLIENT	e3p
SITE	14-554 Don Street
JOB NUMBER	MRN 4287/110

SAMPLE LABEL	Parcel C Bulkfill 107	DATE SAMPLED	21-Nov-22
SAMPLE NUMBER	119100	DATE RECEIVED	21-Nov-22
DATE TESTED	18-Nov-22	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site Won
PRE TREATMENT	Air Dried / Separate Batches

RETAINED 37.5mm	4 %	GRADING ZONE	Zone 5
RETAINED 20mm	6 %	PARTICLE DENSITY	2.00 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	10.2	1.444
2	11.8	1.453
3	14.5	1.489
4	16.3	1.466
5	18.6	1.427



OPTIMUM WATER CONTENT	**15**	(%)
MAXIMUM DRY DENSITY	**1.49**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

SIGNED

DATE 30-Nov-22

MURRAY RIX
CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client e3p

Address Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

Contract Don Street

Job Number MRN 4588/47
Date of Issue 19 May 2023

Approved Signatories

S J Hutchings, O P Davies

Notes

1 All remaining samples and remnants from this contract will be disposed 28 days from the date of this report unless you notify us to the contrary.

2 Result certificates, in this report, not bearing a UKAS mark, are not included in our UKAS accreditation schedule.

3 Opinions and interpretations expressed herein are outside the scope of our UKAS accreditation.

4 Certified that the samples have been examined and tested in accordance with the terms of the contract/order and unless otherwise stated conform to the standards/specifications quoted.

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Andrew House, Hadfield Street, Dukinfield, Cheshire SK16 4QX Tel: 0161 475 0870
Email: enquiries@murrayrix.com Website: www.murrayrix.com

Also at: London: 020 8523 1999

UKAS TESTING 1580

Murray Rix is the trading name of Murray Rix (Northern) Limited. Registered in England 2878361

M U R R A Y R I X
ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

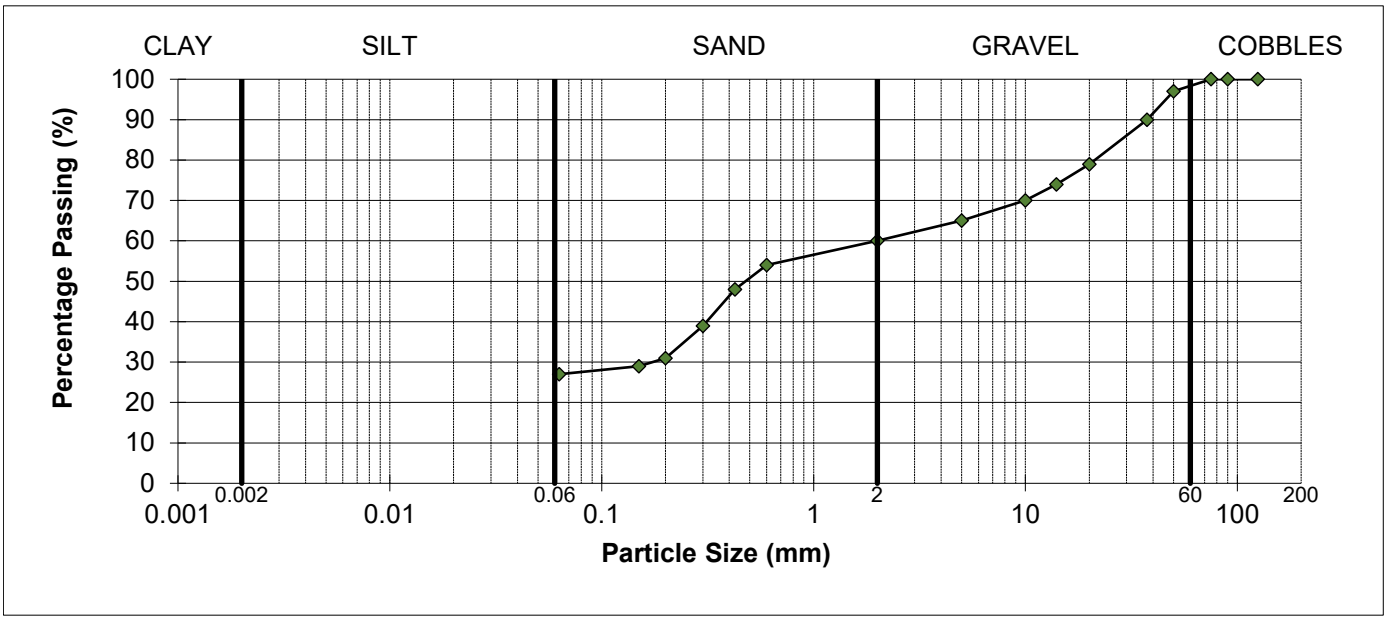
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/47

SAMPLE LABEL	Landfill Stockpile 4	DATE SAMPLED	28-Apr-23
LAB SAMPLE No	124911	DATE RECEIVED	28-Apr-23
DATE TESTED	02-May-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	65	
90	100		2	60	15-80
75	100		0.6	54	
50	97		0.425	48	
37.5	90		0.3	39	
20	79		0.2	31	
14	74		0.15	29	
10	70		0.063	27	15-80



REMARKS
As received water content = 28.8%
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 19-May-23

M U R R A Y R I X
ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

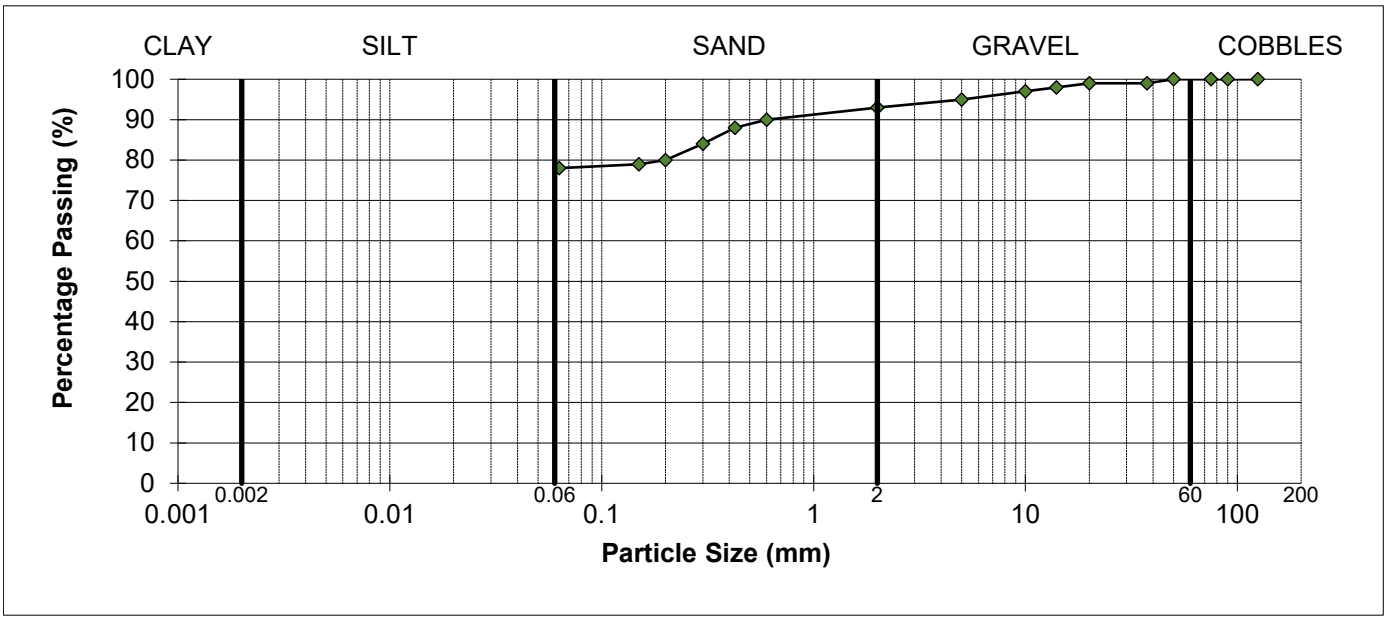
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/47

SAMPLE LABEL	Landfill Stockpile 5	DATE SAMPLED	28-Apr-23
LAB SAMPLE No	124839	DATE RECEIVED	28-Apr-23
DATE TESTED	02-May-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	95	
90	100		2	93	80-100
75	100		0.6	90	
50	100		0.425	88	
37.5	99		0.3	84	
20	99		0.2	80	
14	98		0.15	79	
10	97		0.063	78	15-100



REMARKS
As received water content = 23.9%
Sample complies with the advised grading specification for a 2A/2B material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 19-May-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-4:1990
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

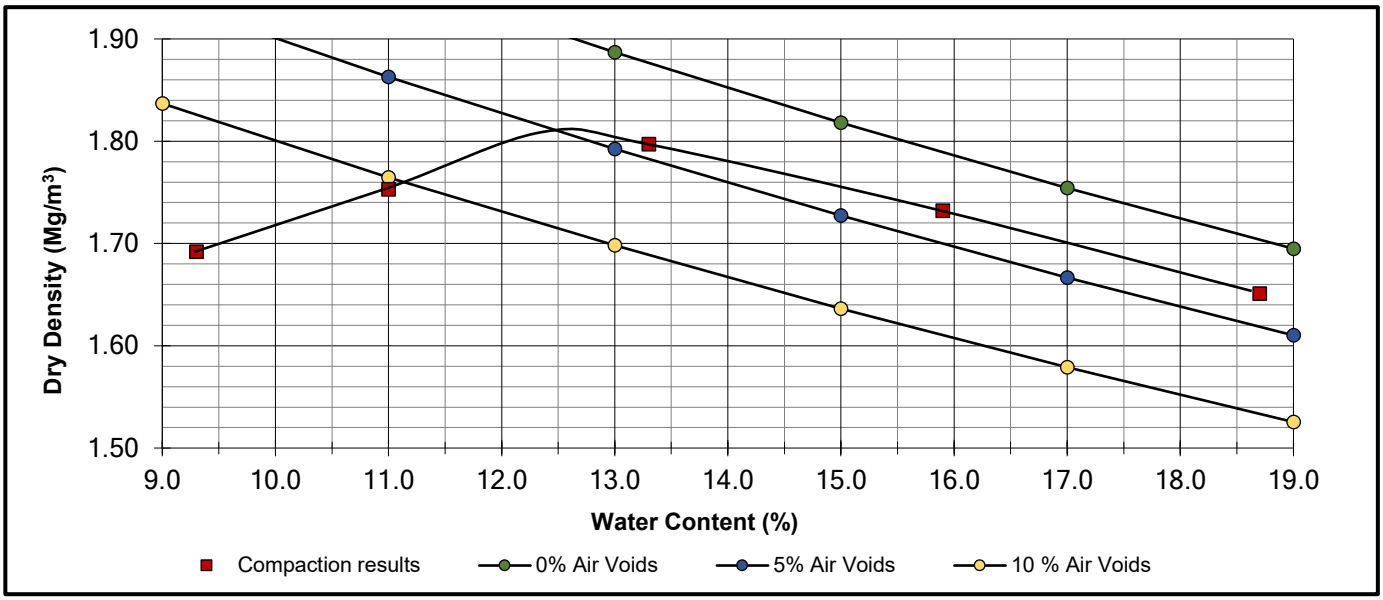
CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/47

SAMPLE LABEL	Landfill Stockpile 4	DATE SAMPLED	28-Apr-23
SAMPLE NUMBER	123953	DATE RECEIVED	28-Apr-23
DATE TESTED	28-Apr-23	SAMPLED BY	Client

MATERIAL	Gravel
ADVISED SOURCE	Site won
PRE TREATMENT	Air Dried / Single Sample

RETAINED 37.5mm	8 %	GRADING ZONE	Zone 5
RETAINED 20mm	20 %	PARTICLE DENSITY	2.50 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	9.3	1.692
2	11.0	1.753
3	13.3	1.797
4	15.9	1.732
5	18.7	1.651



OPTIMUM WATER CONTENT	**13**	(%)
MAXIMUM DRY DENSITY	**1.81**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 19-May-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

TEST CERTIFICATE

WATER SOLUBLE SULFATE CONTENT
BS EN 1744-1:2009+A1:2012 Cl. 10

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/47

DATE TESTED	05 May 2023	DATE SAMPLED	28 April 2022
SAMPLED BY	Client	DATE RECEIVED	28 April 2022

Sample Number	Site Mark	Aggregate Type	Water Soluble Sulfate % SO_4
124837	Landfill Stockpile 2	General Fill	0.04

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 19 May 2023

M U R R A Y R I X

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DETERMINATION OF CONSTITUENTS OF COARSE RECYCLED AGGREGATE

BS EN 933-11:2009

CLIENT	e3p
SITE	Don Street

SAMPLE DETAILS

Job Number	:	MRN 4588/47
Laboratory sample number	:	124910
Material	:	General Fill
Advised source	:	Site won
Site mark	:	Landfill Stockpile 2
Certificate of sampling received	:	No
Date and time of sampling	:	28 April 2023
Date received at Laboratory	:	28 April 2023
Date of start of test	:	05 May 2023
Sampling Location	:	Not advised
Method of sampling	:	BS EN 932-1 : 1997
Sampled by	:	Client
Mass of dry sample tested	:	50 kg
Drying Temperature	:	40 ± 5°C

RESULT

Constituent	Description	Proportion (%)
Rc	Concrete, Concrete products, Mortar, Concrete masonry units	0.2
Ru	Unbound aggregate, Natural stone, Hydraulically bound aggregate	22
Rb	Clay masonry units (i.e. bricks & tiles), Calcium silicate masonry units, Aerated non-floating concrete	10
Ra	Bituminous materials	3.5
Rg	Glass	0.4
X	Other: Cohesive (i.e. clay & soil), Metals (ferrous & non-ferrous), Non-floating wood, plastic & rubber, Gypsum plaster	64
FL	Floating Particles (cm^3/kg)	0.1

Comments
Client requested constituent X to be reported separately to clay/soil. No other consituent X was present, above consituent X figure is shown as the clay/soil proportion.

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 19-May-23

MURRAY RIX
CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client e3p

Address Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

Contract Don Street

Job Number MRN 4588/48
Date of Issue 19 May 2023

Approved Signatories

S J Hutchings, O P Davies

Notes

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UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

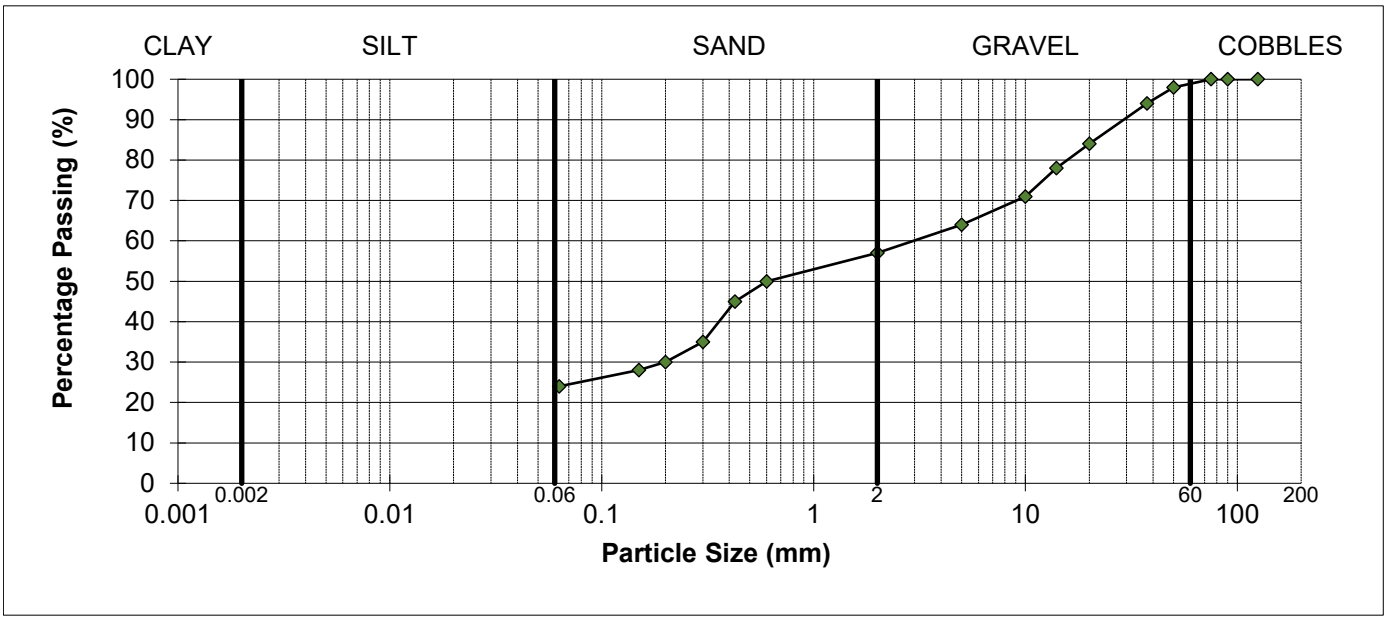
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/48

SAMPLE LABEL	Stockpile 1	DATE SAMPLED	04-May-23
LAB SAMPLE No	125070	DATE RECEIVED	05-May-23
DATE TESTED	09-May-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	64	
90	100		2	57	15-80
75	100		0.6	50	
50	98		0.425	45	
37.5	94		0.3	35	
20	84		0.2	30	
14	78		0.15	28	
10	71		0.063	24	15-80



REMARKS
As received water content = 21.0%
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 19-May-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-4:1990
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

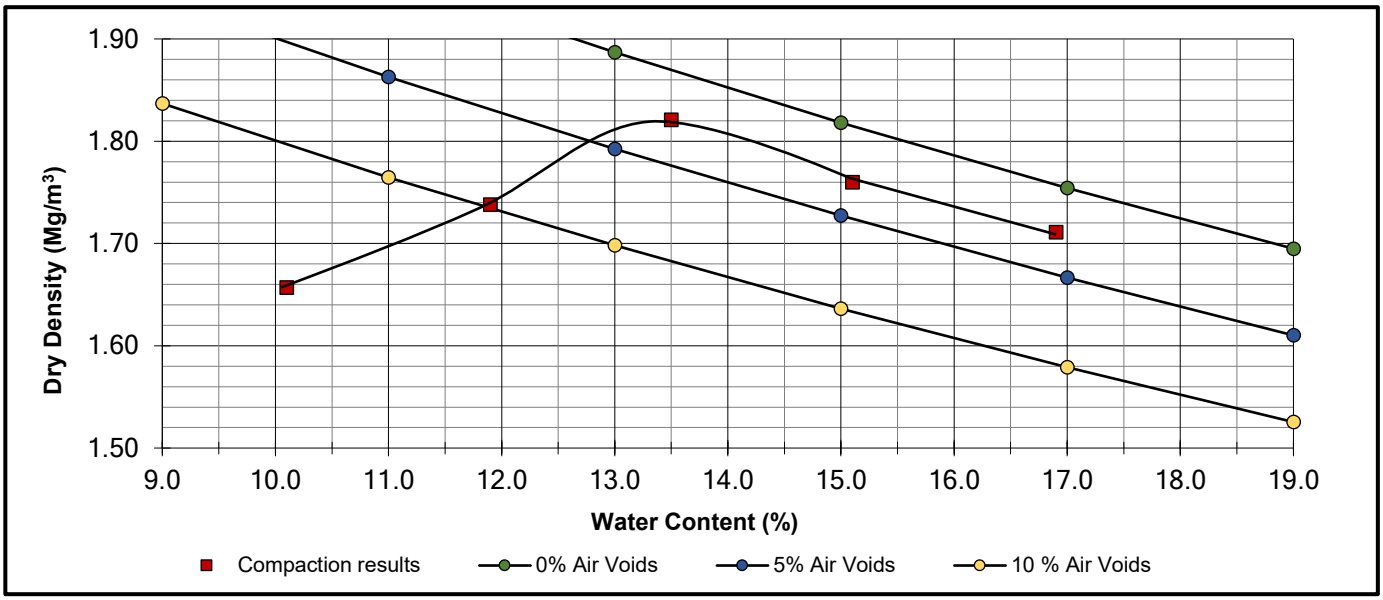
CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/48

SAMPLE LABEL	Stockpile 1	DATE SAMPLED	04-May-23
SAMPLE NUMBER	125070	DATE RECEIVED	05-May-23
DATE TESTED	10-May-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won
PRE TREATMENT	Air Dried / Single Sample

RETAINED 37.5mm	6 %	GRADING ZONE	Zone 5
RETAINED 20mm	16 %	PARTICLE DENSITY	2.50 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	10.1	1.657
2	11.9	1.738
3	13.5	1.821
4	15.1	1.760
5	16.9	1.711



OPTIMUM WATER CONTENT	**13**	(%)
MAXIMUM DRY DENSITY	**1.82**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 19-May-23

M U R R A Y R I X
ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

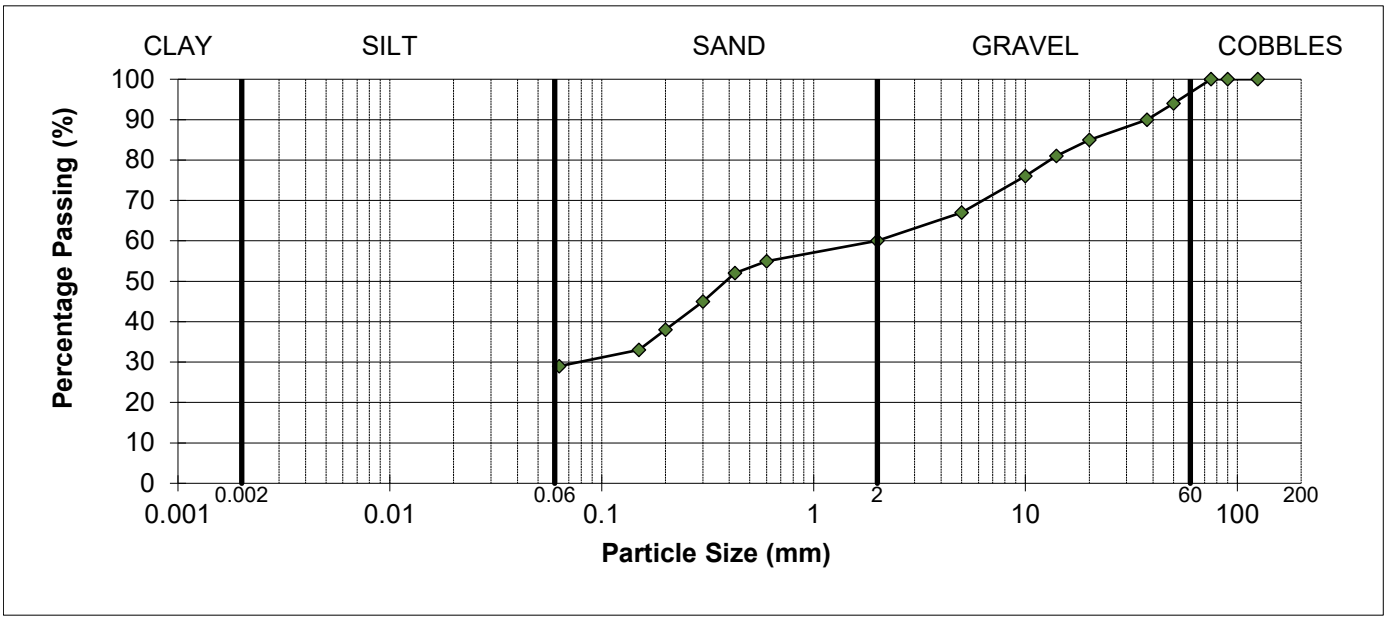
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/48

SAMPLE LABEL	Stockpile 2	DATE SAMPLED	04-May-23
LAB SAMPLE No	125071	DATE RECEIVED	05-May-23
DATE TESTED	09-May-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	67	
90	100		2	60	15-80
75	100		0.6	55	
50	94		0.425	52	
37.5	90		0.3	45	
20	85		0.2	38	
14	81		0.15	33	
10	76		0.063	29	15-80



REMARKS
As received water content = 22.2%
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 19-May-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-4:1990
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

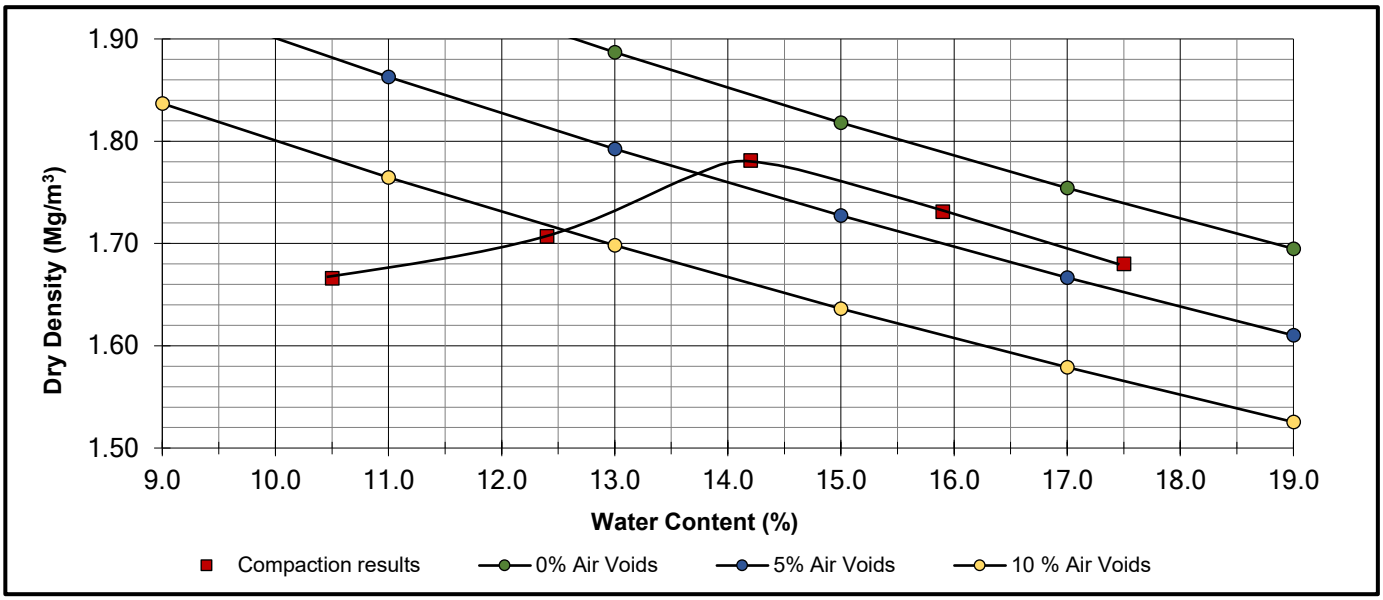
CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/48

SAMPLE LABEL	Stockpile 2	DATE SAMPLED	04-May-23
SAMPLE NUMBER	125071	DATE RECEIVED	05-May-23
DATE TESTED	10-May-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won
PRE TREATMENT	Air Dried / Single Sample

RETAINED 37.5mm	10 %	GRADING ZONE	Zone 5
RETAINED 20mm	15 %	PARTICLE DENSITY	2.50 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	10.5	1.666
2	12.4	1.707
3	14.2	1.781
4	15.9	1.731
5	17.5	1.680



OPTIMUM WATER CONTENT	**14**	(%)
MAXIMUM DRY DENSITY	**1.82**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 19-May-23

M U R R A Y R I X
ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

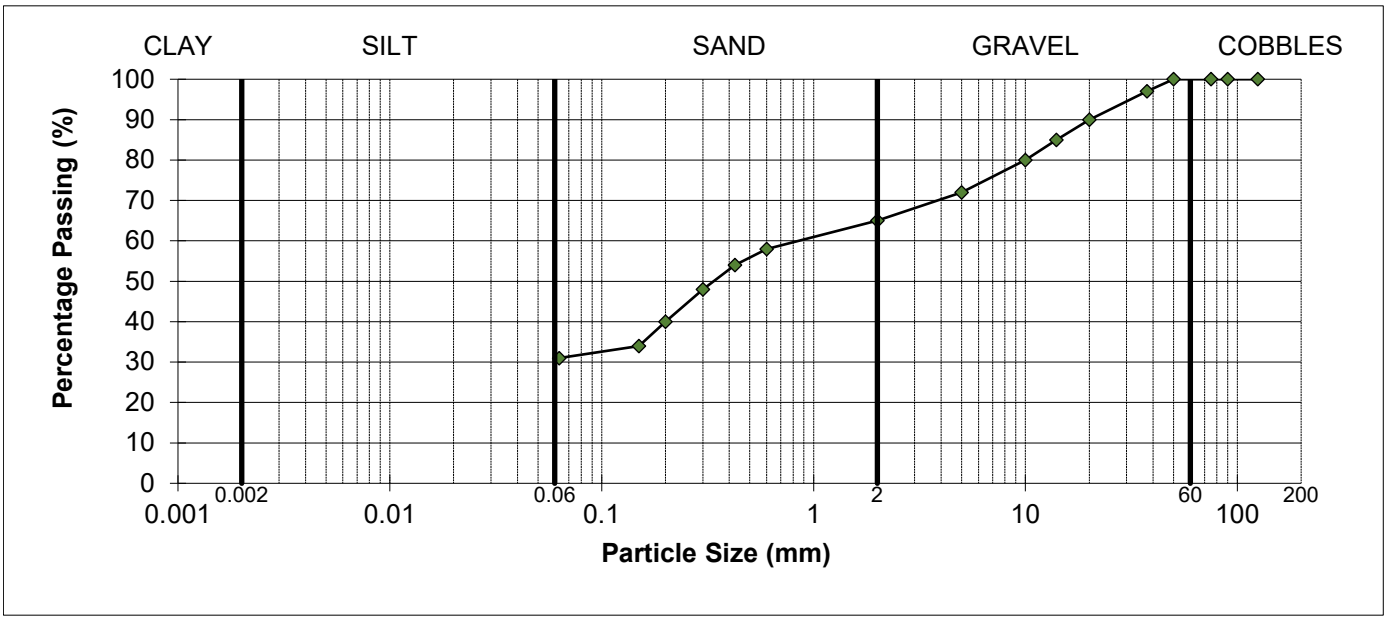
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/48

SAMPLE LABEL	Stockpile 3	DATE SAMPLED	04-May-23
LAB SAMPLE No	125072	DATE RECEIVED	05-May-23
DATE TESTED	09-May-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	72	
90	100		2	65	15-80
75	100		0.6	58	
50	100		0.425	54	
37.5	97		0.3	48	
20	90		0.2	40	
14	85		0.15	34	
10	80		0.063	31	15-80



REMARKS
As received water content = 27.6%
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 19-May-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-4:1990
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

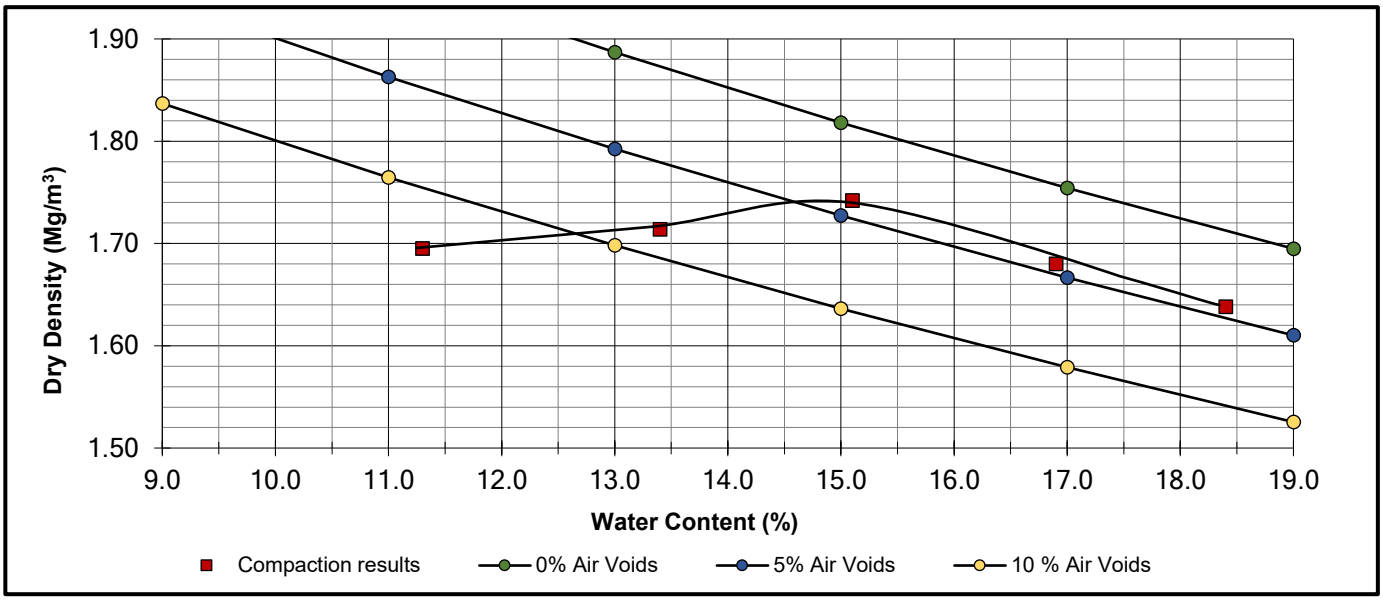
CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/48

SAMPLE LABEL	Stockpile 3	DATE SAMPLED	04-May-23
SAMPLE NUMBER	125072	DATE RECEIVED	05-May-23
DATE TESTED	10-May-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won
PRE TREATMENT	Air Dried / Single Sample

RETAINED 37.5mm	3 %	GRADING ZONE	Zone 4
RETAINED 20mm	10 %	PARTICLE DENSITY	2.50 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	11.3	1.695
2	13.4	1.714
3	15.1	1.742
4	16.9	1.680
5	18.4	1.638



OPTIMUM WATER CONTENT	**15**	(%)
MAXIMUM DRY DENSITY	**1.74**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 19-May-23

M U R R A Y R I X

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

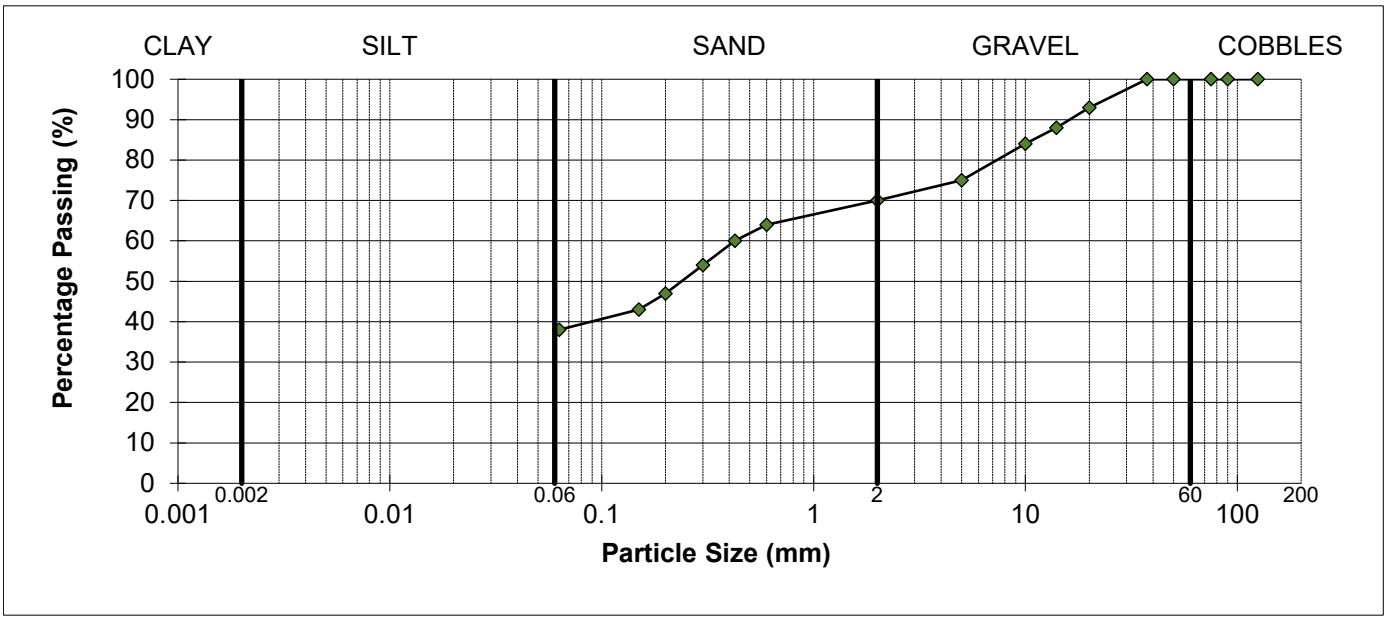
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/48

SAMPLE LABEL	Stockpile 6	DATE SAMPLED	05-May-23
LAB SAMPLE No	125073	DATE RECEIVED	05-May-23
DATE TESTED	09-May-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	75	
90	100		2	70	15-80
75	100		0.6	64	
50	100		0.425	60	
37.5	100		0.3	54	
20	93		0.2	47	
14	88		0.15	43	
10	84		0.063	38	15-80



REMARKS

As received water content = 24.5%

Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 19-May-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-4:1990
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

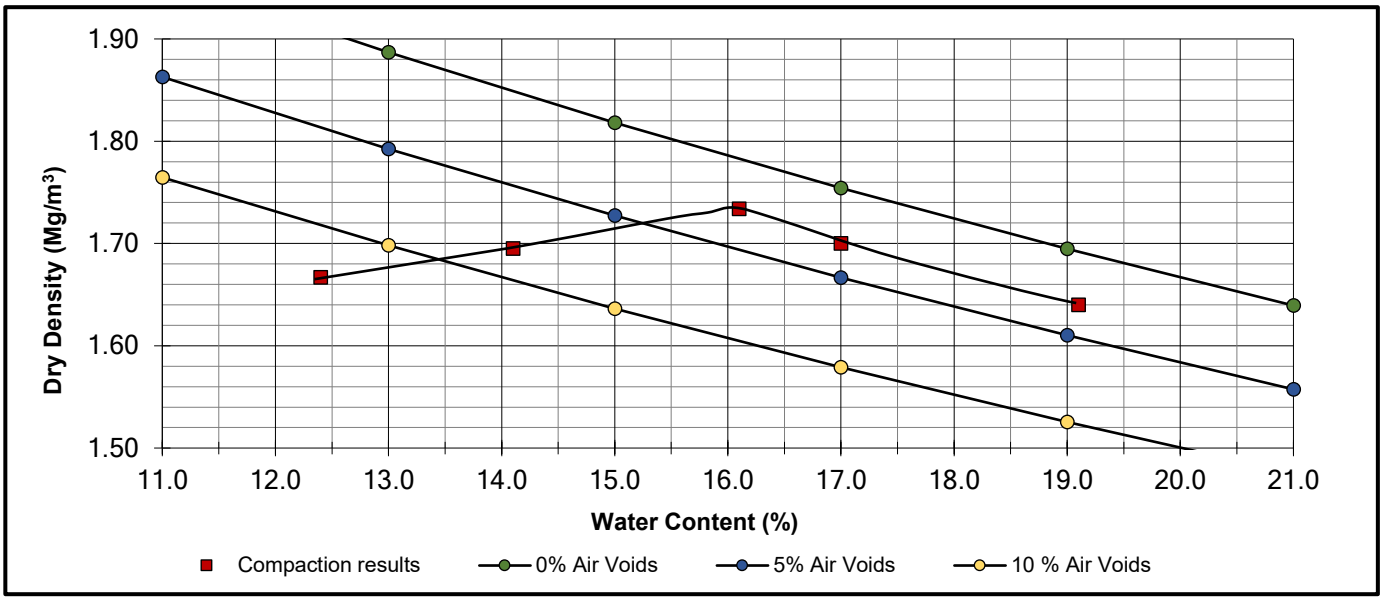
CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/48

SAMPLE LABEL	Stockpile 6	DATE SAMPLED	05-May-23
SAMPLE NUMBER	125073	DATE RECEIVED	05-May-23
DATE TESTED	10-May-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won
PRE TREATMENT	Air Dried / Single Sample

RETAINED 37.5mm	0 %	GRADING ZONE	Zone 3
RETAINED 20mm	7 %	PARTICLE DENSITY	2.50 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	12.4	1.667
2	14.1	1.695
3	16.1	1.734
4	17.0	1.700
5	19.1	1.640



OPTIMUM WATER CONTENT	**16**	(%)
MAXIMUM DRY DENSITY	**1.73**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

SIGNED

DATE 19-May-23

M U R R A Y R I X
ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

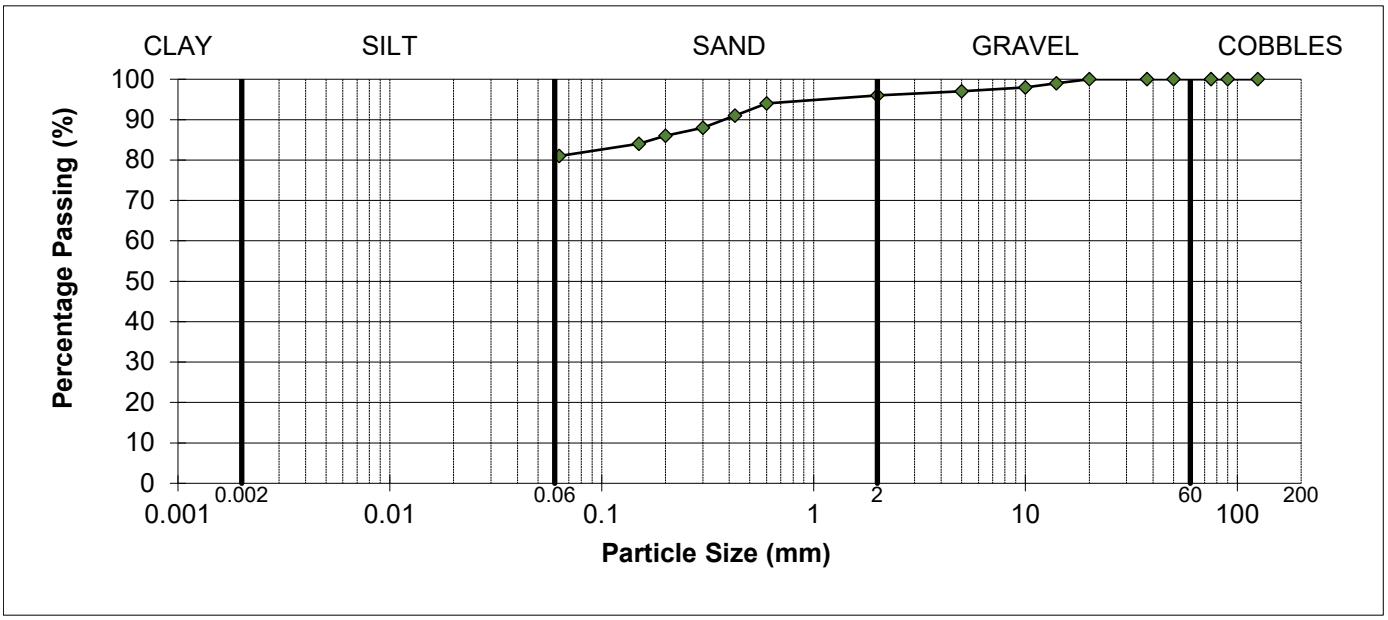
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/48

SAMPLE LABEL	Cell 1 Natural	DATE SAMPLED	04-May-23
LAB SAMPLE No	125068	DATE RECEIVED	05-May-23
DATE TESTED	09-May-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	97	
90	100		2	96	80-100
75	100		0.6	94	
50	100		0.425	91	
37.5	100		0.3	88	
20	100		0.2	86	
14	99		0.15	84	
10	98		0.063	81	15-100



REMARKS
As received water content = 19.8%
Sample complies with the advised grading specification for a 2A/2B material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 19-May-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-4:1990
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

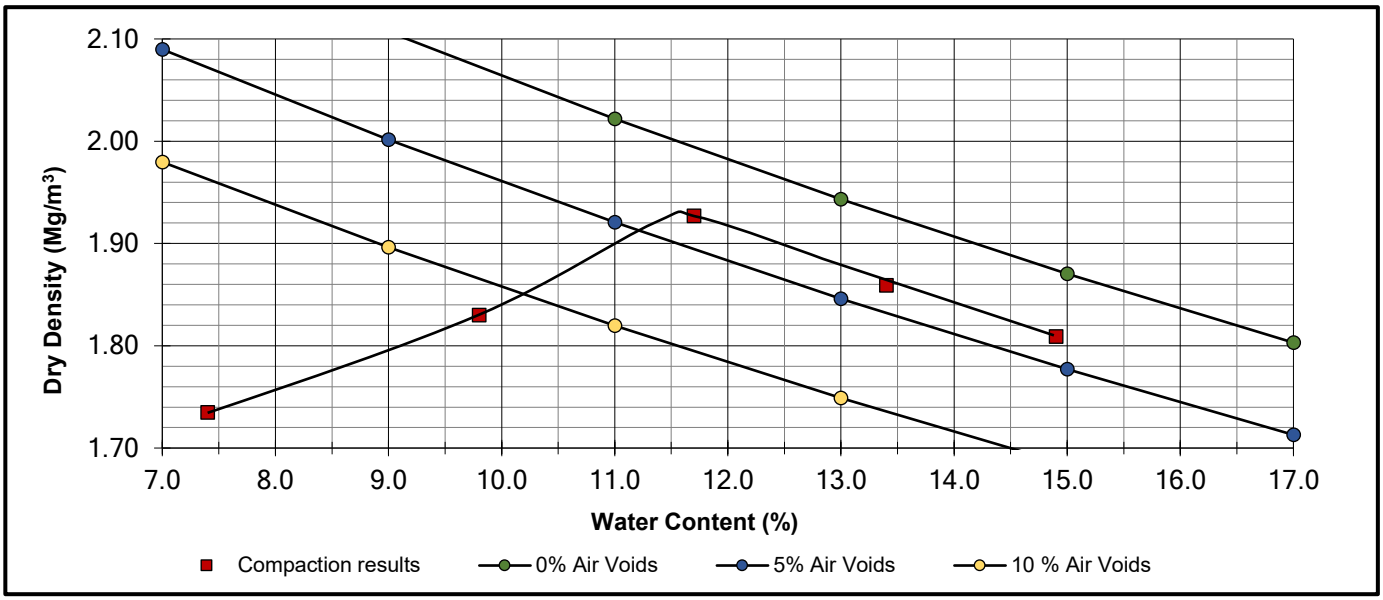
CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/48

SAMPLE LABEL	Cell 1 Natural	DATE SAMPLED	04-May-23
SAMPLE NUMBER	125068	DATE RECEIVED	05-May-23
DATE TESTED	10-May-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won
PRE TREATMENT	Air Dried / Single Sample

RETAINED 37.5mm	0 %	GRADING ZONE	Zone 1
RETAINED 20mm	0 %	PARTICLE DENSITY	2.60 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	7.4	1.735
2	9.8	1.830
3	11.7	1.927
4	13.4	1.859
5	14.9	1.809



OPTIMUM WATER CONTENT	**12**	(%)
MAXIMUM DRY DENSITY	**1.93**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

SIGNED

DATE 19-May-23

M U R R A Y R I X

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

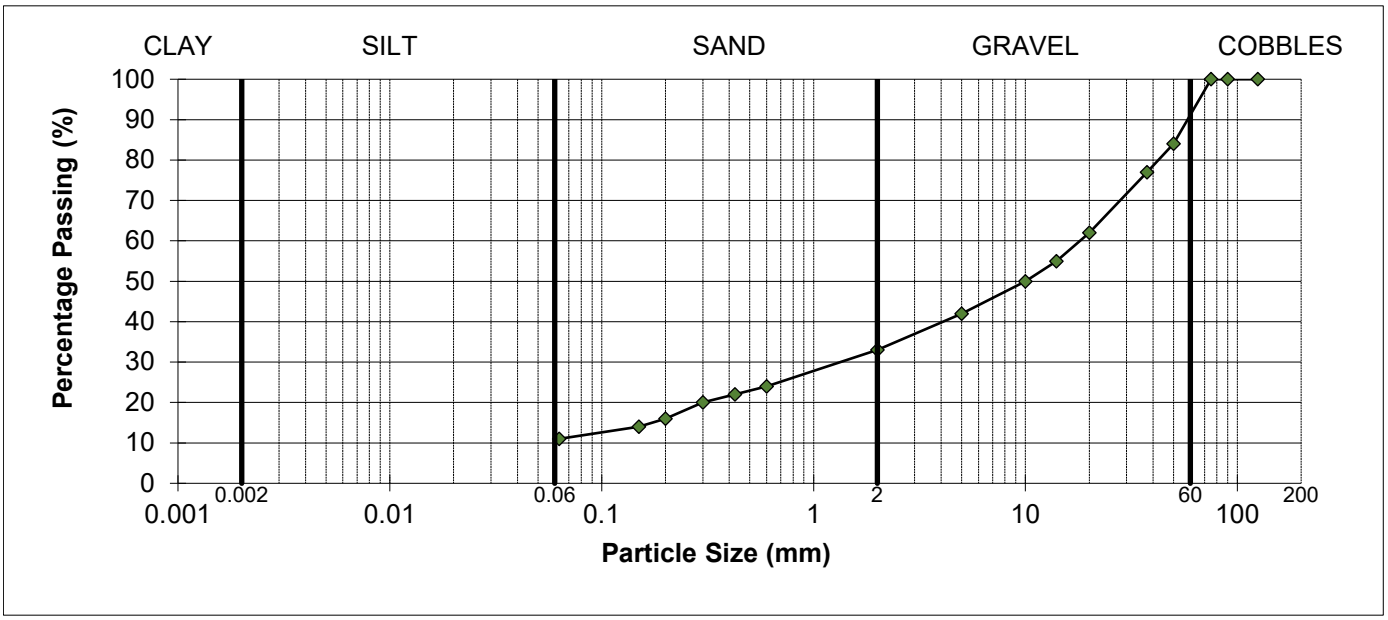
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/48

SAMPLE LABEL	Parcel A Crush	DATE SAMPLED	05-May-23
LAB SAMPLE No	125069	DATE RECEIVED	05-May-23
DATE TESTED	09-May-23	SAMPLED BY	Client

MATERIAL	Crush
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	42	10-45
90	100	80-100	2	33	
75	100	65-100	0.6	24	0-25
50	84		0.425	22	
37.5	77	45-100	0.3	20	
20	62		0.2	16	
14	55		0.15	14	
10	50	15-60	0.063	11	0-12



REMARKS

As received water content = 12.4%

Sample complies with the advised grading specification for a 6F2 material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 19-May-23

MURRAY RIX

CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client e3p

Address Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

Contract Don Street

Job Number MRN 4588/50
Date of Issue 23 May 2023
Page 1 of 3

Approved Signatories

S J Hutchings, O P Davies

Notes

1 All remaining samples and remnants from this contract will be disposed 28 days from the date of this report unless you notify us to the contrary.

2 Result certificates, in this report, not bearing a UKAS mark, are not included in our UKAS accreditation schedule.

3 Opinions and interpretations expressed herein are outside the scope of our UKAS accreditation.

4 Certified that the samples have been examined and tested in accordance with the terms of the contract/order and unless otherwise stated conform to the standards/specifications quoted.

5 The results included within the report are representative of the samples submitted for analysis.

6 This certificate should not be reproduced, except in full, without the express permission of the laboratory.

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-4:1990
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

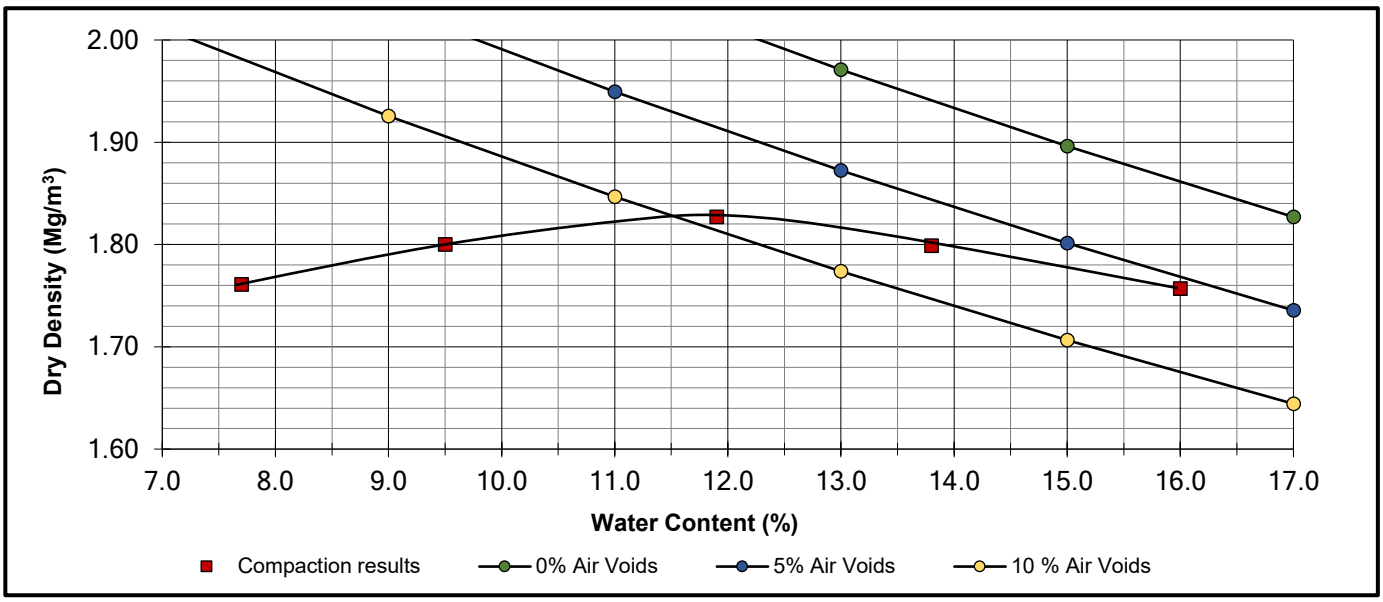
CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/48

SAMPLE LABEL	Stockpile 7	DATE SAMPLED	12-May-23
SAMPLE NUMBER	125221	DATE RECEIVED	12-May-23
DATE TESTED	16-May-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won
PRE TREATMENT	Air Dried / Single Sample

RETAINED 37.5mm	28 %	GRADING ZONE	Zone X
RETAINED 20mm	40 %	PARTICLE DENSITY	2.65 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	7.7	1.761
2	9.5	1.800
3	11.9	1.827
4	13.8	1.799
5	16.0	1.757



OPTIMUM WATER CONTENT	**12**	(%)
MAXIMUM DRY DENSITY	**1.83**	(Mg/m^3)

REMARKS
As received water content = 17.9%

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

SIGNED

DATE 23-May-23

M U R R A Y R I X

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

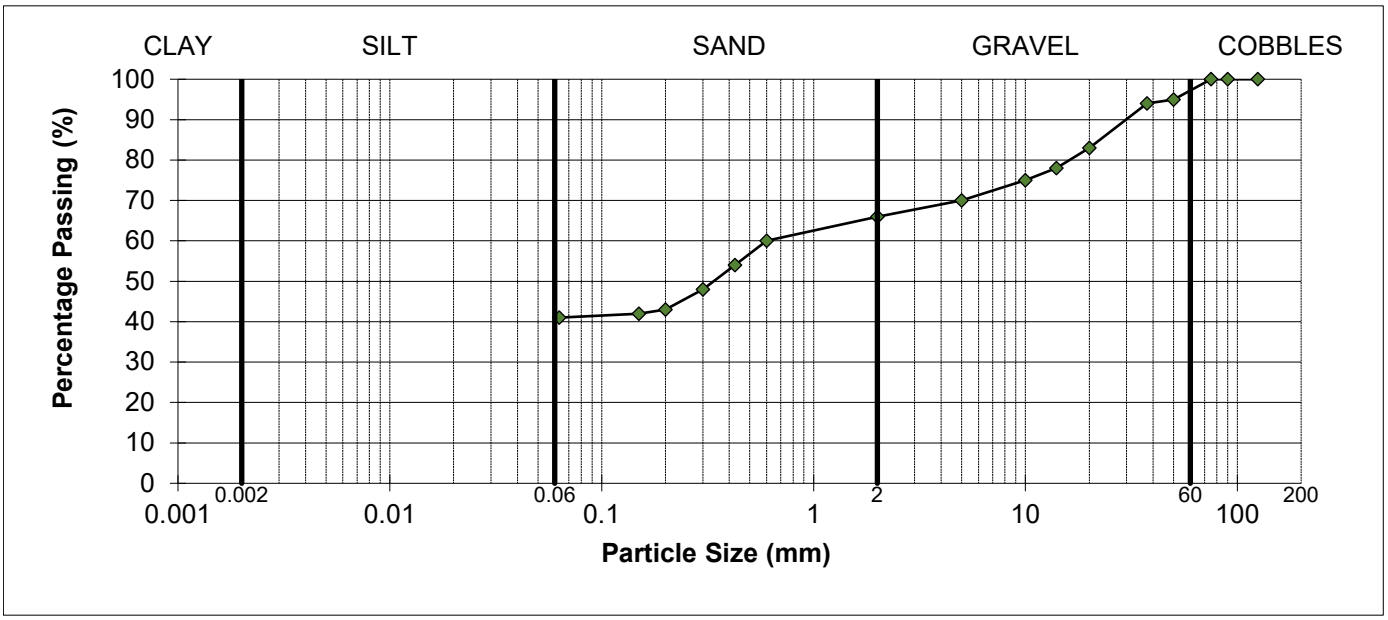
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/50

SAMPLE LABEL	Stockpile 7	DATE SAMPLED	12-May-23
LAB SAMPLE No	125397	DATE RECEIVED	12-May-23
DATE TESTED	16-May-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	70	
90	100		2	66	15-80
75	100		0.6	60	
50	95		0.425	54	
37.5	94		0.3	48	
20	83		0.2	43	
14	78		0.15	42	
10	75		0.063	41	15-80



REMARKS

As received water content = 22.9%

Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 23-May-23

M U R R A Y R I X

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN 933-1 : 2012 (Washing & Sieving Method)

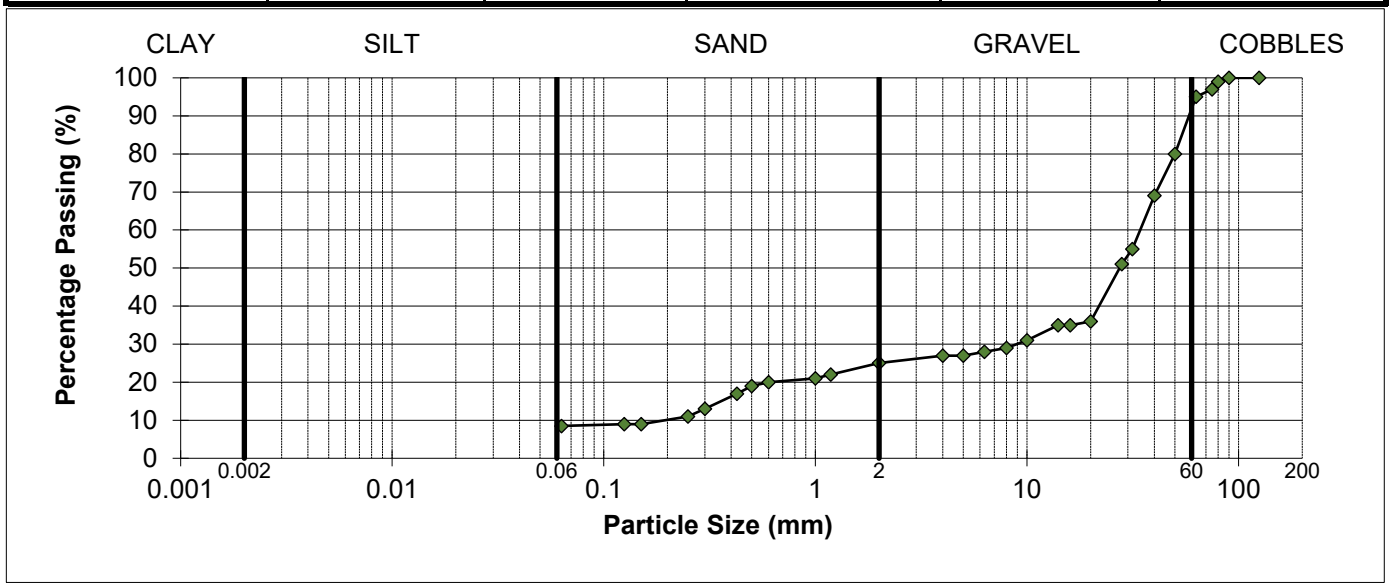
Determination of water content in accordance with BS EN 1097-5:2008

CLIENT	J O'Shea & Sons Ltd
SITE	Orchard Street, Salford
JOB NUMBER	MRN 4643/3

SAMPLE LABEL	DH/16/01/23-6F5	DATE SAMPLED	16-Jan-23
LAB SAMPLE No	120246	DATE RECEIVED	16-Jan-23
DATE TESTED	17-Jan-23	SAMPLED BY	Murray Rix

MATERIAL	Recycled Aggregate
ADVISED SOURCE	As client and site above

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	6.3	28	
90	100		5	27	
80	99	75-99	4	27	
75	97		2	25	0-35
63	95		1.18	22	
50	80		1	21	
40	69	50-90	0.6	20	
31.5	55		0.5	19	
28	51		0.425	17	
20	36	30-75	0.3	13	
16	35		0.25	11	
14	35		0.15	9	
10	31	15-60	0.125	9	
8	29		0.063	8.5	0-12



REMARKS

As received water content = 11%

Sample complies with the advised grading specification for a 6F5 material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 24-Jan-23

MURRAY RIX
CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client e3p

Address Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

Contract Don Street

Job Number MRN 4588/56
Date of Issue 09 June 2023
Page 1 of 7

Approved Signatories

S J Hutchings, O P Davies

Notes

1 All remaining samples and remnants from this contract will be disposed 28 days from the date of this report unless you notify us to the contrary.

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MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-4:1990
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

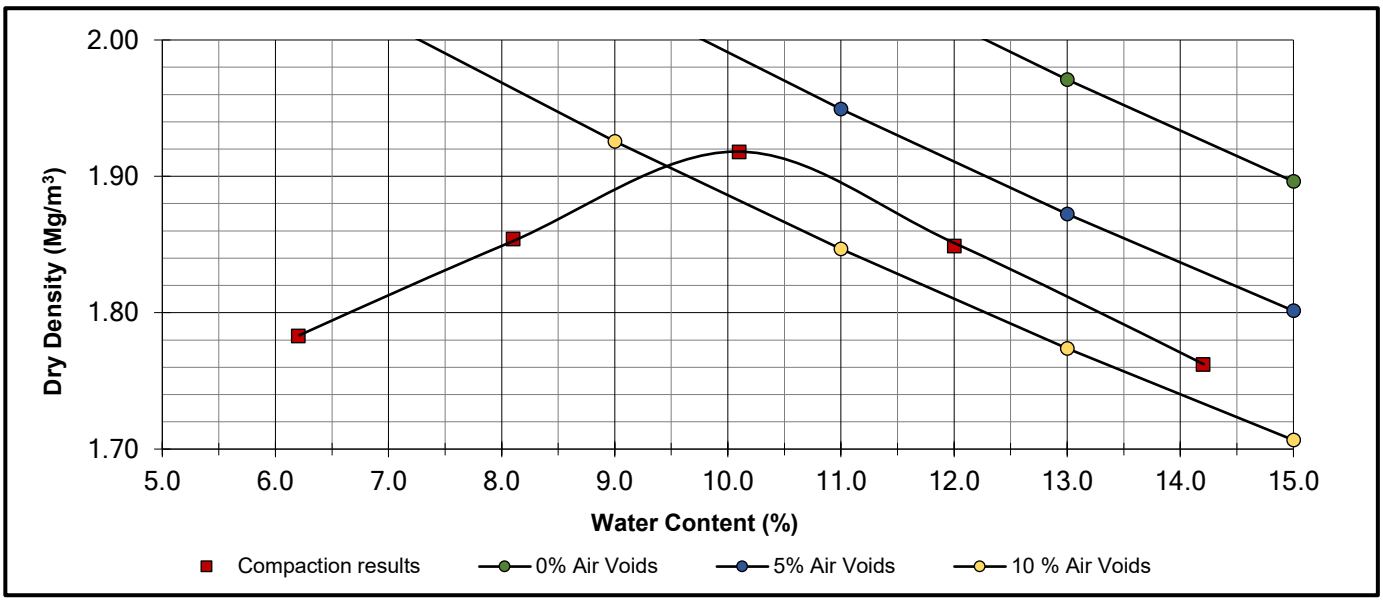
CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/56

SAMPLE LABEL	Stockpile 9	DATE SAMPLED	23-May-23
SAMPLE NUMBER	125712	DATE RECEIVED	23-May-23
DATE TESTED	26-May-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won
PRE TREATMENT	Air Dried / Single Sample

RETAINED 37.5mm	5 %	GRADING ZONE	Zone 4
RETAINED 20mm	25 %	PARTICLE DENSITY	2.65 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	6.2	1.783
2	8.1	1.854
3	10.1	1.918
4	12.0	1.849
5	14.2	1.762



OPTIMUM WATER CONTENT	**10**	(%)
MAXIMUM DRY DENSITY	**1.92**	(Mg/m^3)

REMARKS

NAME S.J Hutchings (Director) SIGNED DATE 09-Jun-23

M U R R A Y R I X
ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

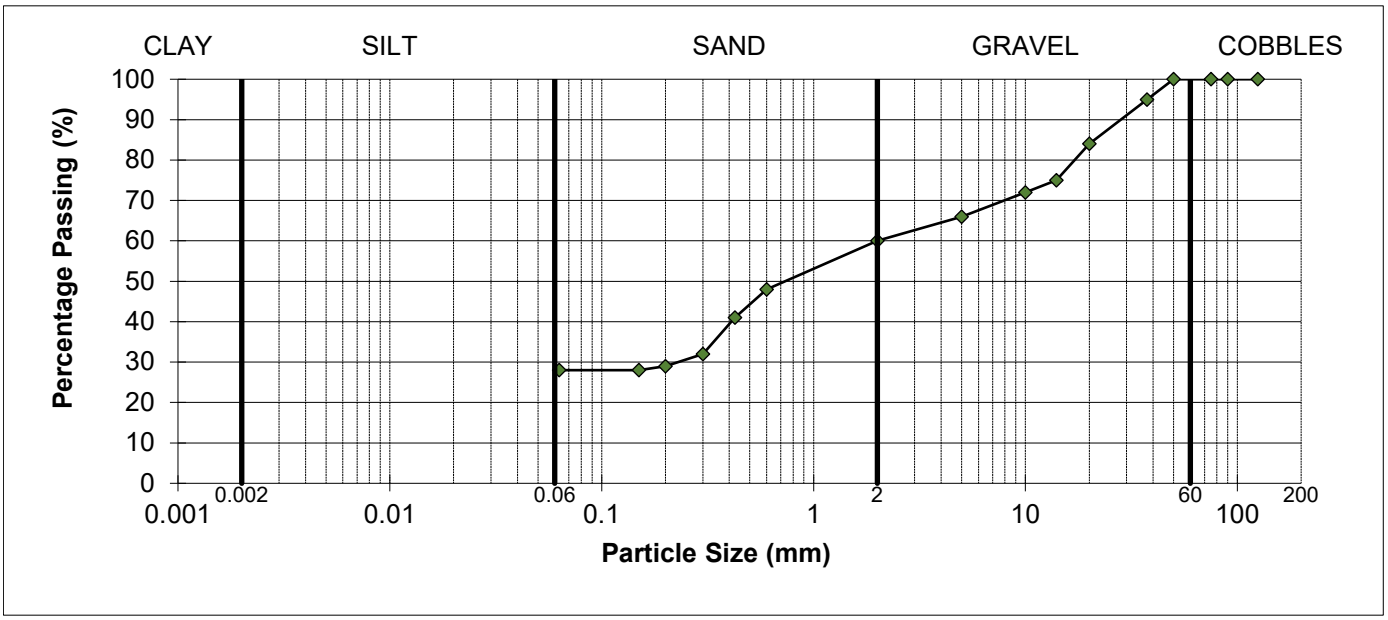
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/56

SAMPLE LABEL	Stockpile 9	DATE SAMPLED	23-May-23
LAB SAMPLE No	125712	DATE RECEIVED	23-May-23
DATE TESTED	26-May-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	66	
90	100		2	60	15-80
75	100		0.6	48	
50	100		0.425	41	
37.5	95		0.3	32	
20	84		0.2	29	
14	75		0.15	28	
10	72		0.063	28	15-80



REMARKS
As received water content = 15.6%
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME S.J. Hutchings (Director) DATE 09-Jun-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

TEST CERTIFICATE

ACID SOLUBLE SULFIDE CONTENT
BS EN 1744-1:2009+A1:2012 Cl. 13

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/56

DATE TESTED	26 May 2023	DATE SAMPLED	02 May 2023
SAMPLED BY	Client	DATE RECEIVED	23 May 2023

Sample Number	Site Mark	Aggregate Type	Acid Soluble Sulfide % S
125704	Stockpile 1	General Fill	<0.01
125705	Stockpile 2	General Fill	<0.01
125706	Stockpile 3	General Fill	<0.01
125707	Stockpile 4	General Fill	<0.01

REMARKS

SIGNED

NAME S.J Hutchings
(Director)

DATE 09 June 2023

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

TEST CERTIFICATE

ACID SOLUBLE SULFIDE CONTENT
BS EN 1744-1:2009+A1:2012 Cl. 13

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/56

DATE TESTED	26 May 2023	DATE SAMPLED	23 May 2023
SAMPLED BY	Client	DATE RECEIVED	23 May 2023

Sample Number	Site Mark	Aggregate Type	Acid Soluble Sulfide % S
125708	Stockpile 5	General Fill	<0.01
125709	Stockpile 6	General Fill	<0.01
125710	Stockpile 7	General Fill	<0.01
125711	Stockpile 8	General Fill	<0.01
125712	Stockpile 9	General Fill	<0.01

REMARKS

SIGNED

NAME S.J Hutchings
(Director)

DATE 09 June 2023

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

TEST CERTIFICATE

TOTAL SULFUR CONTENT
BS EN 1744-1:2009+A1:2012 Cl. 11

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/56

DATE TESTED	26 May 2023	DATE SAMPLED	02 May 2023
SAMPLED BY	Client	DATE RECEIVED	23 May 2023

Sample Number	Site Mark	Aggregate Type	Total Sulfur % S
125704	Stockpile 1	General Fill	<0.1
125705	Stockpile 2	General Fill	<0.1
125706	Stockpile 3	General Fill	0.2
125707	Stockpile 4	General Fill	0.1

REMARKS

SIGNED

NAME S.J. Hutchings (Director) DATE 09 June 2023

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

TEST CERTIFICATE

TOTAL SULFUR CONTENT
BS EN 1744-1:2009+A1:2012 Cl. 11

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/56

DATE TESTED	26 May 2023	DATE SAMPLED	23 May 2023
SAMPLED BY	Client	DATE RECEIVED	23 May 2023

Sample Number	Site Mark	Aggregate Type	Total Sulfur % S
125708	Stockpile 5	General Fill	0.1
125709	Stockpile 6	General Fill	0.2
125710	Stockpile 7	General Fill	0.2
125711	Stockpile 8	General Fill	<0.1
125712	Stockpile 9	General Fill	0.1

REMARKS

SIGNED 

NAME S.J. Hutchings
(Director)

DATE 09 June 2023

MURRAY RIX
CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client e3p

Address Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

Contract Don Street

Job Number MRN 4588/121
Date of Issue 18 October 2023

Approved Signatories

S J Hutchings, O P Davies

Notes

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Murray Rix is the trading name of Murray Rix (Northern) Limited. Registered in England 2878361

M U R R A Y R I X
ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

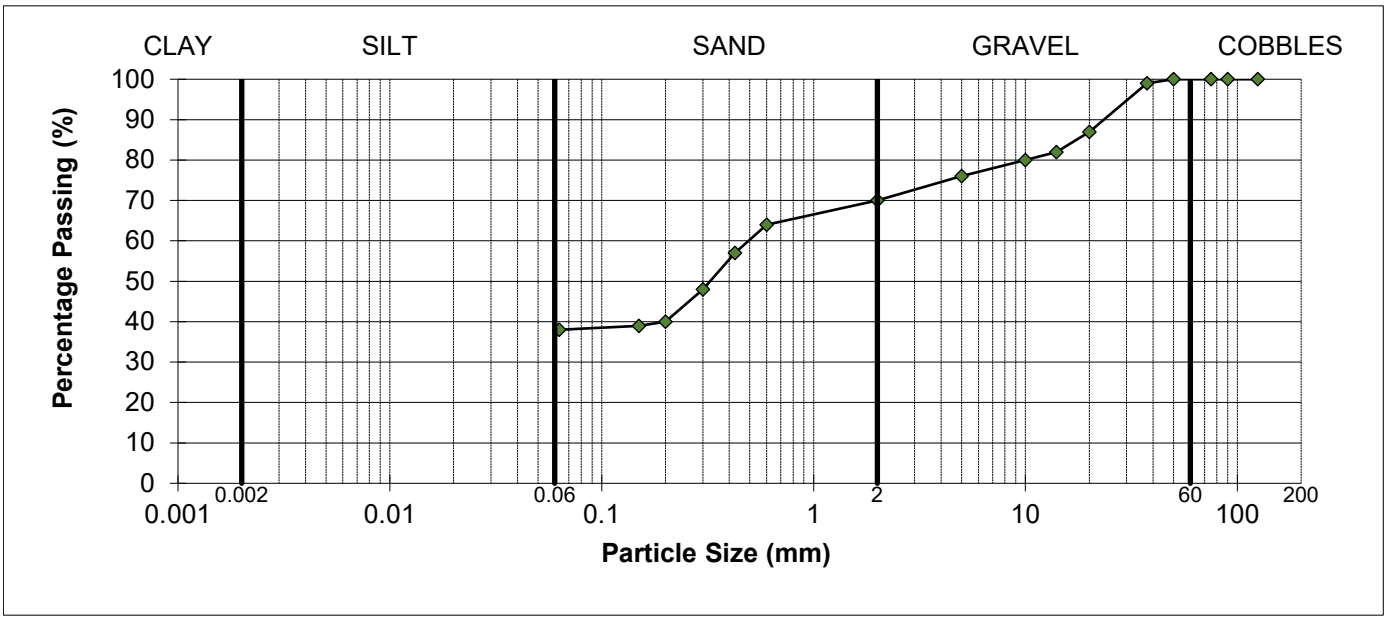
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/121

SAMPLE LABEL	Stockpile 29	DATE SAMPLED	26-Sep-23
LAB SAMPLE No	131869	DATE RECEIVED	29-Sep-23
DATE TESTED	02-Oct-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	76	
90	100		2	70	15-80
75	100		0.6	64	
50	100		0.425	57	
37.5	99		0.3	48	
20	87		0.2	40	
14	82		0.15	39	
10	80		0.063	38	15-80



REMARKS
As received water content = 9.4%
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 18-Oct-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-2:2022 Cl.11
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

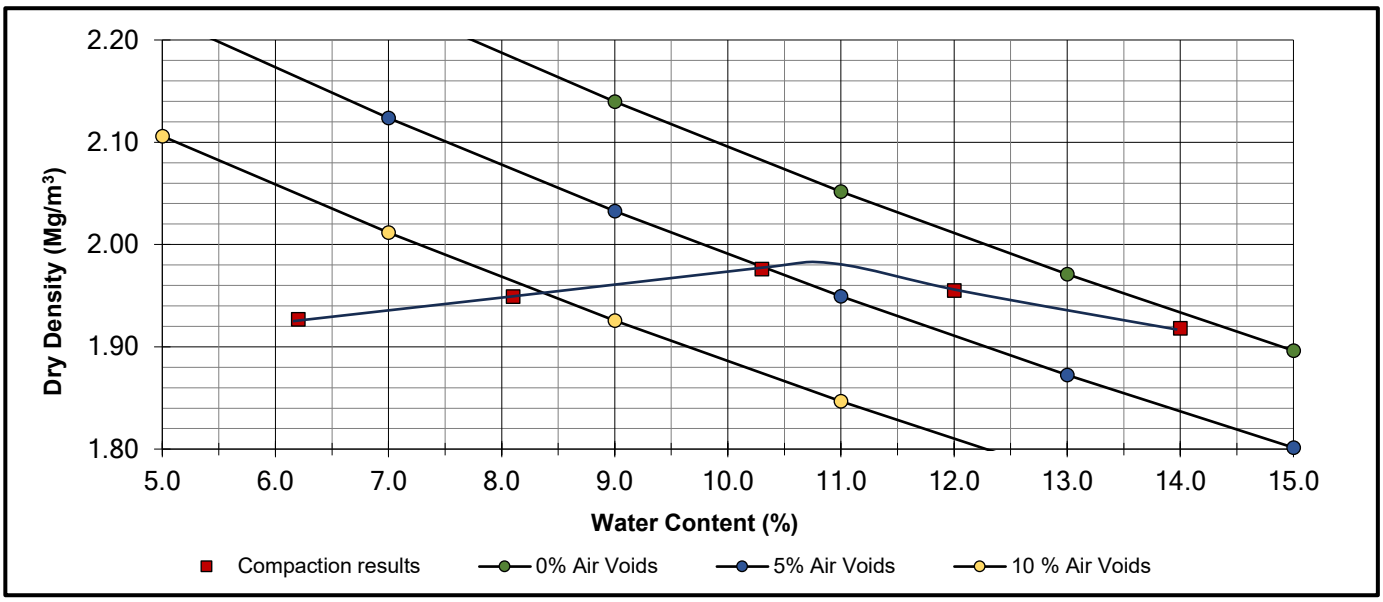
CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/121

SAMPLE LABEL	Stockpile 29	DATE SAMPLED	26-Sep-23
SAMPLE NUMBER	131869	DATE RECEIVED	29-Sep-23
DATE TESTED	02-Oct-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won
PRE TREATMENT	Air Dried / Single Sample

RETAINED 37.5mm	1 %	GRADING ZONE	Zone 4
RETAINED 20mm	13 %	PARTICLE DENSITY	2.65 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	6.2	1.927
2	8.1	1.949
3	10.3	1.976
4	12.0	1.955
5	14.0	1.918



OPTIMUM WATER CONTENT	**11**	(%)
MAXIMUM DRY DENSITY	**1.98**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

SIGNED

DATE 18-Oct-23

M U R R A Y R I X

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

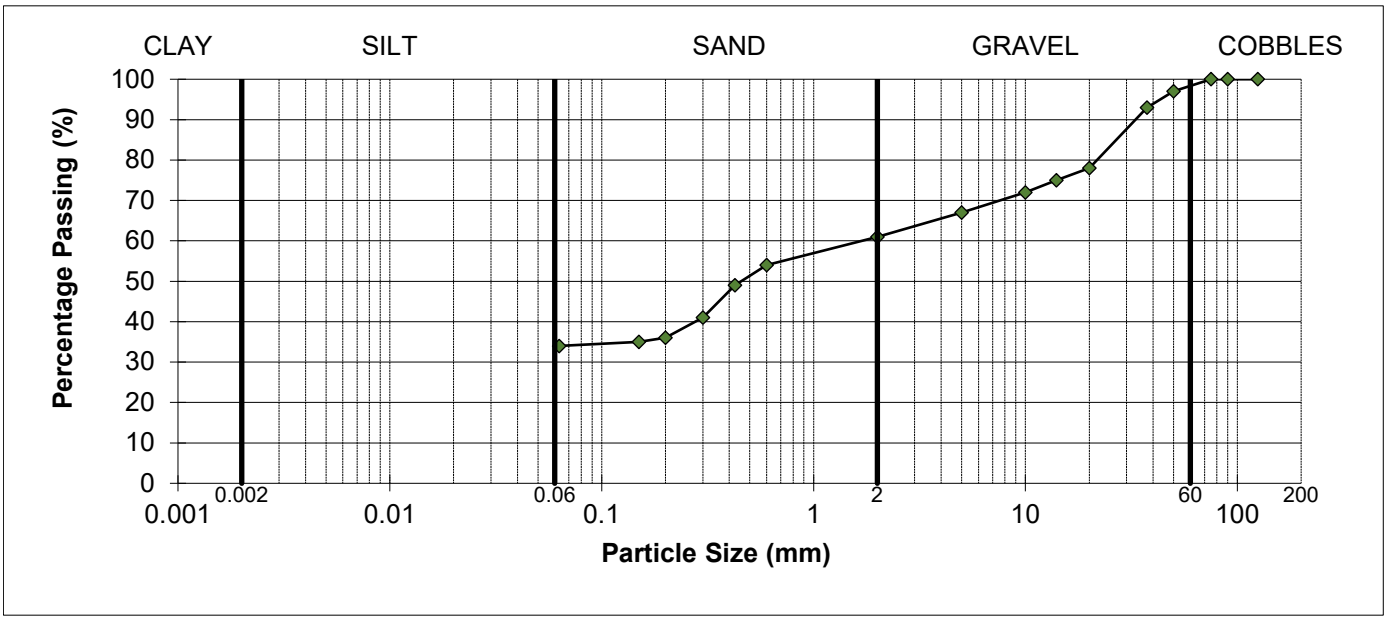
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/121

SAMPLE LABEL	Stockpile 30	DATE SAMPLED	29-Sep-23
LAB SAMPLE No	131870	DATE RECEIVED	29-Sep-23
DATE TESTED	02-Oct-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	67	
90	100		2	61	15-80
75	100		0.6	54	
50	97		0.425	49	
37.5	93		0.3	41	
20	78		0.2	36	
14	75		0.15	35	
10	72		0.063	34	15-80



REMARKS
As received water content = 11.8%
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 18-Oct-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-2:2022 Cl.11
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

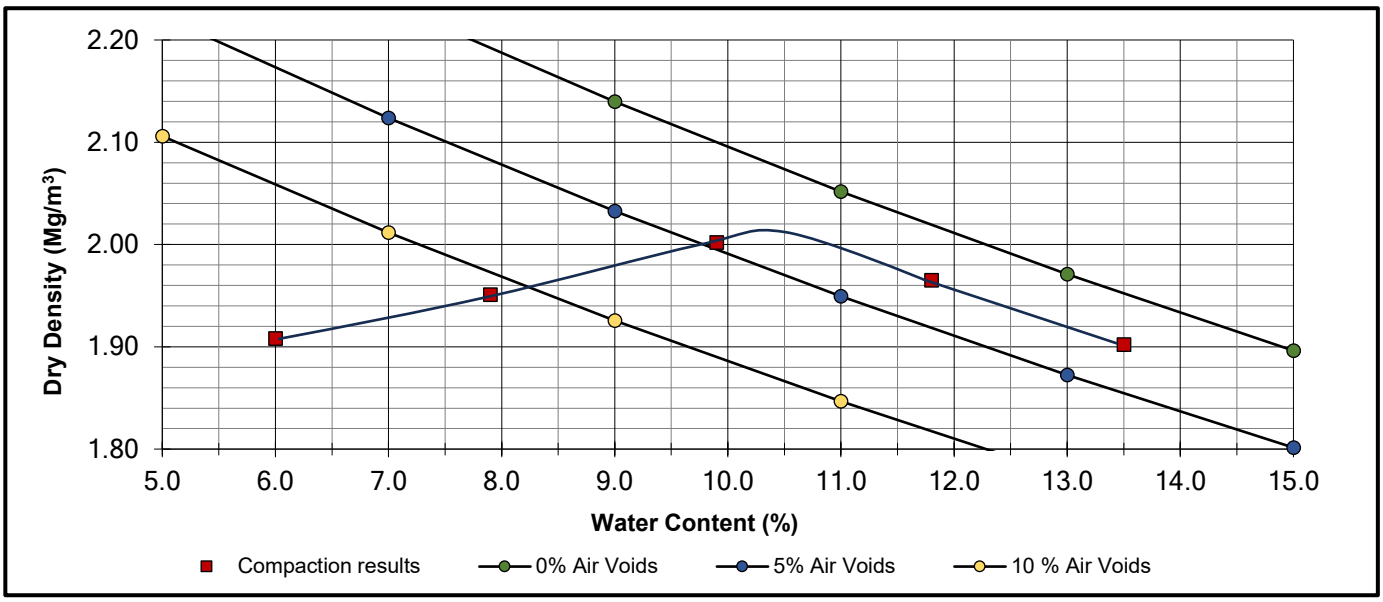
CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/121

SAMPLE LABEL	Stockpile 30	DATE SAMPLED	29-Sep-23
SAMPLE NUMBER	131870	DATE RECEIVED	29-Sep-23
DATE TESTED	02-Oct-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won
PRE TREATMENT	Air Dried / Single Sample

RETAINED 37.5mm	7 %	GRADING ZONE	Zone 5
RETAINED 20mm	22 %	PARTICLE DENSITY	2.65 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	6.0	1.908
2	7.9	1.951
3	9.9	2.002
4	11.8	1.965
5	13.5	1.902



OPTIMUM WATER CONTENT	**10**	(%)
MAXIMUM DRY DENSITY	**2.01**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

SIGNED

DATE 18-Oct-23

M U R R A Y R I X
ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

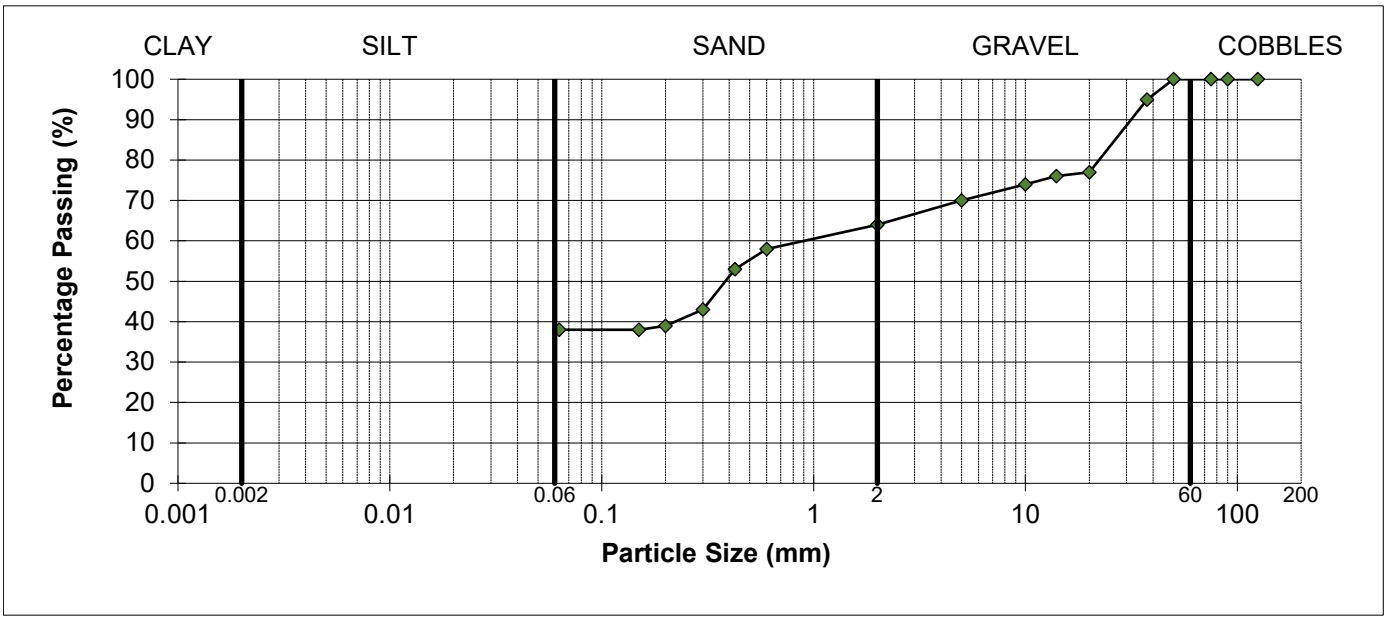
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/121

SAMPLE LABEL	Stockpile 31	DATE SAMPLED	29-Sep-23
LAB SAMPLE No	131871	DATE RECEIVED	29-Sep-23
DATE TESTED	02-Oct-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	70	
90	100		2	64	15-80
75	100		0.6	58	
50	100		0.425	53	
37.5	95		0.3	43	
20	77		0.2	39	
14	76		0.15	38	
10	74		0.063	38	15-80



REMARKS
As received water content = 15.6%
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 18-Oct-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-2:2022 Cl.11
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

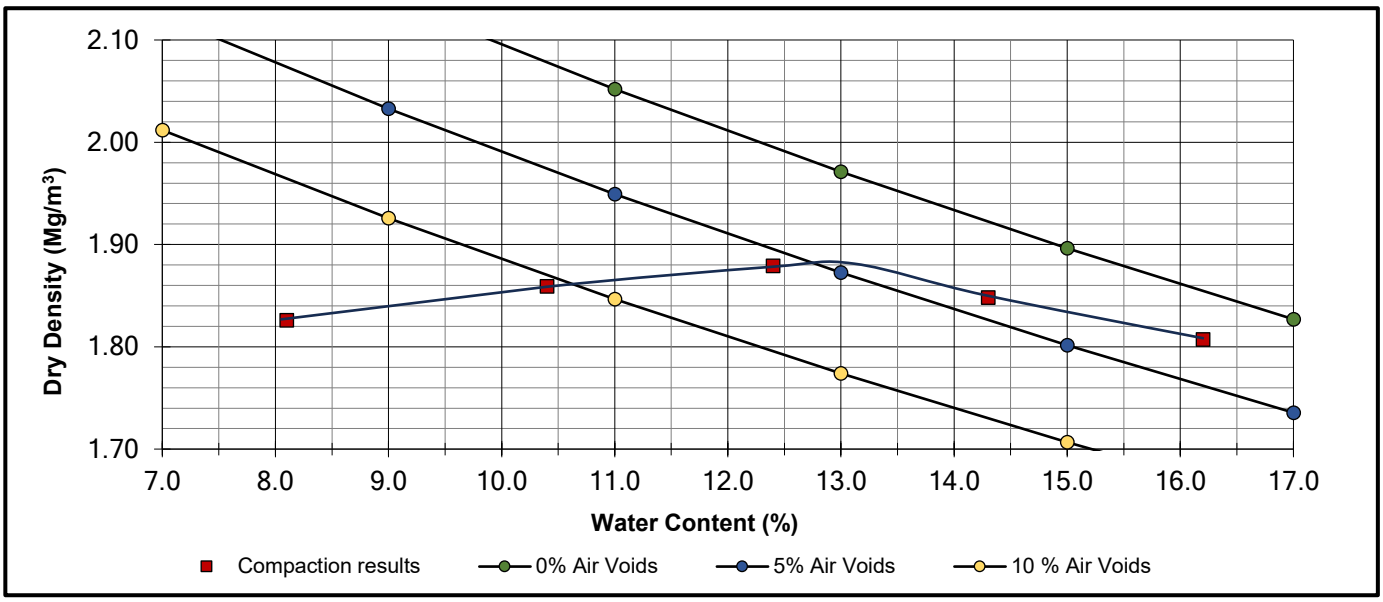
CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/121

SAMPLE LABEL	Stockpile 31	DATE SAMPLED	29-Sep-23
SAMPLE NUMBER	131871	DATE RECEIVED	29-Sep-23
DATE TESTED	02-Oct-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won
PRE TREATMENT	Air Dried / Single Sample

RETAINED 37.5mm	5 %	GRADING ZONE	Zone 4
RETAINED 20mm	23 %	PARTICLE DENSITY	2.65 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	8.1	1.826
2	10.4	1.859
3	12.4	1.879
4	14.3	1.848
5	16.2	1.807



OPTIMUM WATER CONTENT	**13**	(%)
MAXIMUM DRY DENSITY	**1.88**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 18-Oct-23

M U R R A Y R I X
ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

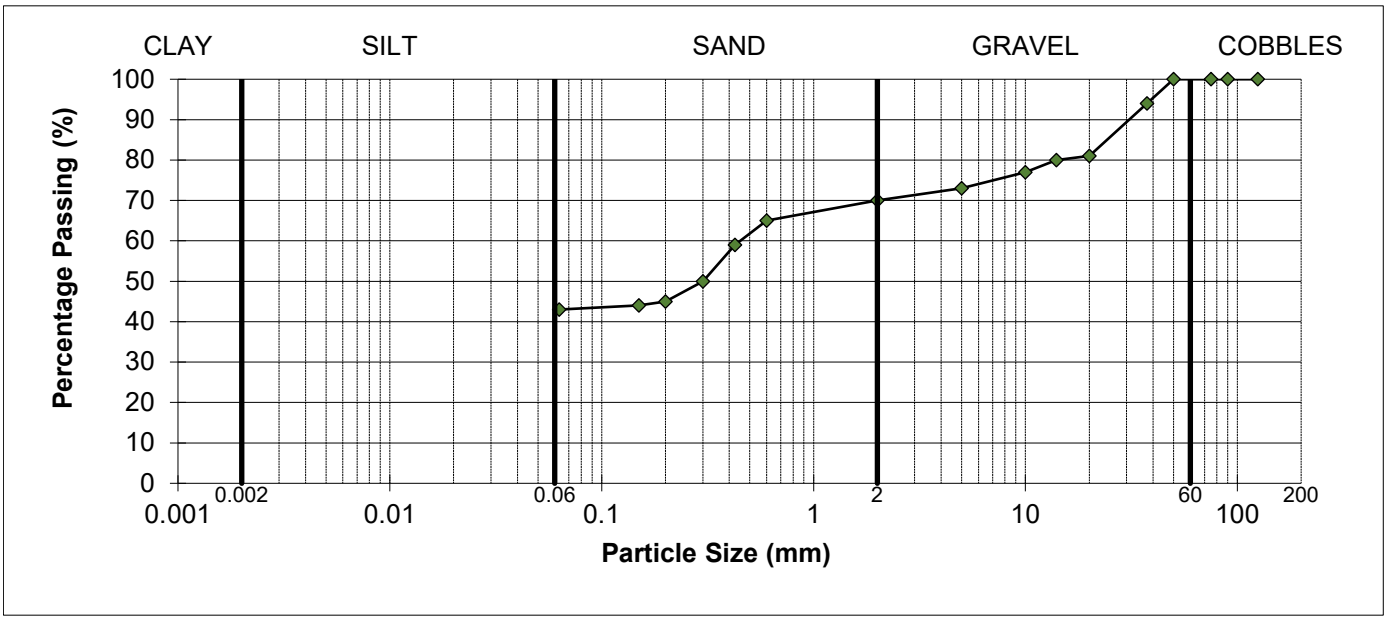
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/121

SAMPLE LABEL	Stockpile 32	DATE SAMPLED	29-Sep-23
LAB SAMPLE No	131872	DATE RECEIVED	29-Sep-23
DATE TESTED	02-Oct-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	73	
90	100		2	70	15-80
75	100		0.6	65	
50	100		0.425	59	
37.5	94		0.3	50	
20	81		0.2	45	
14	80		0.15	44	
10	77		0.063	43	15-80



REMARKS
As received water content = 12.3%
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 18-Oct-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-2:2022 Cl.11
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

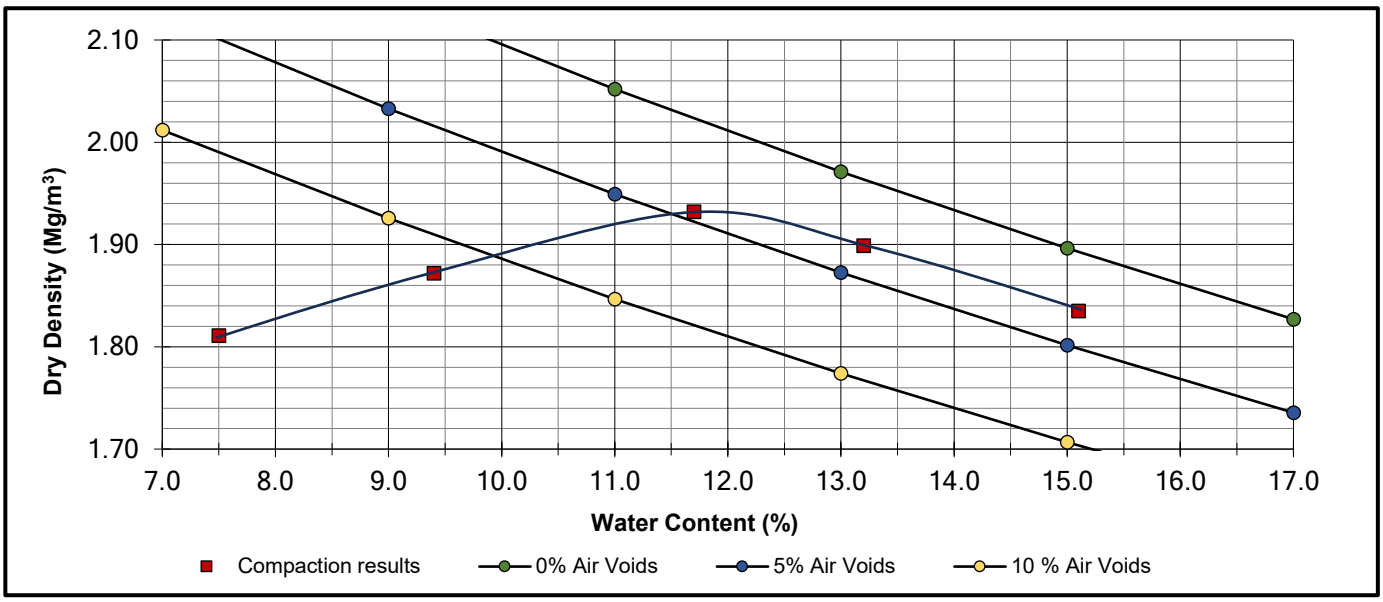
CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/121

SAMPLE LABEL	Stockpile 32	DATE SAMPLED	29-Sep-23
SAMPLE NUMBER	131872	DATE RECEIVED	29-Sep-23
DATE TESTED	02-Oct-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won
PRE TREATMENT	Air Dried / Single Sample

RETAINED 37.5mm	6 %	GRADING ZONE	Zone 5
RETAINED 20mm	19 %	PARTICLE DENSITY	2.65 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	7.5	1.811
2	9.4	1.872
3	11.7	1.932
4	13.2	1.899
5	15.1	1.835



OPTIMUM WATER CONTENT	**12**	(%)
MAXIMUM DRY DENSITY	**1.93**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 18-Oct-23

M U R R A Y R I X
ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

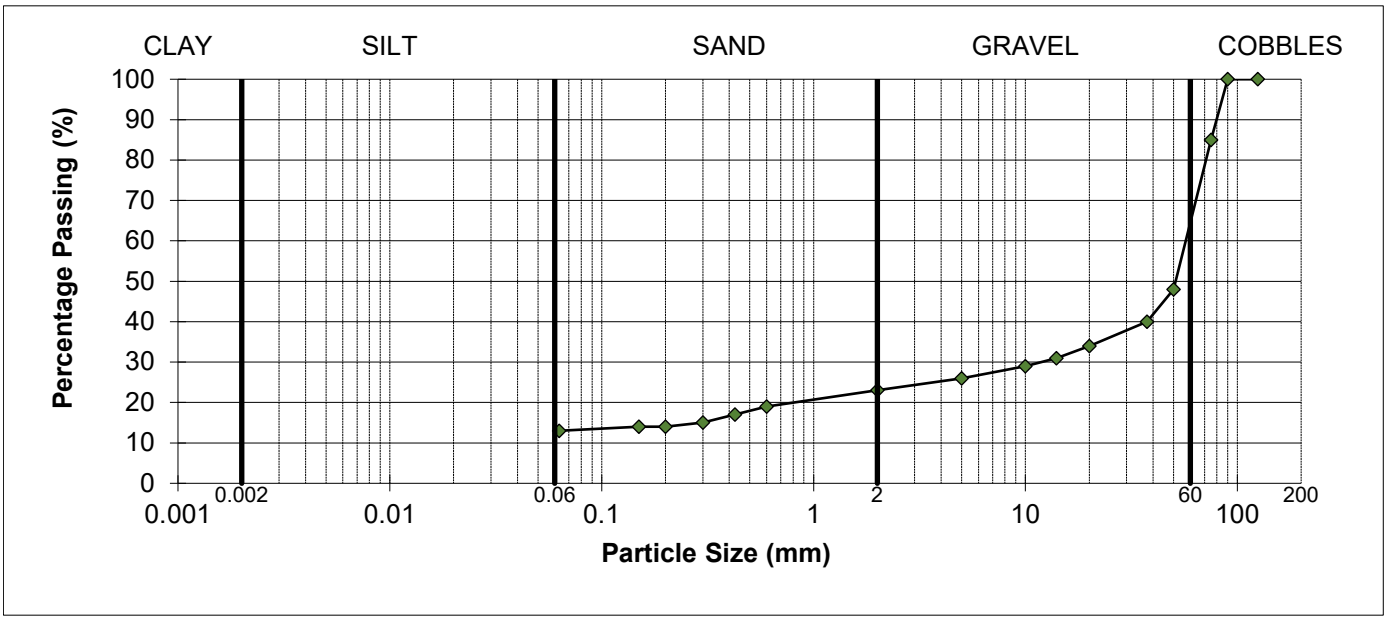
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/121

SAMPLE LABEL	LF CRUSH 103	DATE SAMPLED	29-Sep-23
LAB SAMPLE No	131873	DATE RECEIVED	29-Sep-23
DATE TESTED	02-Oct-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	95-100	5	26	
90	100		2	23	
75	85		0.6	19	
50	48		0.425	17	
37.5	40		0.3	15	
20	34		0.2	14	
14	31		0.15	14	
10	29		0.063	13	<15



REMARKS

As received water content = 8.8%

Sample complies with the advised grading specification for a 1A material (SHW 2016), Uniformity coefficient = >10

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 18-Oct-23

M U R R A Y R I X
ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

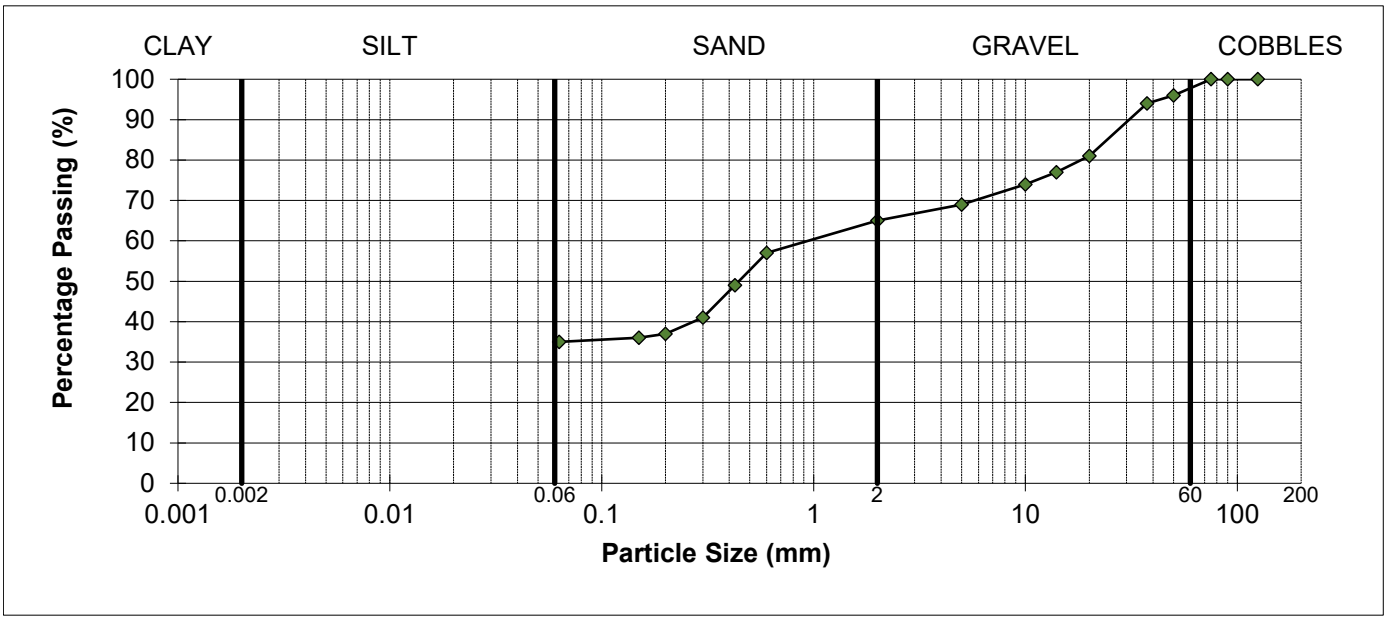
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/121

SAMPLE LABEL	Stockpile 34	DATE SAMPLED	29-Sep-23
LAB SAMPLE No	131874	DATE RECEIVED	29-Sep-23
DATE TESTED	02-Oct-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	69	
90	100		2	65	15-80
75	100		0.6	57	
50	96		0.425	49	
37.5	94		0.3	41	
20	81		0.2	37	
14	77		0.15	36	
10	74		0.063	35	15-80



REMARKS
As received water content = 12.0%
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 18-Oct-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-2:2022 Cl.11
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

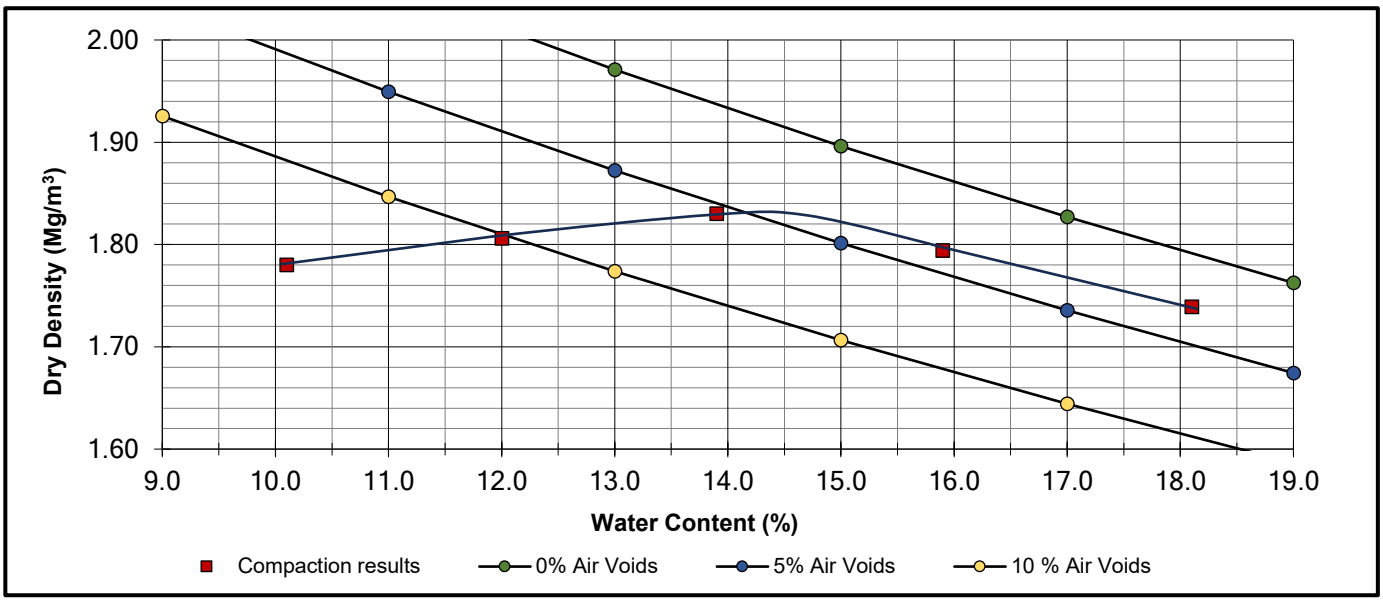
CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/121

SAMPLE LABEL	Stockpile 34	DATE SAMPLED	29-Sep-23
SAMPLE NUMBER	131874	DATE RECEIVED	29-Sep-23
DATE TESTED	02-Oct-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won
PRE TREATMENT	Air Dried / Single Sample

RETAINED 37.5mm	6 %	GRADING ZONE	Zone 5
RETAINED 20mm	19 %	PARTICLE DENSITY	2.65 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	10.1	1.780
2	12.0	1.806
3	13.9	1.830
4	15.9	1.794
5	18.1	1.739



OPTIMUM WATER CONTENT	**14**	(%)
MAXIMUM DRY DENSITY	**1.83**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 18-Oct-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

TEST CERTIFICATE

ACID SOLUBLE SULFIDE CONTENT
BS EN 1744-1:2009+A1:2012 Cl. 13

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/121

DATE TESTED	02 October 2023	DATE SAMPLED	26 & 29 September 2023
SAMPLED BY	Client	DATE RECEIVED	29 September 2023

Sample Number	Site Mark	Aggregate Type	Acid Soluble Sulfide % S
131868	Stockpile 24	General Fill	<0.01
131869	Stockpile 29	General Fill	<0.01
131870	Stockpile 30	General Fill	<0.01
131871	Stockpile 31	General Fill	<0.01
131872	Stockpile 32	General Fill	<0.01
131874	Stockpile 34	General Fill	<0.01

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 18 October 2023

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

TEST CERTIFICATE

TOTAL SULFUR CONTENT
BS EN 1744-1:2009+A1:2012 Cl. 11

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/121

DATE TESTED	02 October 2023	DATE SAMPLED	26 & 29 September 2023
SAMPLED BY	Client	DATE RECEIVED	29 September 2023

Sample Number	Site Mark	Aggregate Type	Total Sulfur % S
131868	Stockpile 24	General Fill	0.1
131869	Stockpile 29	General Fill	<0.1
131870	Stockpile 30	General Fill	0.1
131871	Stockpile 31	General Fill	0.1
131872	Stockpile 32	General Fill	<0.1
131874	Stockpile 34	General Fill	<0.1

REMARKS

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 18 October 2023

M U R R A Y R I X

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DETERMINATION OF CONSTITUENTS OF COARSE RECYCLED AGGREGATE

BS EN 933-11:2009

CLIENT	e3p
SITE	Don Street

SAMPLE DETAILS

Job Number	:	MRN 4588/121
Laboratory sample number	:	131874
Material	:	General Fill
Advised source	:	Site won
Site mark	:	Stockpile 34
Certificate of sampling received	:	No
Date and time of sampling	:	29 September 2023
Date received at Laboratory	:	29 September 2023
Date of start of test	:	02 October 2023
Sampling Location	:	Not advised
Method of sampling	:	BS EN 932-1 : 1997
Sampled by	:	Client
Mass of dry sample tested	:	50 kg
Drying Temperature	:	40 ± 5°C

RESULT

Constituent	Description	Proportion (%)
Rc	Concrete, Concrete products, Mortar, Concrete masonry units	3.2
Ru	Unbound aggregate, Natural stone, Hydraulically bound aggregate	25
Rb	Clay masonry units (i.e. bricks & tiles), Calcium silicate masonry units, Aerated non-floating concrete	7.6
Ra	Bituminous materials	0.0
Rg	Glass	1.3
X	Other: Cohesive (i.e. clay & soil), Metals (ferrous & non-ferrous), Non-floating wood, plastic & rubber, Gypsum plaster	63
FL	Floating Particles (cm^3/kg)	0.2

Comments
Client requested constituent X to be reported separately to clay/soil. No other consituent X was present, above consituent X figure is shown as the clay/soil proportion.

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 18-Oct-23

MURRAY RIX
CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client e3p

Address Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

Contract Don Street

Job Number MRN 4588/140A
Date of Issue 16 November 2023

Approved Signatories

S J Hutchings, O P Davies

Notes

1 All remaining samples and remnants from this contract will be disposed 28 days from the date of this report unless you notify us to the contrary.

2 Result certificates, in this report, not bearing a UKAS mark, are not included in our UKAS accreditation schedule.

3 Opinions and interpretations expressed herein are outside the scope of our UKAS accreditation.

4 Certified that the samples have been examined and tested in accordance with the terms of the contract/order and unless otherwise stated conform to the standards/specifications quoted.

5 The results included within the report are representative of the samples submitted for analysis.

6 This certificate should not be reproduced, except in full, without the express permission of the laboratory.

M U R R A Y R I X
ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

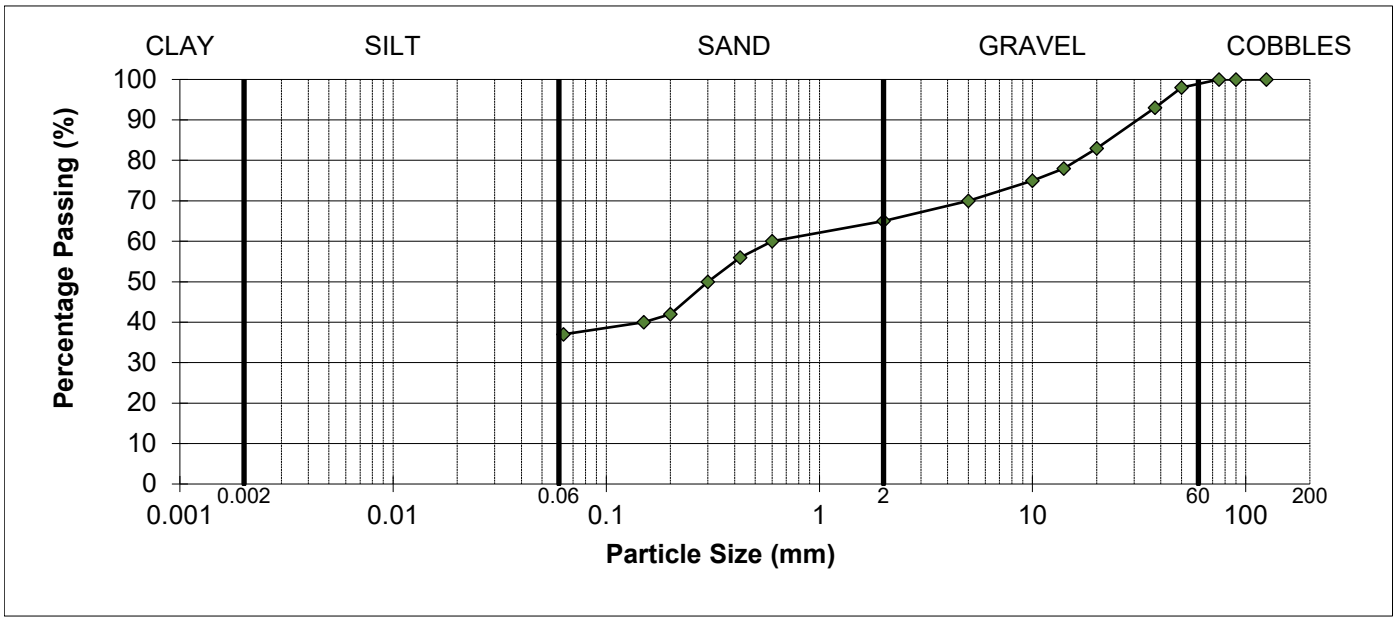
Determination of Water Content in accordance with BS EN ISO 17892-1:2014+A1:2022 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/140A

SAMPLE LABEL	SP24	DATE SAMPLED	25-Oct-23
LAB SAMPLE No	133155	DATE RECEIVED	25-Oct-23
DATE TESTED	27-Oct-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	70	
90	100		2	65	15-80
75	100		0.6	60	
50	98		0.425	56	
37.5	93		0.3	50	
20	83		0.2	42	
14	78		0.15	40	
10	75		0.063	37	15-80



SOIL FRACTIONS			
COBBLES	1%	SAND	28%
GRAVEL	34%	SILT / CLAY	37%

REMARKS
As received water content = 18.4%
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 16-Nov-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-2:2022 Cl.11
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

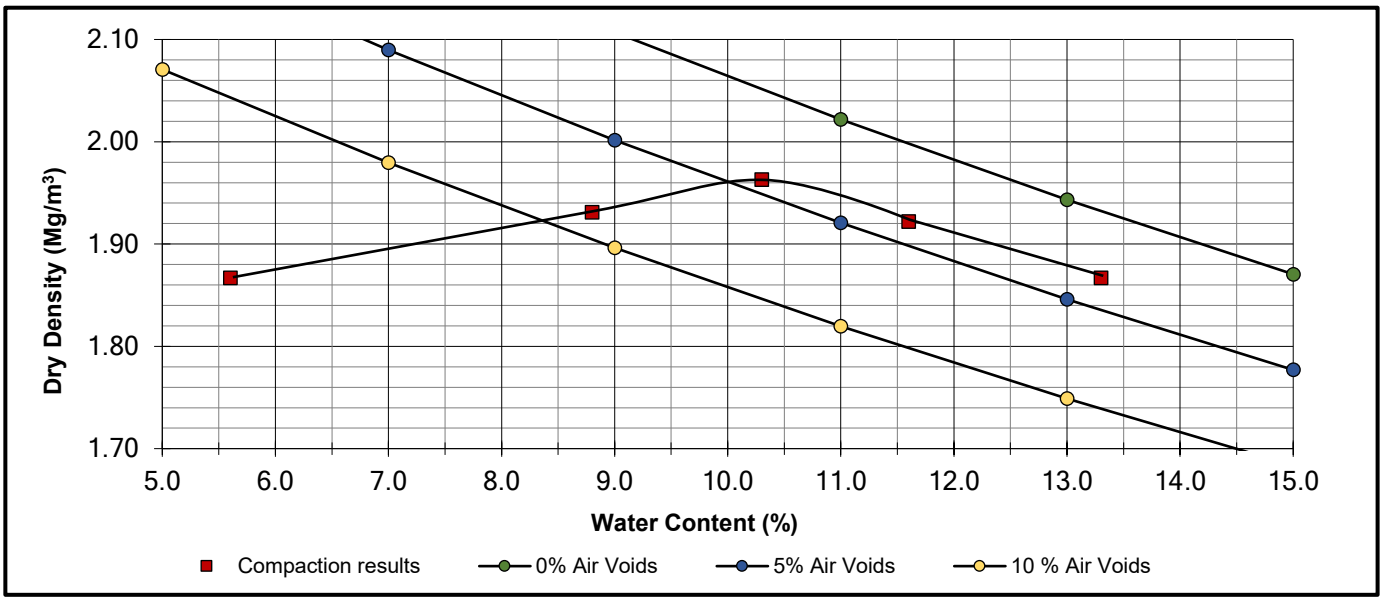
CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/140A

SAMPLE LABEL	SP24	DATE SAMPLED	25-Oct-23
SAMPLE NUMBER	133155	DATE RECEIVED	25-Oct-23
DATE TESTED	27-Oct-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won
PRE TREATMENT	Air Dried / Single Sample

RETAINED 37.5mm	7 %	GRADING ZONE	Zone 5
RETAINED 20mm	17 %	PARTICLE DENSITY	2.60 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	5.6	1.867
2	8.8	1.931
3	10.3	1.963
4	11.6	1.922
5	13.3	1.867



OPTIMUM WATER CONTENT	**10**	(%)
MAXIMUM DRY DENSITY	**1.96**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

SIGNED

DATE 16-Nov-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

TEST CERTIFICATE

ACID SOLUBLE SULFIDE CONTENT
BS EN 1744-1:2009+A1:2012 Cl. 13

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/140A

DATE TESTED	27 October 2023	DATE SAMPLED	25 October 2023
SAMPLED BY	Client	DATE RECEIVED	25 October 2023

Sample Number	Site Mark	Aggregate Type	Acid Soluble Sulfide % S
133155	SP24	General Fill	<0.01

REMARKS

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 16 November 2023

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

TEST CERTIFICATE

TOTAL SULFUR CONTENT
BS EN 1744-1:2009+A1:2012 Cl. 11

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/140A

DATE TESTED	27 October 2023	DATE SAMPLED	25 October 2023
SAMPLED BY	Client	DATE RECEIVED	25 October 2023

Sample Number	Site Mark	Aggregate Type	Total Sulfur % S
133155	SP24	General Fill	<0.1

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 16 November 2023

M U R R A Y R I X

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DETERMINATION OF CONSTITUENTS OF COARSE RECYCLED AGGREGATE

BS EN 933-11:2009

CLIENT	e3p
SITE	Don Street

SAMPLE DETAILS

Job Number	:	MRN 4588/140A
Laboratory sample number	:	133155
Material	:	General Fill
Advised source	:	Site won
Site mark	:	SP24
Certificate of sampling received	:	No
Date and time of sampling	:	29 September 2023
Date received at Laboratory	:	29 September 2023
Date of start of test	:	02 October 2023 Not
Sampling Location	:	advised
Method of sampling	:	BS EN 932-1 : 1997
Sampled by	:	Client
Mass of dry sample tested	:	50 kg
Drying Temperature	:	40 ± 5°C

RESULT

Constituent	Description	Proportion (%)
Rc	Concrete, Concrete products, Mortar, Concrete masonry units	3
Ru	Unbound aggregate, Natural stone, Hydraulically bound aggregate	24
Rb	Clay masonry units (i.e. bricks & tiles), Calcium silicate masonry units, Aerated non-floating concrete	7.2
Ra	Bituminous materials	0.0
Rg	Glass	0.8
X	Other: Cohesive (i.e. clay & soil), Metals (ferrous & non-ferrous), Non-floating wood, plastic & rubber, Gypsum plaster	65
FL	Floating Particles (cm^3/kg)	0.2

Comments
Client requested constituent X to be reported separately to clay/soil. No other consituent X was present, above consituent X figure is shown as the clay/soil proportion.

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 16-Nov-23

MURRAY RIX
CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client e3p

Address Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

Contract Don Street

Job Number MRN 4588/148
Date of Issue 16 November 2023

Approved Signatories

S J Hutchings, O P Davies

Notes

1 All remaining samples and remnants from this contract will be disposed 28 days from the date of this report unless you notify us to the contrary.

2 Result certificates, in this report, not bearing a UKAS mark, are not included in our UKAS accreditation schedule.

3 Opinions and interpretations expressed herein are outside the scope of our UKAS accreditation.

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M U R R A Y R I X

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

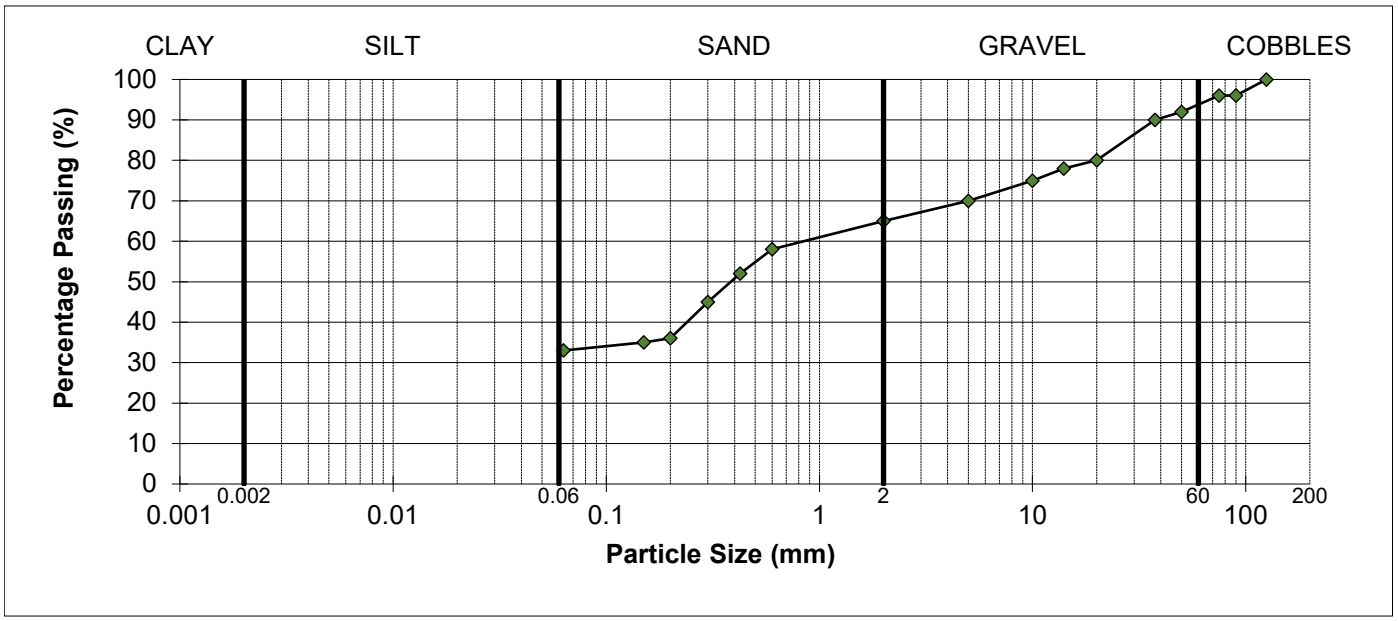
Determination of Water Content in accordance with BS EN ISO 17892-1:2014+A1:2022 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/148

SAMPLE LABEL	Landfill Stockpile 35	DATE SAMPLED	25-Oct-23
LAB SAMPLE No	133157	DATE RECEIVED	25-Oct-23
DATE TESTED	06-Nov-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	70	
90	96		2	65	15-80
75	96		0.6	58	
50	92		0.425	52	
37.5	90		0.3	45	
20	80		0.2	36	
14	78		0.15	35	
10	75		0.063	33	15-80



SOIL FRACTIONS			
COBBLES	6%	SAND	32%
GRAVEL	29%	SILT / CLAY	33%

REMARKS
As received water content = 13.2%
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 16-Nov-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-2:2022 Cl.11
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

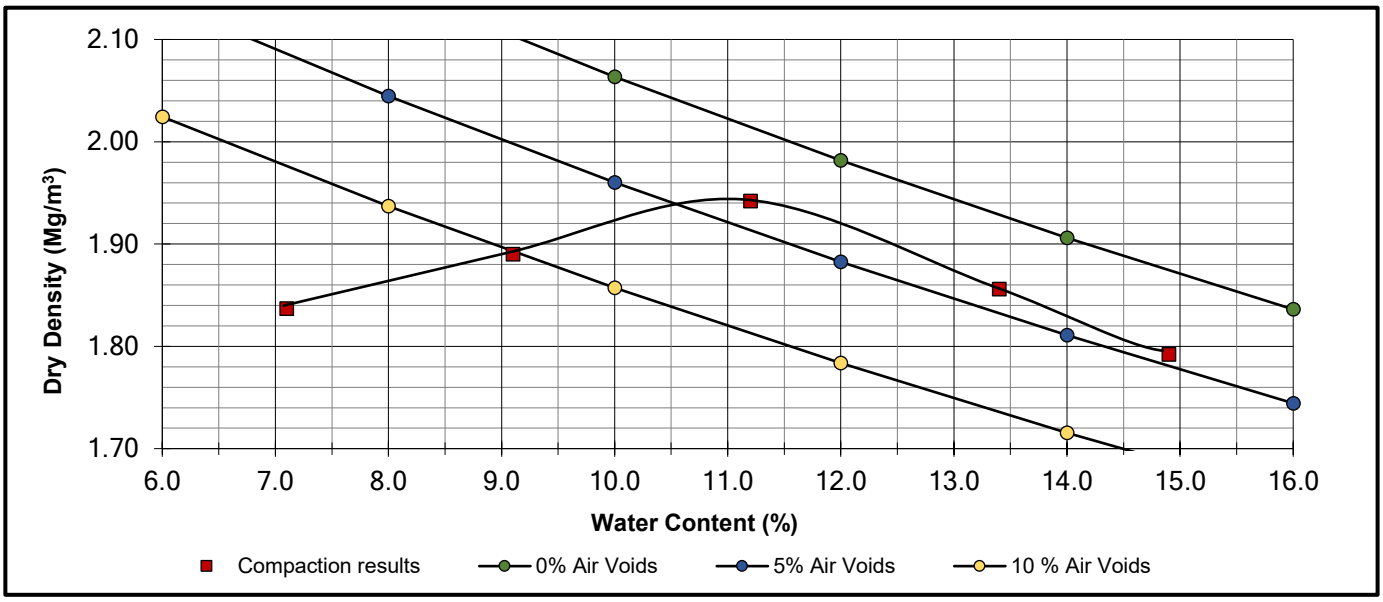
CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/148

SAMPLE LABEL	Landfill Stockpile 35	DATE SAMPLED	25-Oct-23
SAMPLE NUMBER	133157	DATE RECEIVED	25-Oct-23
DATE TESTED	06-Nov-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won
PRE TREATMENT	Air Dried / Single Sample

RETAINED 37.5mm	10 %	GRADING ZONE	Zone 5
RETAINED 20mm	20 %	PARTICLE DENSITY	2.60 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	7.1	1.837
2	9.1	1.890
3	11.2	1.942
4	13.4	1.856
5	14.9	1.792



OPTIMUM WATER CONTENT	**11**	(%)
MAXIMUM DRY DENSITY	**1.94**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 16-Nov-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

TEST CERTIFICATE

ACID SOLUBLE SULFIDE CONTENT
BS EN 1744-1:2009+A1:2012 Cl. 13

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/148

DATE TESTED	06 November 2023	DATE SAMPLED	25 October 2023
SAMPLED BY	Client	DATE RECEIVED	25 October 2023

Sample Number	Site Mark	Aggregate Type	Acid Soluble Sulfide % S
133157	Landfill Stockpile 35	General Fill	<0.01

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 16 November 2023

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

TEST CERTIFICATE

TOTAL SULFUR CONTENT
BS EN 1744-1:2009+A1:2012 Cl. 11

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/148

DATE TESTED	06 November 2023	DATE SAMPLED	25 October 2023
SAMPLED BY	Client	DATE RECEIVED	25 October 2023

Sample Number	Site Mark	Aggregate Type	Total Sulfur % S
133157	Landfill Stockpile 35	General Fill	<0.1

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 16 November 2023

M U R R A Y R I X

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DETERMINATION OF CONSTITUENTS OF COARSE RECYCLED AGGREGATE

BS EN 933-11:2009

CLIENT	e3p
SITE	Don Street

SAMPLE DETAILS

Job Number	:	MRN 4588/148
Laboratory sample number	:	133157
Material	:	General Fill
Advised source	:	Site won
Site mark	:	Landfill Stockpile 35
Certificate of sampling received	:	No
Date and time of sampling	:	25 October 2023
Date received at Laboratory	:	25 October 2023
Date of start of test	:	06 November 2023
Sampling Location	:	Not advised
Method of sampling	:	BS EN 932-1 : 1997
Sampled by	:	Client
Mass of dry sample tested	:	50 kg
Drying Temperature	:	40 ± 5°C

RESULT

Constituent	Description	Proportion (%)
Rc	Concrete, Concrete products, Mortar, Concrete masonry units	4.3
Ru	Unbound aggregate, Natural stone, Hydraulically bound aggregate	28
Rb	Clay masonry units (i.e. bricks & tiles), Calcium silicate masonry units, Aerated non-floating concrete	7.7
Ra	Bituminous materials	0.0
Rg	Glass	1.1
X	Other: Cohesive (i.e. clay & soil), Metals (ferrous & non-ferrous), Non-floating wood, plastic & rubber, Gypsum plaster	59
FL	Floating Particles (cm^3/kg)	0.1

Comments
Client requested constituent X to be reported separately to clay/soil. No other consituent X was present, above consituent X figure is shown as the clay/soil proportion.

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 16-Nov-23

MURRAY RIX
CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client e3p

Address Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

Contract Don Street

Job Number MRN 4588/151
Date of Issue 17 November 2023

Approved Signatories

S J Hutchings, O P Davies

Notes

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M U R R A Y R I X
ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

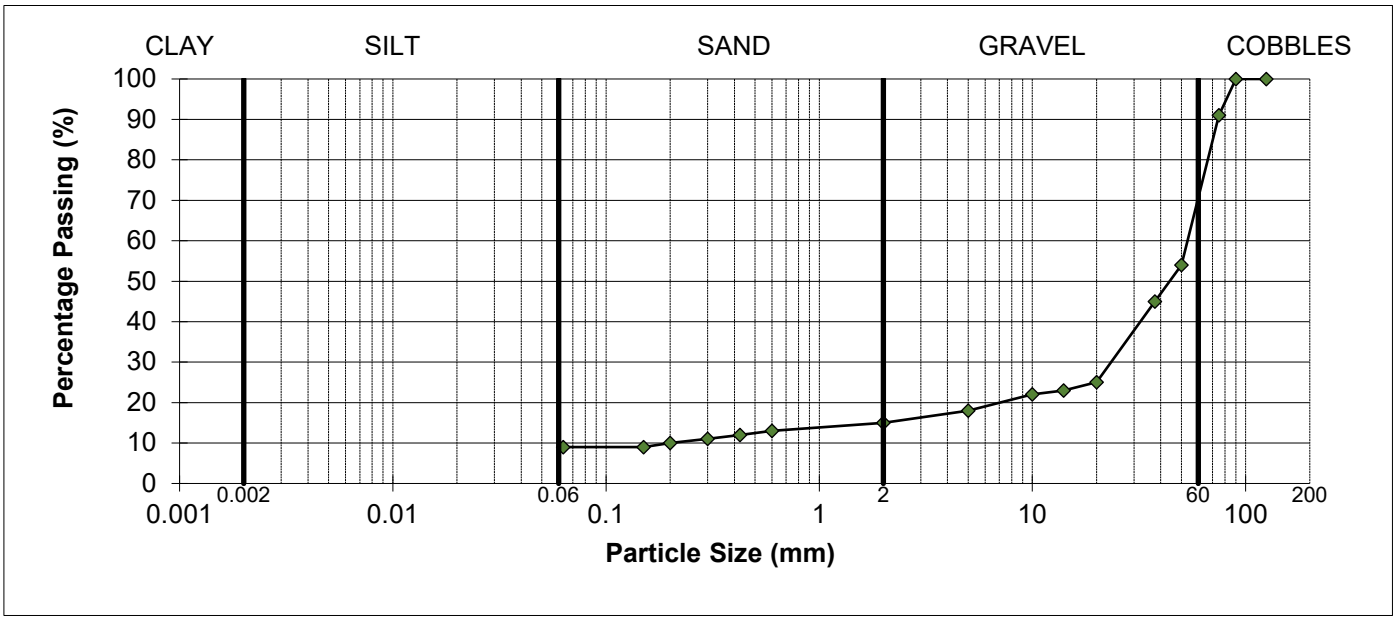
Determination of Water Content in accordance with BS EN ISO 17892-1:2014+A1:2022 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/151

SAMPLE LABEL	LF Crush 005	DATE SAMPLED	31-Oct-23
LAB SAMPLE No	133369	DATE RECEIVED	31-Oct-23
DATE TESTED	01-Nov-23	SAMPLED BY	Client

MATERIAL	Crush
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	18	10-45
90	100	80-100	2	15	
75	91	65-100	0.6	13	0-25
50	54		0.425	12	
37.5	45	45-100	0.3	11	
20	25		0.2	10	
14	23		0.15	9	
10	22	15-60	0.063	9	0-12



SOIL FRACTIONS			
COBBLES	28%	SAND	6%
GRAVEL	58%	SILT / CLAY	9%

REMARKS
As received water content = 11.1%
Sample complies with the advised grading specification for a 6F2 material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 17-Nov-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-2:2022 Cl.11
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

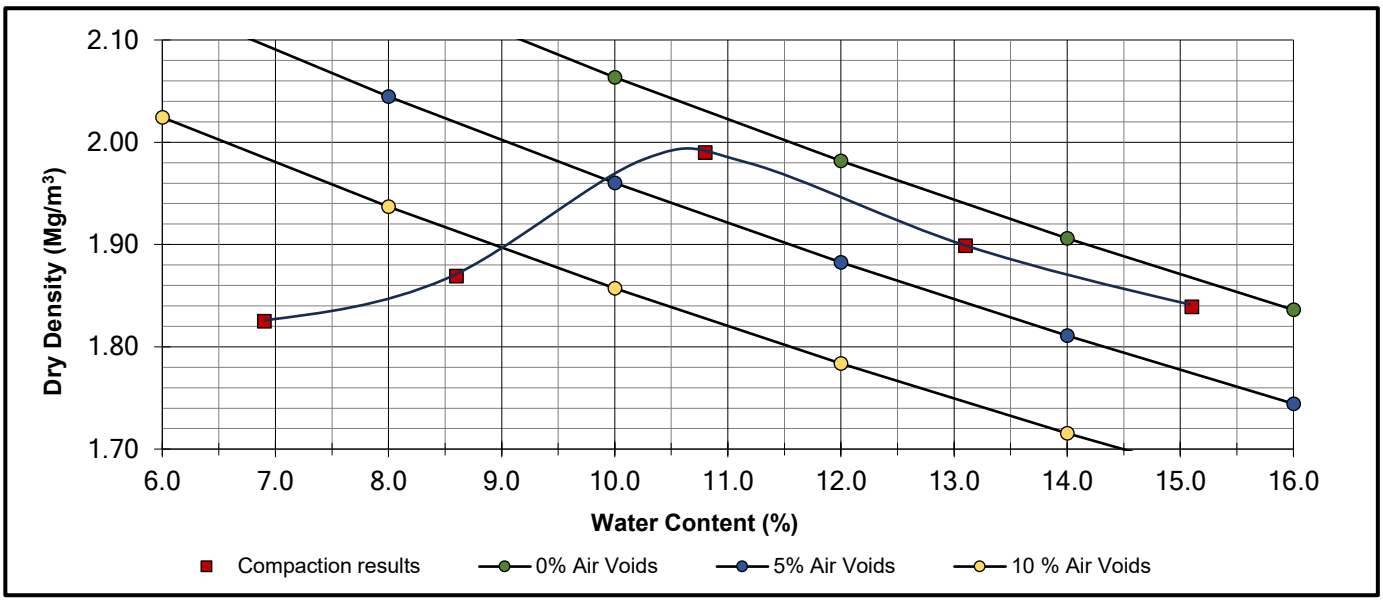
CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/151

SAMPLE LABEL	LF Crush 005	DATE SAMPLED	31-Oct-23
SAMPLE NUMBER	133369	DATE RECEIVED	31-Oct-23
DATE TESTED	06-Nov-23	SAMPLED BY	Client

MATERIAL	Crush
ADVISED SOURCE	Site won
PRE TREATMENT	Air Dried / Single Sample

RETAINED 37.5mm	55 %	GRADING ZONE	Zone X
RETAINED 20mm	75 %	PARTICLE DENSITY	2.60 Mg/m3 (Measured)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	6.9	1.825
2	8.6	1.869
3	10.8	1.990
4	13.1	1.899
5	15.1	1.839



OPTIMUM WATER CONTENT	**11**	(%)
MAXIMUM DRY DENSITY	**1.99**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 17-Nov-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

TEST CERTIFICATE

ACID SOLUBLE SULFIDE CONTENT
BS EN 1744-1:2009+A1:2012 Cl. 13

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/151

DATE TESTED	06 November 2023	DATE SAMPLED	31 October 2023
SAMPLED BY	Client	DATE RECEIVED	31 October 2023

Sample Number	Site Mark	Aggregate Type	Acid Soluble Sulfide % S
133369	LF Crush 005	Crush	<0.01

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 17 November 2023

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

TEST CERTIFICATE

TOTAL SULFUR CONTENT
BS EN 1744-1:2009+A1:2012 Cl. 11

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/148

DATE TESTED	06 November 2023	DATE SAMPLED	31 October 2023
SAMPLED BY	Client	DATE RECEIVED	31 October 2023

Sample Number	Site Mark	Aggregate Type	Total Sulfur % S
133369	LF Crush 005	Crush	0.1

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 17 November 2023

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

TEST CERTIFICATE

WATER SOLUBLE SULFATE CONTENT
BS EN 1744-1:2009+A1:2012 Cl. 10

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/151

DATE TESTED	06 November 2023	DATE SAMPLED	31 October 2023
SAMPLED BY	Client	DATE RECEIVED	31 October 2023

Sample Number	Site Mark	Aggregate Type	Water Soluble Sulfate % SO_4
133369	LF Crush 005	Crush	<0.01

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 17 November 2023

M U R R A Y R I X

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DETERMINATION OF CONSTITUENTS OF COARSE RECYCLED AGGREGATE

BS EN 933-11:2009

CLIENT	e3p
SITE	Don Street

SAMPLE DETAILS

Job Number	:	MRN 4588/151
Laboratory sample number	:	133369
Material	:	Crush
Advised source	:	Site won
Site mark	:	LF Crush 005
Certificate of sampling received	:	No
Date and time of sampling	:	31 October 2023
Date received at Laboratory	:	31 October 2023
Date of start of test	:	01 November 2023
Sampling Location	:	Not advised
Method of sampling	:	BS EN 932-1 : 1997
Sampled by	:	Client
Mass of dry sample tested	:	50 kg
Drying Temperature	:	40 ± 5°C

RESULT

Constituent	Description	Proportion (%)
Rc	Concrete, Concrete products, Mortar, Concrete masonry units	12
Ru	Unbound aggregate, Natural stone, Hydraulically bound aggregate	49
Rb	Clay masonry units (i.e. bricks & tiles), Calcium silicate masonry units, Aerated non-floating concrete	29
Ra	Bituminous materials	8.7
Rg	Glass	0.4
X	Other: Cohesive (i.e. clay & soil), Metals (ferrous & non-ferrous), Non-floating wood, plastic & rubber, Gypsum plaster	0.9
FL	Floating Particles (cm^3/kg)	0.4

Comments
Client requested constituent X to be reported separately to clay/soil. No other consituent X was present, above consituent X figure is shown as the clay/soil proportion.

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 17-Nov-23

M U R R A Y R I X

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DETERMINATION OF RESISTANCE TO FRAGMENTATION BY THE LOS ANGELES TEST METHOD

BS EN 1097-2:2020

CLIENT	e3p
SITE	Don Street

SAMPLE DETAILS

Job Number	:	MRN 4588/151
Laboratory sample number	:	133369
Material	:	Crush
Advised source	:	Site won
Site mark	:	LF Crush 005
Certificate of sampling received	:	No
Date and time of sampling	:	31-Oct-23
Date received at Laboratory	:	31-Oct-23
Date of start of test	:	01-Nov-23
Sampling Location	:	Site
Method of sampling	:	BS EN 932-1 : 1997
Sampled by	:	Client
Size Fraction	:	34% passing 14mm retained 12.5mm 66% passing 12.5mm retained 10mm
Mass of dry sample tested	:	5000g
Target specification	:	<50

RESULT

Los Angeles Coefficient	:	**41**

Comment

NAME O.P. Davies BA (Hons (Laboratory Manager) SIGNED DATE 17-Nov-23

M U R R A Y R I X

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

TEST CERTIFICATE

DETERMINATION OF PARTICLE DENSITY AND WATER ABSORPTION

BS EN 1097-6:2013:CLAUSE 7

METHODS FOR AGGREGATES PASSING THE 63mm TEST SIEVE AND RETAINED ON THE 31.5mm TEST SIEVE (24 HOUR SOAKED)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/151

SITE REFERENCE	LF Crush 005	DATE SAMPLED	31 October 2023
SAMPLE NUMBER	133369	DATE RECEIVED	31 October 2023
DATE TESTED	06 November 2023	SAMPLED BY	Client

MATERIAL	Crush
ADVISED SUPPLIER	Site won

AGGREGATE SIZE TESTED	63mm to 31.5mm	WAS SAMPLE ARTIFICIALLY HEATED BEFORE TEST	No

Apparent particle density	**2.60**	Mg/m^3
Particle density on an oven dried basis	**2.26**	Mg/m^3
Particle density on a saturated and surface dried basis	**2.39**	Mg/m^3
Water absorption as % of dry mass	**5.8**	%

COMMENT / ANOMALIES

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED  DATE 17-Nov-23

MURRAY RIX
CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client e3p

Address Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

Contract Don Street

Job Number MRN 4588/210
Date of Issue 19 December 2023

Approved Signatories

S J Hutchings, O P Davies

Notes

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Andrew House, Hadfield Street, Dukinfield, Cheshire SK16 4QX Tel: 0161 475 0870
Email: enquiries@murrayrix.com Website: www.murrayrix.com

Also at: London: 020 8523 1999

UKAS TESTING 1580

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M U R R A Y R I X

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

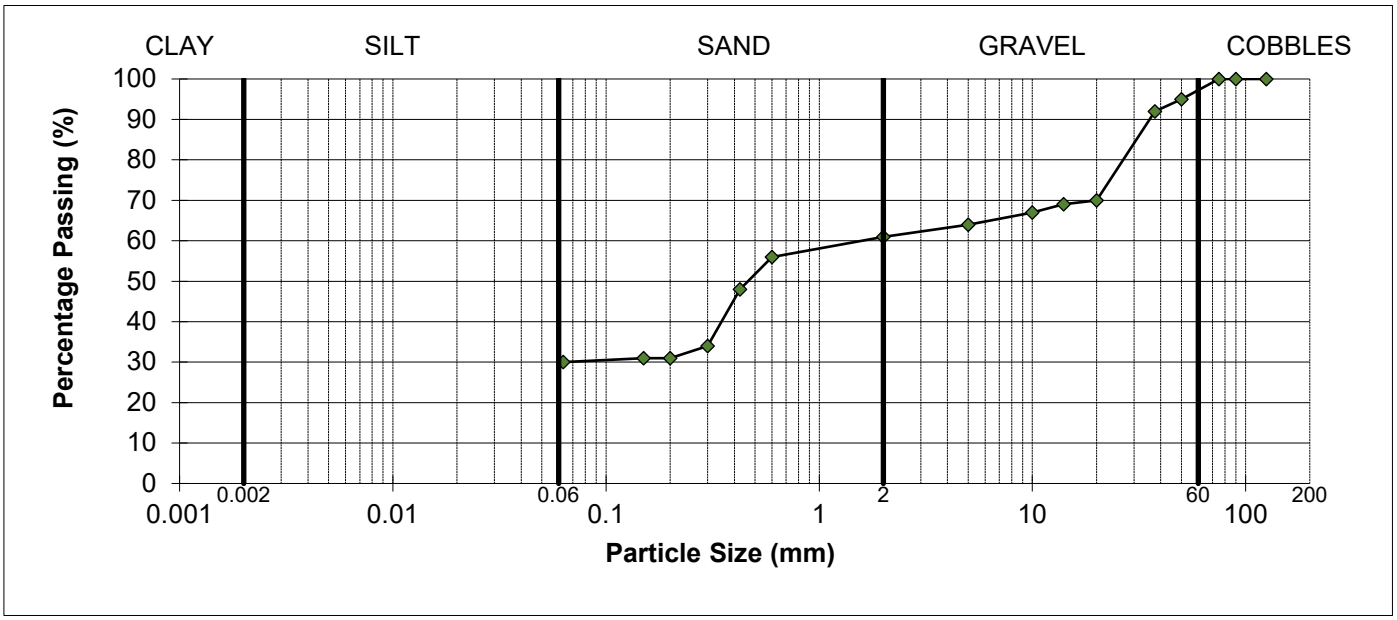
Determination of Water Content in accordance with BS EN ISO 17892-1:2014+A1:2022 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/210

SAMPLE LABEL	Stockpile 36	DATE SAMPLED	14-Dec-23
LAB SAMPLE No	135071	DATE RECEIVED	14-Dec-23
DATE TESTED	14-Dec-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	64	
90	100		2	61	15-80
75	100		0.6	56	
50	95		0.425	48	
37.5	92		0.3	34	
20	70		0.2	31	
14	69		0.15	31	
10	67		0.063	30	15-80



SOIL FRACTIONS			
COBBLES	3%	SAND	31%
GRAVEL	37%	SILT / CLAY	30%

REMARKS
As received water content = 21.8%
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 19-Dec-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-2:2022 Cl.11
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

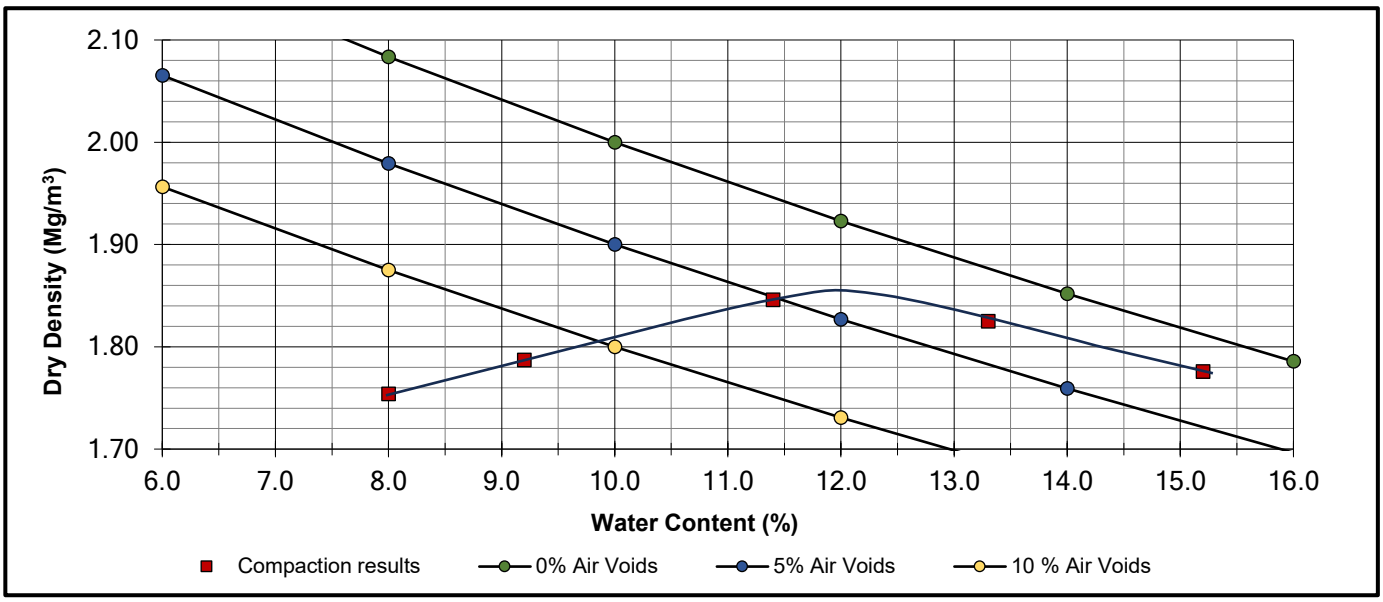
CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/210

SAMPLE LABEL	Stockpile 36	DATE SAMPLED	14-Dec-23
SAMPLE NUMBER	135071	DATE RECEIVED	14-Dec-23
DATE TESTED	14-Dec-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won
PRE TREATMENT	Air Dried / Single Sample

RETAINED 37.5mm	8 %	GRADING ZONE	Zone 5
RETAINED 20mm	30 %	PARTICLE DENSITY	2.50 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	8.0	1.754
2	9.2	1.787
3	11.4	1.846
4	13.3	1.825
5	15.2	1.776



OPTIMUM WATER CONTENT	**12**	(%)
MAXIMUM DRY DENSITY	**1.85**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 19-Dec-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

TEST CERTIFICATE

ACID SOLUBLE SULFIDE CONTENT
BS EN 1744-1:2009+A1:2012 Cl. 13

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/210

DATE TESTED	14 December 2023	DATE SAMPLED	14 December 2023
SAMPLED BY	Client	DATE RECEIVED	14 December 2023

Sample Number	Site Mark	Aggregate Type	Acid Soluble Sulfide % S
135071	Stockpile 36	General Fill	<0.01

REMARKS

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 19 December 2023

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

TEST CERTIFICATE

TOTAL SULFUR CONTENT
BS EN 1744-1:2009+A1:2012 Cl. 11

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/210

DATE TESTED	14 December 2023	DATE SAMPLED	14 December 2023
SAMPLED BY	Client	DATE RECEIVED	14 December 2023

Sample Number	Site Mark	Aggregate Type	Total Sulfur % S
135071	Stockpile 36	General Fill	<0.1

REMARKS

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 19 December 2023

M U R R A Y R I X

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DETERMINATION OF CONSTITUENTS OF COARSE RECYCLED AGGREGATE

BS EN 933-11:2009

CLIENT	e3p
SITE	Don Street

SAMPLE DETAILS

Job Number	:	MRN 4588/210
Laboratory sample number	:	135071
Material	:	General Fill
Advised source	:	Site won
Site mark	:	Stockpile 36
Certificate of sampling received	:	No
Date and time of sampling	:	14 December 2023
Date received at Laboratory	:	14 December 2023
Date of start of test	:	14 December 2023
Sampling Location	:	Not advised
Method of sampling	:	BS EN 932-1 : 1997
Sampled by	:	Client
Mass of dry sample tested	:	50 kg
Drying Temperature	:	40 ± 5°C

RESULT

Constituent	Description	Proportion (%)
Rc	Concrete, Concrete products, Mortar, Concrete masonry units	8.6
Ru	Unbound aggregate, Natural stone, Hydraulically bound aggregate	11
Rb	Clay masonry units (i.e. bricks & tiles), Calcium silicate masonry units, Aerated non-floating concrete	5.8
Ra	Bituminous materials	6.7
Rg	Glass	0.1
X	Other: Cohesive (i.e. clay & soil), Metals (ferrous & non-ferrous), Non-floating wood, plastic & rubber, Gypsum plaster	68
FL	Floating Particles (cm^3/kg)	1.2

Comments
Client requested constituent X to be reported separately to clay/soil. No other consituent X was present, above consituent X figure is shown as the clay/soil proportion.

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 19-Dec-23

MURRAY RIX
CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client e3p

Address Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

Contract Don Street

Job Number MRN 4588/213
Date of Issue 20 December 2023

Approved Signatories

S J Hutchings, O P Davies

Notes

1 All remaining samples and remnants from this contract will be disposed 28 days from the date of this report unless you notify us to the contrary.

2 Result certificates, in this report, not bearing a UKAS mark, are not included in our UKAS accreditation schedule.

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M U R R A Y R I X

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

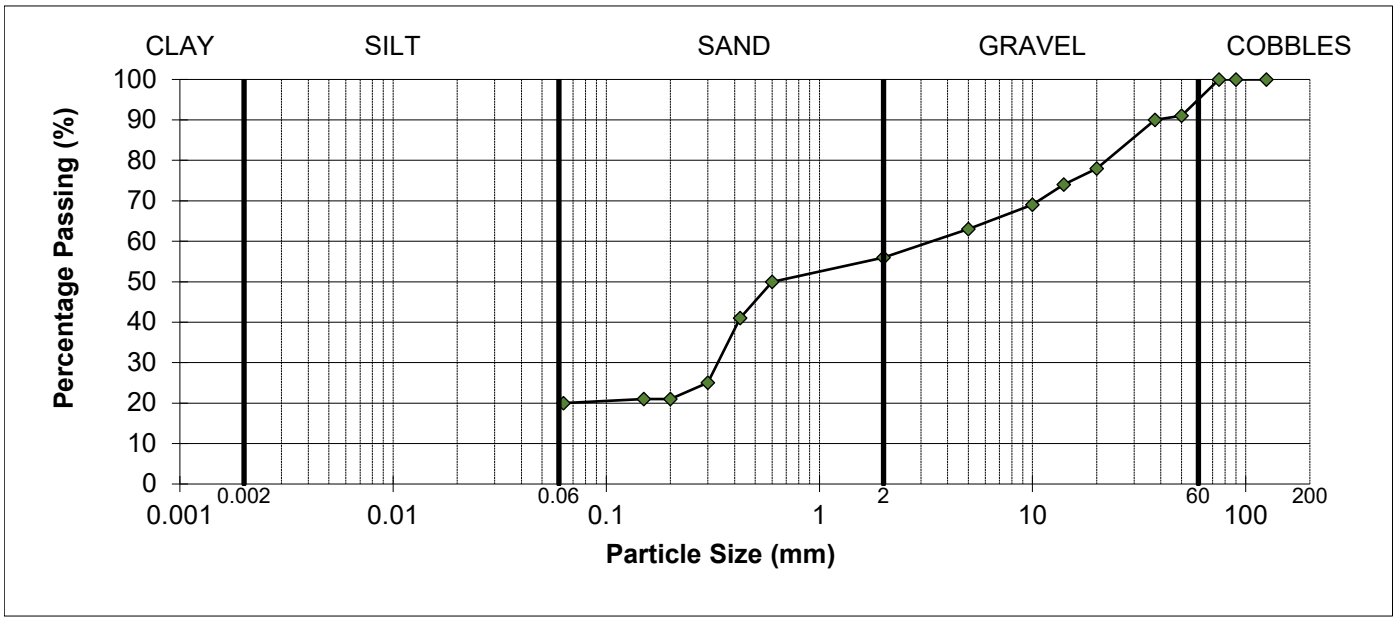
Determination of Water Content in accordance with BS EN ISO 17892-1:2014+A1:2022 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/213

SAMPLE LABEL	Stockpile 37	DATE SAMPLED	23-Nov-23
LAB SAMPLE No	135049	DATE RECEIVED	13-Dec-23
DATE TESTED	14-Dec-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	63	
90	100		2	56	15-80
75	100		0.6	50	
50	91		0.425	41	
37.5	90		0.3	25	
20	78		0.2	21	
14	74		0.15	21	
10	69		0.063	20	15-80



SOIL FRACTIONS			
COBBLES	5%	SAND	36%
GRAVEL	40%	SILT / CLAY	20%

REMARKS
As received water content = 18.9%
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 20-Dec-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-2:2022 Cl.11
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

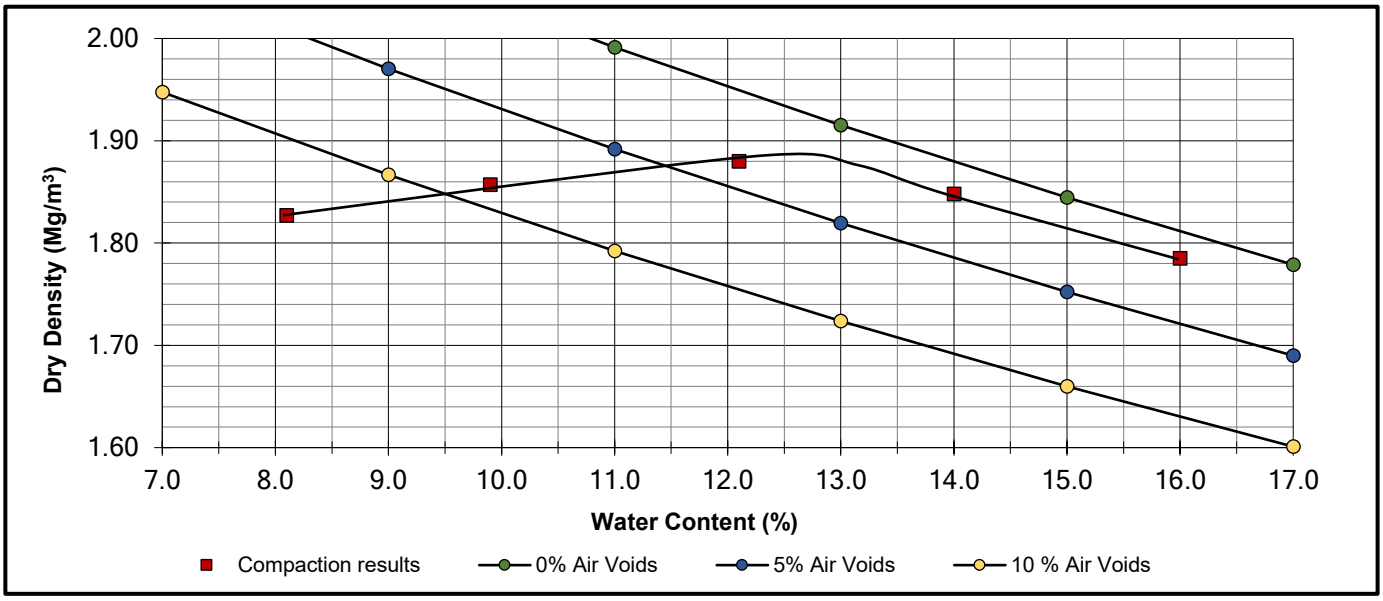
CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/213

SAMPLE LABEL	Stockpile 37	DATE SAMPLED	23-Nov-23
SAMPLE NUMBER	135049	DATE RECEIVED	13-Dec-23
DATE TESTED	14-Dec-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won
PRE TREATMENT	Air Dried / Single Sample

RETAINED 37.5mm	10 %	GRADING ZONE	Zone 5
RETAINED 20mm	22 %	PARTICLE DENSITY	2.55 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	8.1	1.827
2	9.9	1.857
3	12.1	1.880
4	14.0	1.848
5	16.0	1.785



OPTIMUM WATER CONTENT	**13**	(%)
MAXIMUM DRY DENSITY	**1.88**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 20-Dec-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

TEST CERTIFICATE

ACID SOLUBLE SULFIDE CONTENT
BS EN 1744-1:2009+A1:2012 Cl. 13

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/213

DATE TESTED	14 December 2023	DATE SAMPLED	23 November 2023
SAMPLED BY	Client	DATE RECEIVED	13 December 2023

Sample Number	Site Mark	Aggregate Type	Acid Soluble Sulfide % S
135049	Stockpile 37	General Fill	<0.01

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 20 December 2023

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

TEST CERTIFICATE

TOTAL SULFUR CONTENT
BS EN 1744-1:2009+A1:2012 Cl. 11

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/213

DATE TESTED	14 December 2023	DATE SAMPLED	23 November 2023
SAMPLED BY	Client	DATE RECEIVED	13 December 2023

Sample Number	Site Mark	Aggregate Type	Total Sulfur % S
135049	Stockpile 37	General Fill	<0.1

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 20 December 2023

MURRAY RIX
CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client e3p

Address Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

Contract Don Street

Job Number MRN 4588/47
Date of Issue 19 May 2023

Approved Signatories

S J Hutchings, O P Davies

Notes

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Andrew House, Hadfield Street, Dukinfield, Cheshire SK16 4QX Tel: 0161 475 0870
Email: enquiries@murrayrix.com Website: www.murrayrix.com

Also at: London: 020 8523 1999

UKAS TESTING 1580

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M U R R A Y R I X
ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

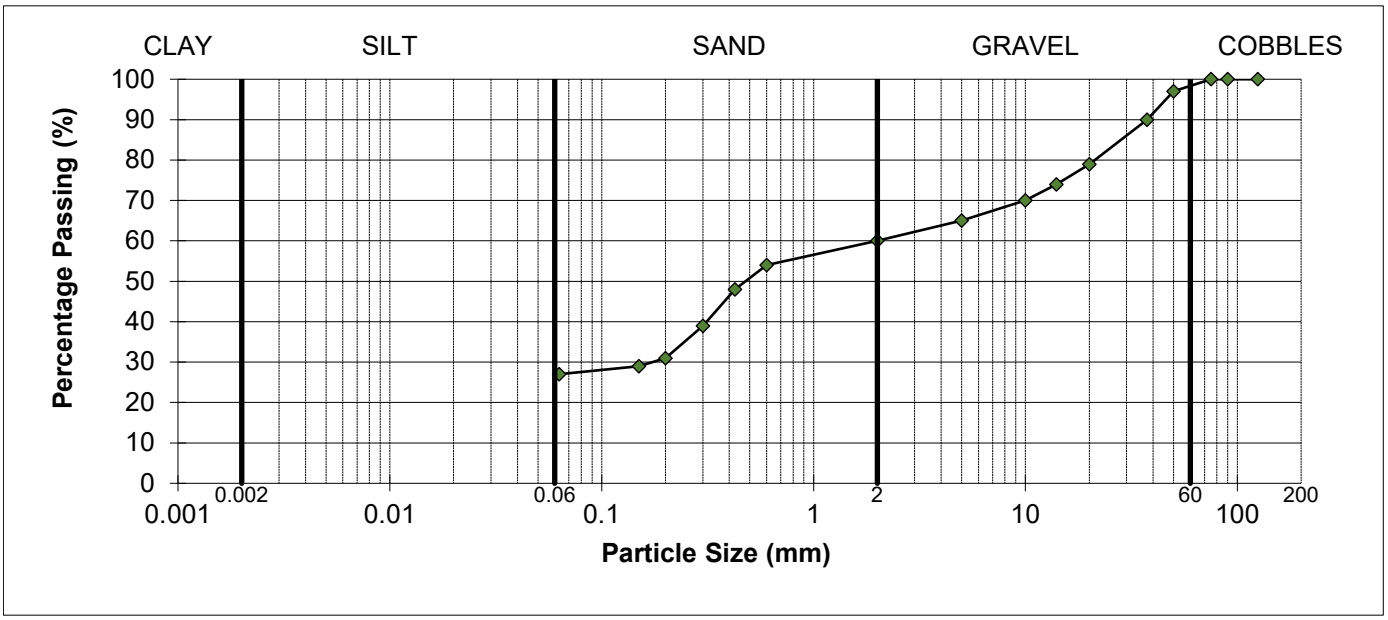
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/47

SAMPLE LABEL	Landfill Stockpile 4	DATE SAMPLED	28-Apr-23
LAB SAMPLE No	124911	DATE RECEIVED	28-Apr-23
DATE TESTED	02-May-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	65	
90	100		2	60	15-80
75	100		0.6	54	
50	97		0.425	48	
37.5	90		0.3	39	
20	79		0.2	31	
14	74		0.15	29	
10	70		0.063	27	15-80



REMARKS
As received water content = 28.8%
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 19-May-23

M U R R A Y R I X
ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

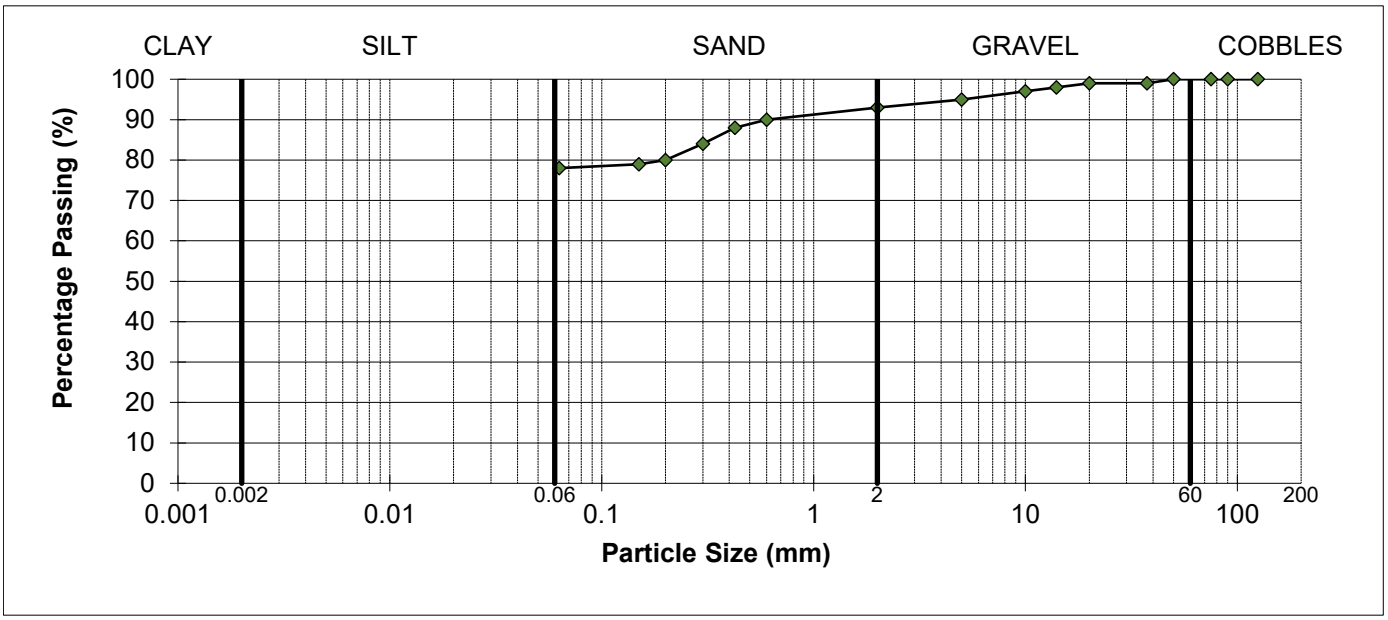
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/47

SAMPLE LABEL	Landfill Stockpile 5	DATE SAMPLED	28-Apr-23
LAB SAMPLE No	124839	DATE RECEIVED	28-Apr-23
DATE TESTED	02-May-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	95	
90	100		2	93	80-100
75	100		0.6	90	
50	100		0.425	88	
37.5	99		0.3	84	
20	99		0.2	80	
14	98		0.15	79	
10	97		0.063	78	15-100



REMARKS
As received water content = 23.9%
Sample complies with the advised grading specification for a 2A/2B material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 19-May-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-4:1990
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

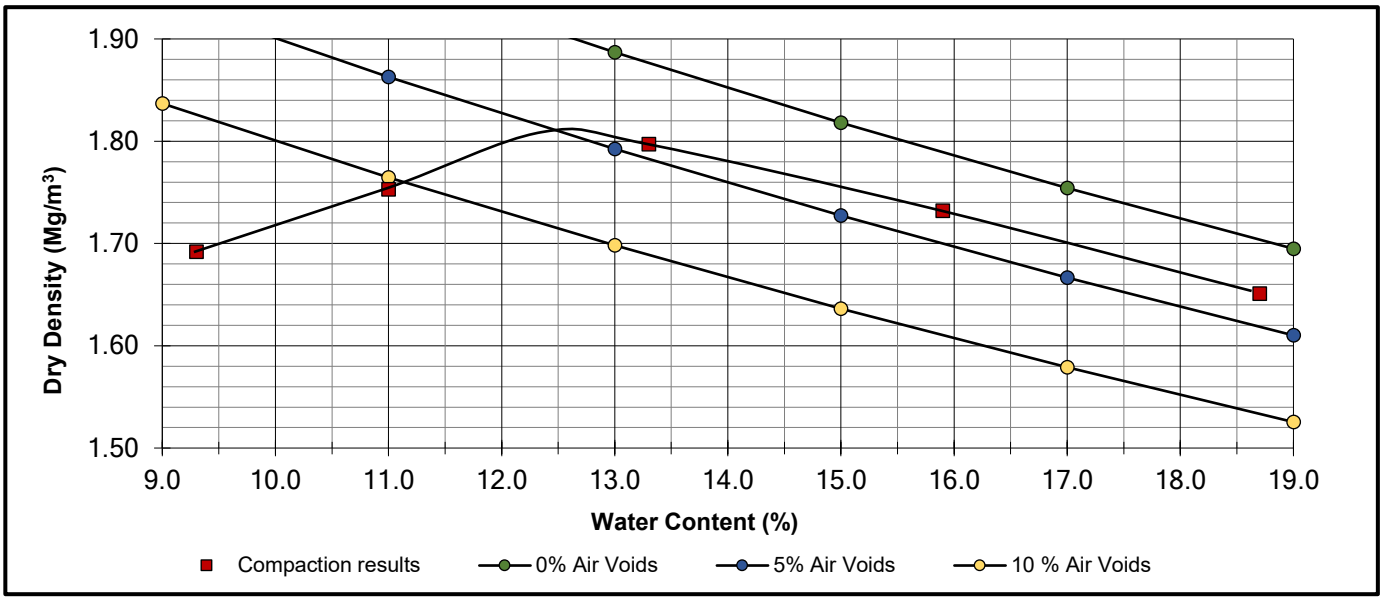
CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/47

SAMPLE LABEL	Landfill Stockpile 4	DATE SAMPLED	28-Apr-23
SAMPLE NUMBER	123953	DATE RECEIVED	28-Apr-23
DATE TESTED	28-Apr-23	SAMPLED BY	Client

MATERIAL	Gravel
ADVISED SOURCE	Site won
PRE TREATMENT	Air Dried / Single Sample

RETAINED 37.5mm	8 %	GRADING ZONE	Zone 5
RETAINED 20mm	20 %	PARTICLE DENSITY	2.50 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	9.3	1.692
2	11.0	1.753
3	13.3	1.797
4	15.9	1.732
5	18.7	1.651



OPTIMUM WATER CONTENT	**13**	(%)
MAXIMUM DRY DENSITY	**1.81**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 19-May-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

TEST CERTIFICATE

WATER SOLUBLE SULFATE CONTENT
BS EN 1744-1:2009+A1:2012 Cl. 10

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/47

DATE TESTED	05 May 2023	DATE SAMPLED	28 April 2022
SAMPLED BY	Client	DATE RECEIVED	28 April 2022

Sample Number	Site Mark	Aggregate Type	Water Soluble Sulfate % SO_4
124837	Landfill Stockpile 2	General Fill	0.04

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 19 May 2023

M U R R A Y R I X

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DETERMINATION OF CONSTITUENTS OF COARSE RECYCLED AGGREGATE

BS EN 933-11:2009

CLIENT	e3p
SITE	Don Street

SAMPLE DETAILS

Job Number	:	MRN 4588/47
Laboratory sample number	:	124910
Material	:	General Fill
Advised source	:	Site won
Site mark	:	Landfill Stockpile 2
Certificate of sampling received	:	No
Date and time of sampling	:	28 April 2023
Date received at Laboratory	:	28 April 2023
Date of start of test	:	05 May 2023
Sampling Location	:	Not advised
Method of sampling	:	BS EN 932-1 : 1997
Sampled by	:	Client
Mass of dry sample tested	:	50 kg
Drying Temperature	:	40 ± 5°C

RESULT

Constituent	Description	Proportion (%)
Rc	Concrete, Concrete products, Mortar, Concrete masonry units	0.2
Ru	Unbound aggregate, Natural stone, Hydraulically bound aggregate	22
Rb	Clay masonry units (i.e. bricks & tiles), Calcium silicate masonry units, Aerated non-floating concrete	10
Ra	Bituminous materials	3.5
Rg	Glass	0.4
X	Other: Cohesive (i.e. clay & soil), Metals (ferrous & non-ferrous), Non-floating wood, plastic & rubber, Gypsum plaster	64
FL	Floating Particles (cm^3/kg)	0.1

Comments
Client requested constituent X to be reported separately to clay/soil. No other consituent X was present, above consituent X figure is shown as the clay/soil proportion.

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 19-May-23

MURRAY RIX
CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client e3p

Address Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

Contract Don Street

Job Number MRN 4588/48
Date of Issue 19 May 2023

Approved Signatories

S J Hutchings, O P Davies

Notes

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DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

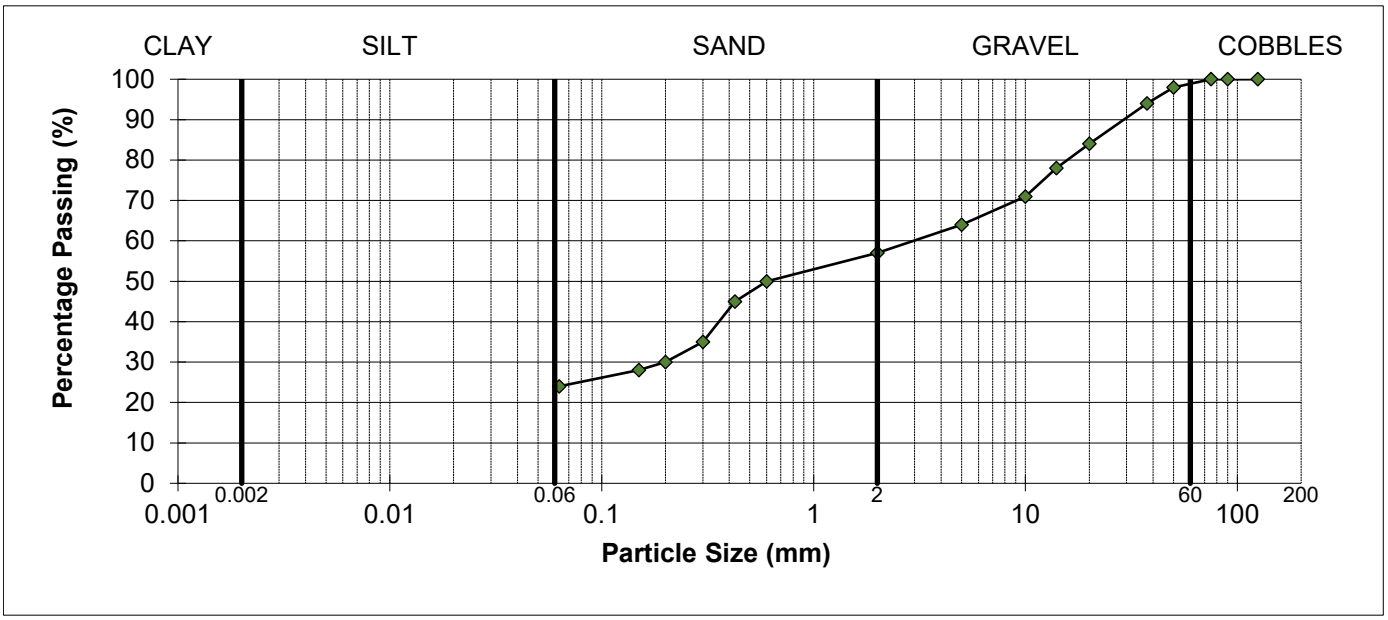
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/48

SAMPLE LABEL	Stockpile 1	DATE SAMPLED	04-May-23
LAB SAMPLE No	125070	DATE RECEIVED	05-May-23
DATE TESTED	09-May-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	64	
90	100		2	57	15-80
75	100		0.6	50	
50	98		0.425	45	
37.5	94		0.3	35	
20	84		0.2	30	
14	78		0.15	28	
10	71		0.063	24	15-80



REMARKS
As received water content = 21.0%
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 19-May-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-4:1990
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

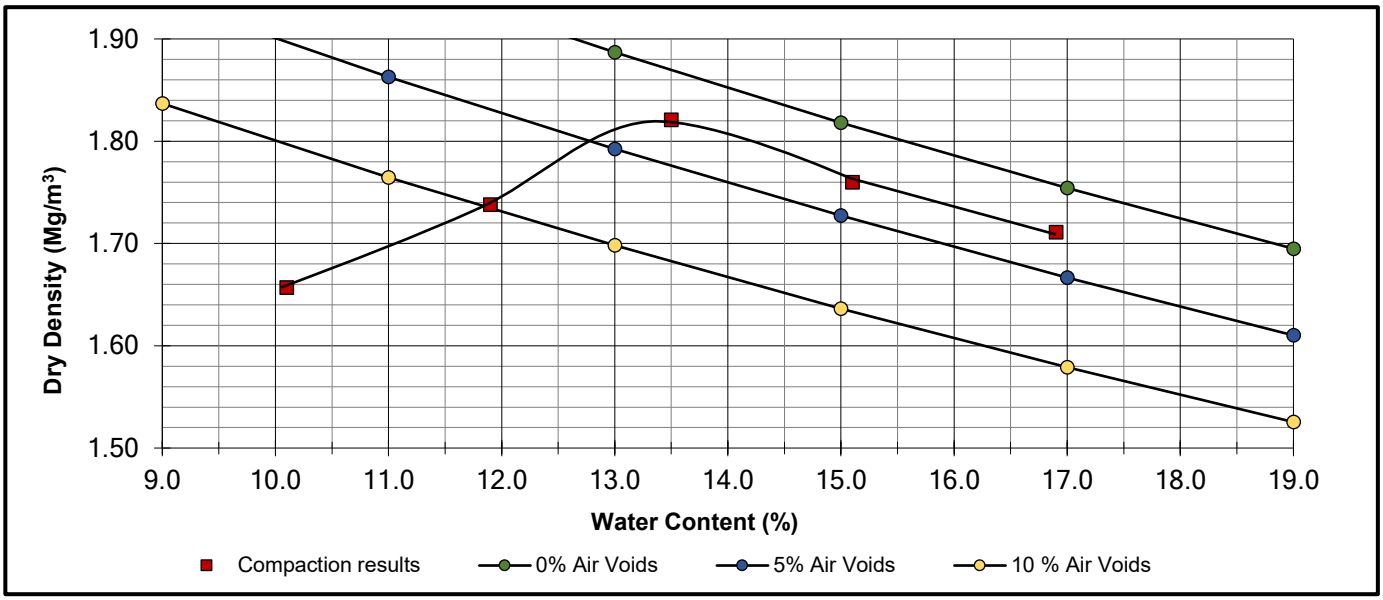
CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/48

SAMPLE LABEL	Stockpile 1	DATE SAMPLED	04-May-23
SAMPLE NUMBER	125070	DATE RECEIVED	05-May-23
DATE TESTED	10-May-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won
PRE TREATMENT	Air Dried / Single Sample

RETAINED 37.5mm	6 %	GRADING ZONE	Zone 5
RETAINED 20mm	16 %	PARTICLE DENSITY	2.50 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	10.1	1.657
2	11.9	1.738
3	13.5	1.821
4	15.1	1.760
5	16.9	1.711



OPTIMUM WATER CONTENT	**13**	(%)
MAXIMUM DRY DENSITY	**1.82**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 19-May-23

M U R R A Y R I X
ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

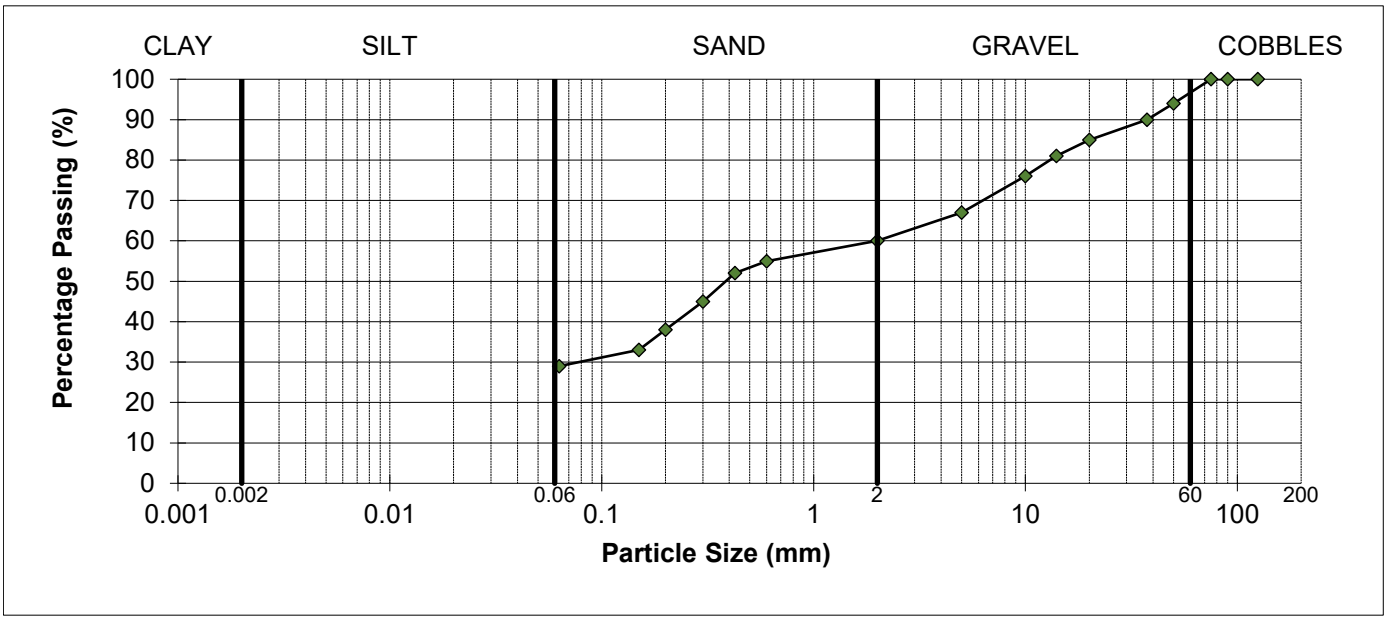
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/48

SAMPLE LABEL	Stockpile 2	DATE SAMPLED	04-May-23
LAB SAMPLE No	125071	DATE RECEIVED	05-May-23
DATE TESTED	09-May-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	67	
90	100		2	60	15-80
75	100		0.6	55	
50	94		0.425	52	
37.5	90		0.3	45	
20	85		0.2	38	
14	81		0.15	33	
10	76		0.063	29	15-80



REMARKS
As received water content = 22.2%
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 19-May-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-4:1990
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

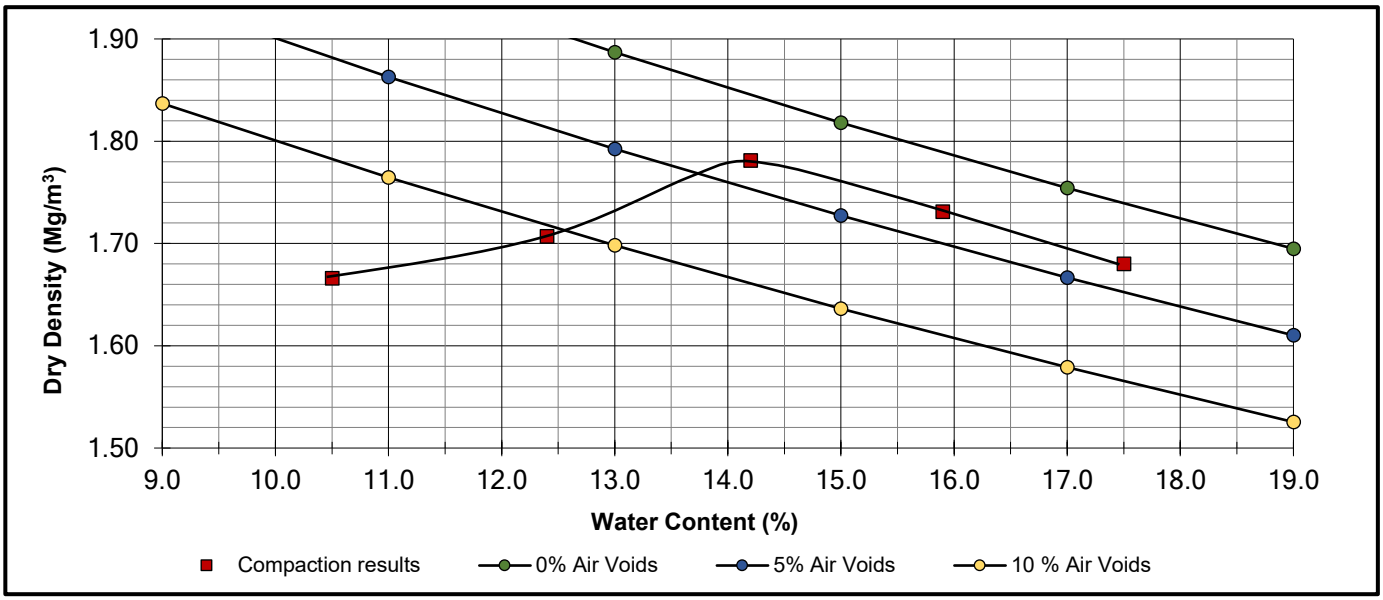
CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/48

SAMPLE LABEL	Stockpile 2	DATE SAMPLED	04-May-23
SAMPLE NUMBER	125071	DATE RECEIVED	05-May-23
DATE TESTED	10-May-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won
PRE TREATMENT	Air Dried / Single Sample

RETAINED 37.5mm	10 %	GRADING ZONE	Zone 5
RETAINED 20mm	15 %	PARTICLE DENSITY	2.50 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	10.5	1.666
2	12.4	1.707
3	14.2	1.781
4	15.9	1.731
5	17.5	1.680



OPTIMUM WATER CONTENT	**14**	(%)
MAXIMUM DRY DENSITY	**1.82**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 19-May-23

M U R R A Y R I X
ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

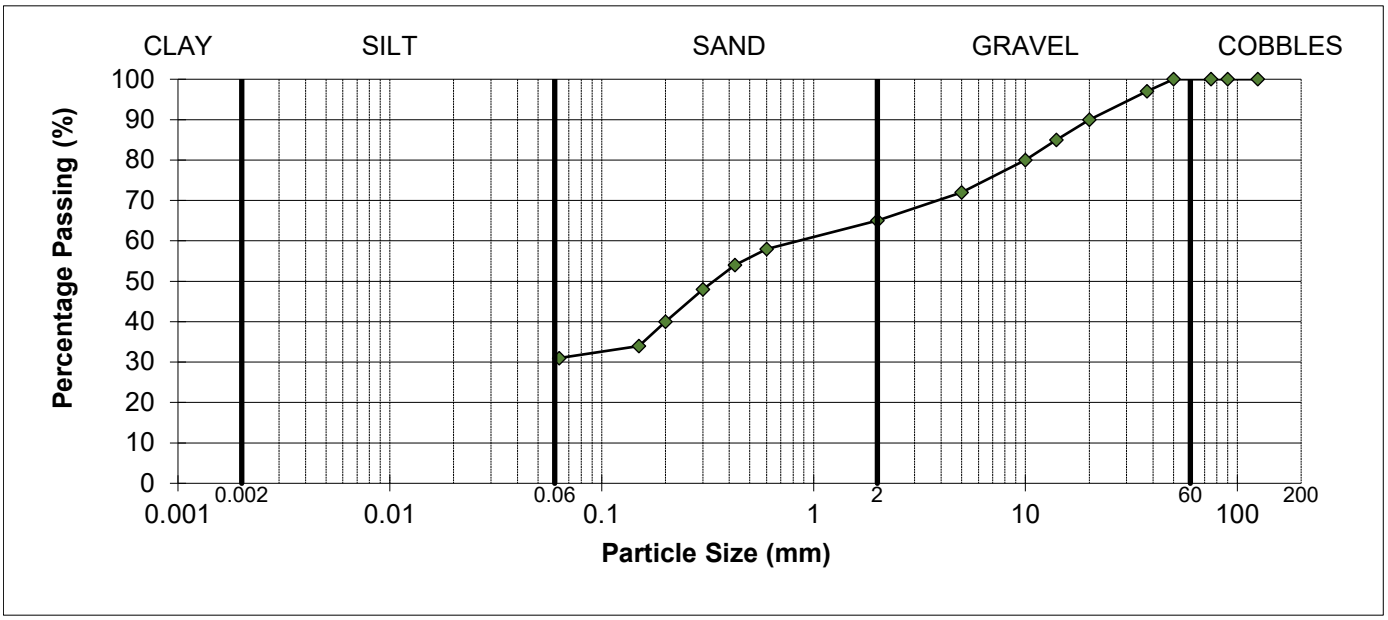
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/48

SAMPLE LABEL	Stockpile 3	DATE SAMPLED	04-May-23
LAB SAMPLE No	125072	DATE RECEIVED	05-May-23
DATE TESTED	09-May-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	72	
90	100		2	65	15-80
75	100		0.6	58	
50	100		0.425	54	
37.5	97		0.3	48	
20	90		0.2	40	
14	85		0.15	34	
10	80		0.063	31	15-80



REMARKS
As received water content = 27.6%
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 19-May-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-4:1990
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

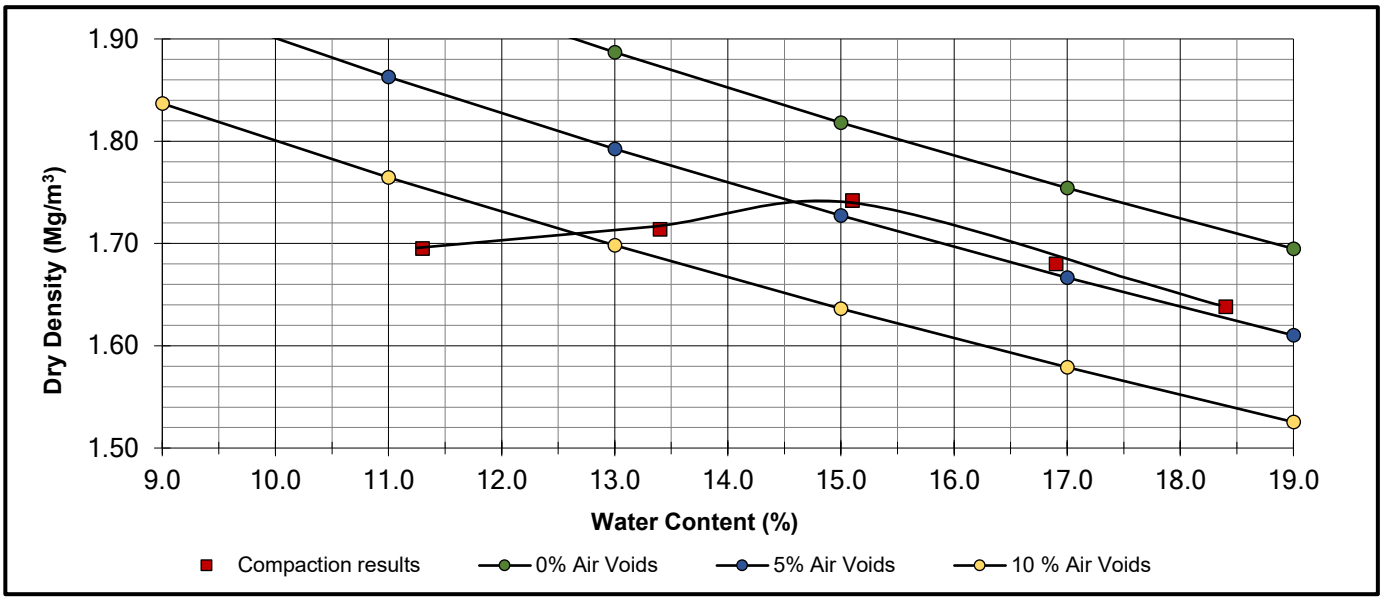
CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/48

SAMPLE LABEL	Stockpile 3	DATE SAMPLED	04-May-23
SAMPLE NUMBER	125072	DATE RECEIVED	05-May-23
DATE TESTED	10-May-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won
PRE TREATMENT	Air Dried / Single Sample

RETAINED 37.5mm	3 %	GRADING ZONE	Zone 4
RETAINED 20mm	10 %	PARTICLE DENSITY	2.50 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	11.3	1.695
2	13.4	1.714
3	15.1	1.742
4	16.9	1.680
5	18.4	1.638



OPTIMUM WATER CONTENT	**15**	(%)
MAXIMUM DRY DENSITY	**1.74**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 19-May-23

M U R R A Y R I X

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

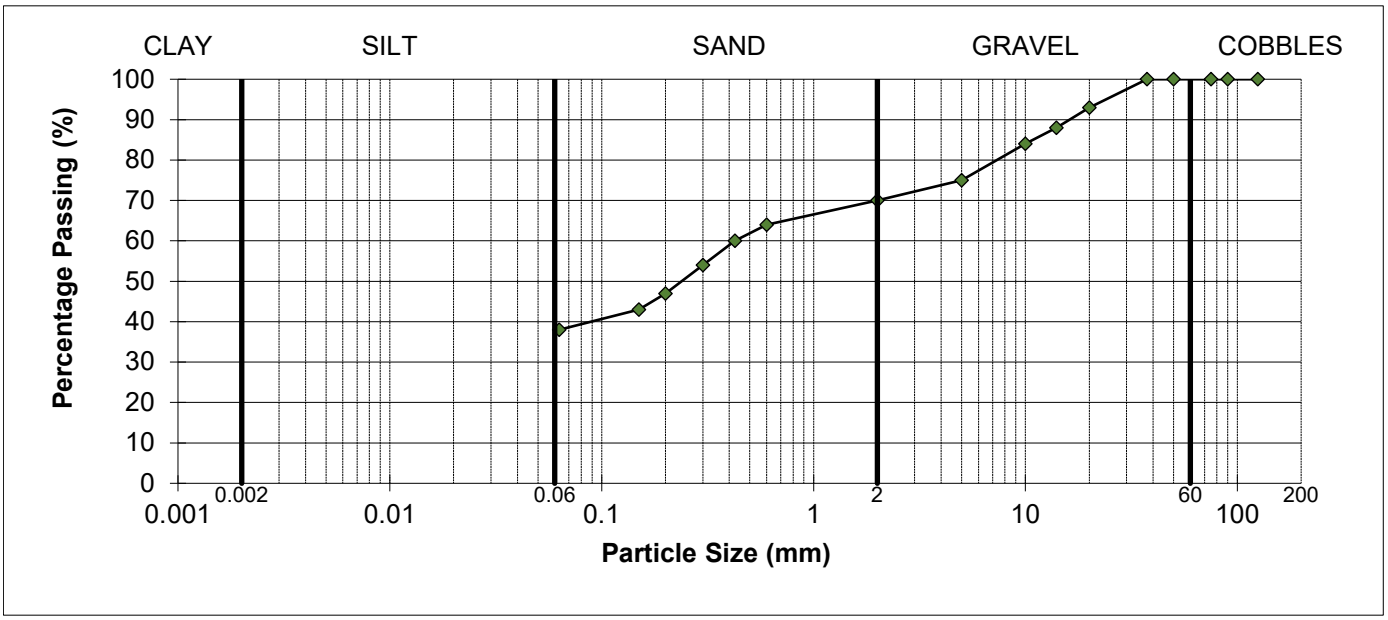
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/48

SAMPLE LABEL	Stockpile 6	DATE SAMPLED	05-May-23
LAB SAMPLE No	125073	DATE RECEIVED	05-May-23
DATE TESTED	09-May-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	75	
90	100		2	70	15-80
75	100		0.6	64	
50	100		0.425	60	
37.5	100		0.3	54	
20	93		0.2	47	
14	88		0.15	43	
10	84		0.063	38	15-80



REMARKS

As received water content = 24.5%

Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 19-May-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-4:1990
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

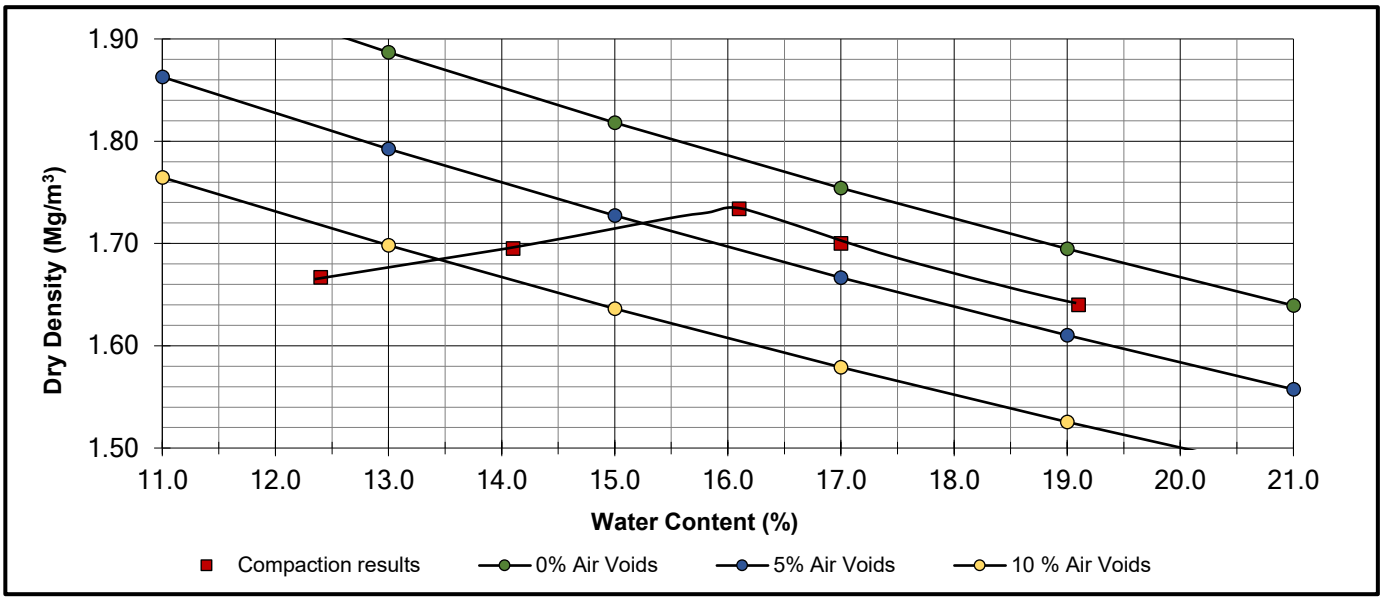
CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/48

SAMPLE LABEL	Stockpile 6	DATE SAMPLED	05-May-23
SAMPLE NUMBER	125073	DATE RECEIVED	05-May-23
DATE TESTED	10-May-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won
PRE TREATMENT	Air Dried / Single Sample

RETAINED 37.5mm	0 %	GRADING ZONE	Zone 3
RETAINED 20mm	7 %	PARTICLE DENSITY	2.50 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	12.4	1.667
2	14.1	1.695
3	16.1	1.734
4	17.0	1.700
5	19.1	1.640



OPTIMUM WATER CONTENT	**16**	(%)
MAXIMUM DRY DENSITY	**1.73**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

SIGNED

DATE 19-May-23

M U R R A Y R I X
ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

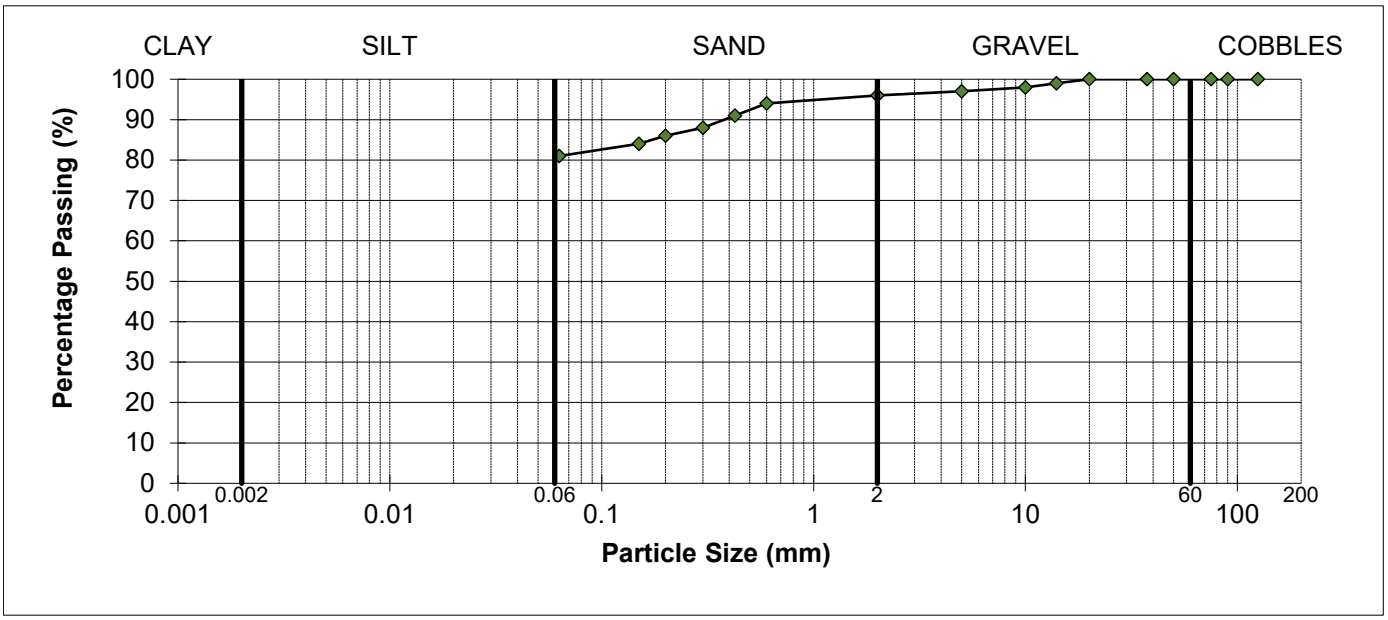
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/48

SAMPLE LABEL	Cell 1 Natural	DATE SAMPLED	04-May-23
LAB SAMPLE No	125068	DATE RECEIVED	05-May-23
DATE TESTED	09-May-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	97	
90	100		2	96	80-100
75	100		0.6	94	
50	100		0.425	91	
37.5	100		0.3	88	
20	100		0.2	86	
14	99		0.15	84	
10	98		0.063	81	15-100



REMARKS
As received water content = 19.8%
Sample complies with the advised grading specification for a 2A/2B material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 19-May-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-4:1990
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

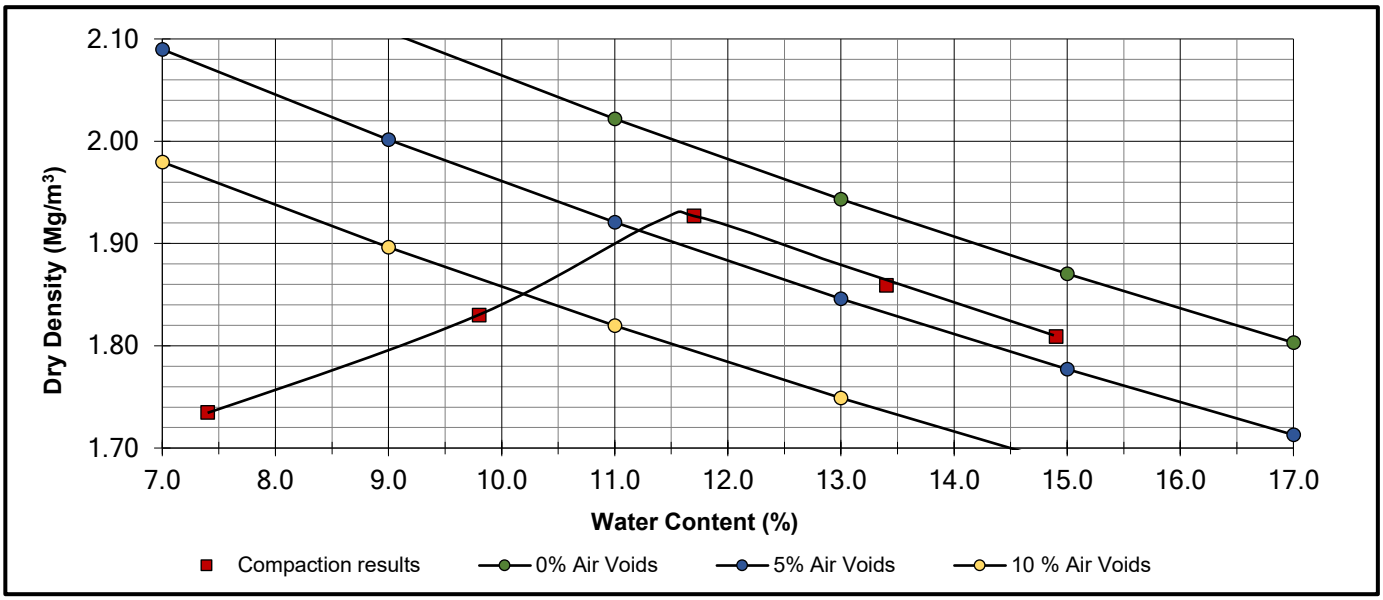
CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/48

SAMPLE LABEL	Cell 1 Natural	DATE SAMPLED	04-May-23
SAMPLE NUMBER	125068	DATE RECEIVED	05-May-23
DATE TESTED	10-May-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won
PRE TREATMENT	Air Dried / Single Sample

RETAINED 37.5mm	0 %	GRADING ZONE	Zone 1
RETAINED 20mm	0 %	PARTICLE DENSITY	2.60 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	7.4	1.735
2	9.8	1.830
3	11.7	1.927
4	13.4	1.859
5	14.9	1.809



OPTIMUM WATER CONTENT	**12**	(%)
MAXIMUM DRY DENSITY	**1.93**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

SIGNED

DATE 19-May-23

M U R R A Y R I X

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

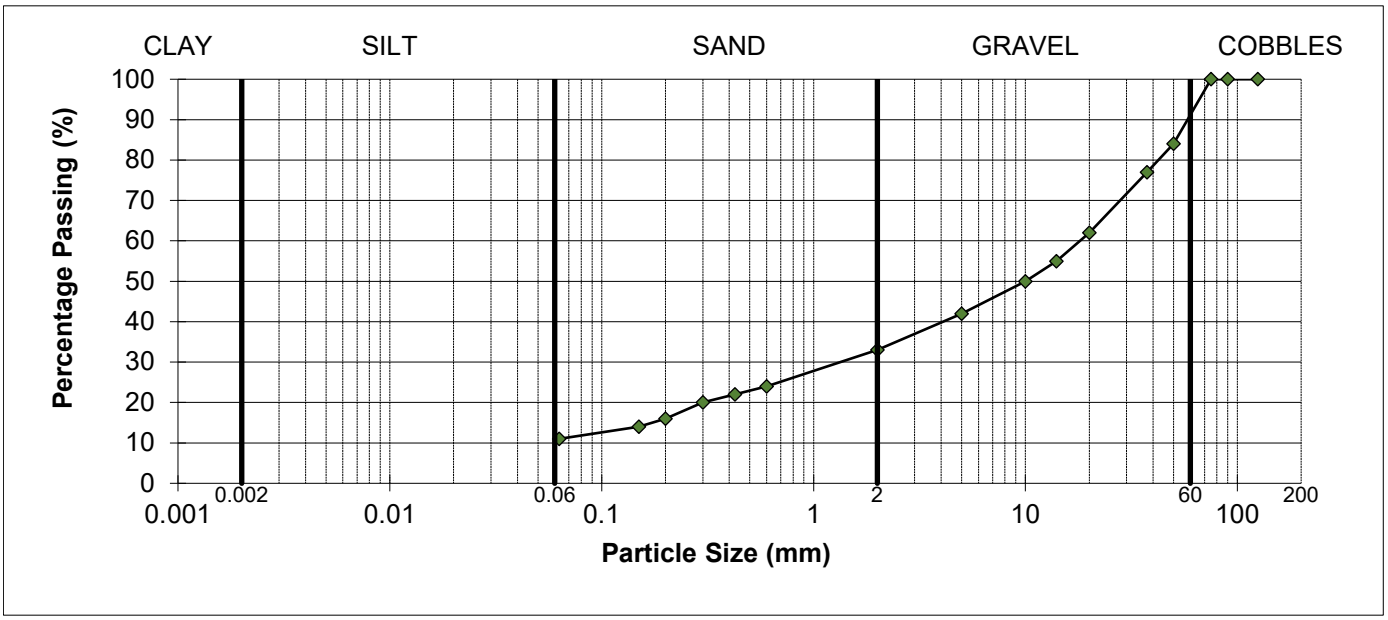
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/48

SAMPLE LABEL	Parcel A Crush	DATE SAMPLED	05-May-23
LAB SAMPLE No	125069	DATE RECEIVED	05-May-23
DATE TESTED	09-May-23	SAMPLED BY	Client

MATERIAL	Crush
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	42	10-45
90	100	80-100	2	33	
75	100	65-100	0.6	24	0-25
50	84		0.425	22	
37.5	77	45-100	0.3	20	
20	62		0.2	16	
14	55		0.15	14	
10	50	15-60	0.063	11	0-12



REMARKS

As received water content = 12.4%

Sample complies with the advised grading specification for a 6F2 material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 19-May-23

MURRAY RIX

CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client e3p

Address Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

Contract Don Street

Job Number MRN 4588/50
Date of Issue 23 May 2023
Page 1 of 3

Approved Signatories

S J Hutchings, O P Davies

Notes

1 All remaining samples and remnants from this contract will be disposed 28 days from the date of this report unless you notify us to the contrary.

2 Result certificates, in this report, not bearing a UKAS mark, are not included in our UKAS accreditation schedule.

3 Opinions and interpretations expressed herein are outside the scope of our UKAS accreditation.

4 Certified that the samples have been examined and tested in accordance with the terms of the contract/order and unless otherwise stated conform to the standards/specifications quoted.

5 The results included within the report are representative of the samples submitted for analysis.

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MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-4:1990
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

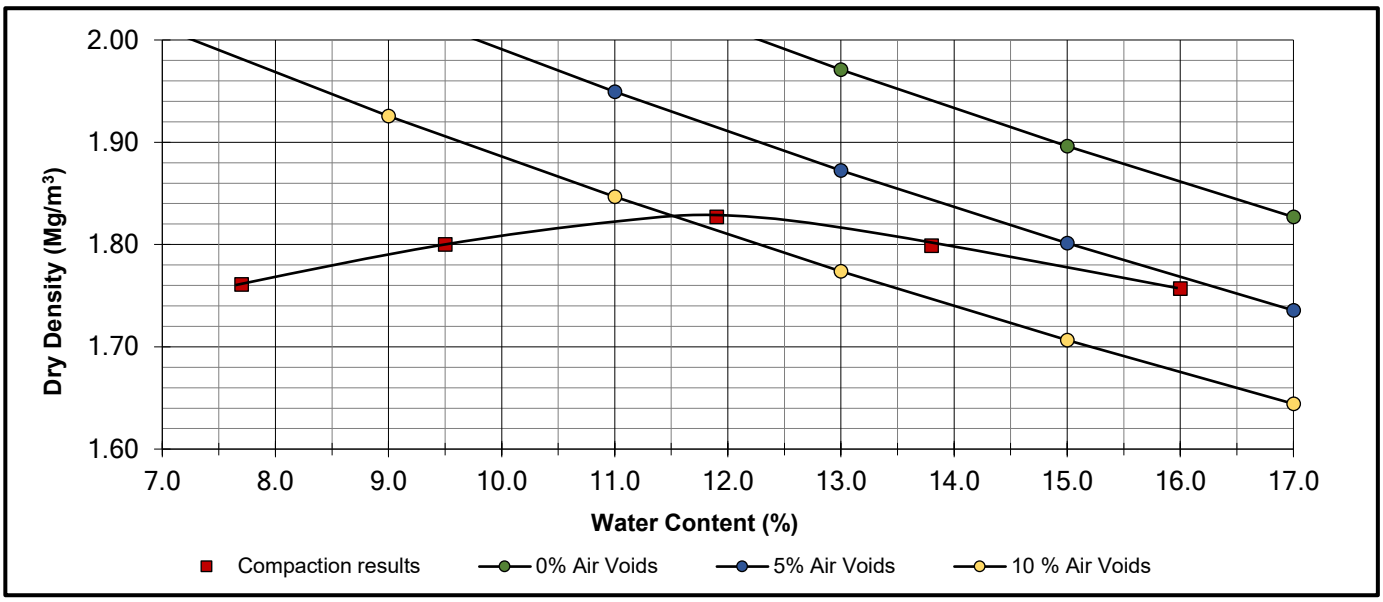
CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/48

SAMPLE LABEL	Stockpile 7	DATE SAMPLED	12-May-23
SAMPLE NUMBER	125221	DATE RECEIVED	12-May-23
DATE TESTED	16-May-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won
PRE TREATMENT	Air Dried / Single Sample

RETAINED 37.5mm	28 %	GRADING ZONE	Zone X
RETAINED 20mm	40 %	PARTICLE DENSITY	2.65 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	7.7	1.761
2	9.5	1.800
3	11.9	1.827
4	13.8	1.799
5	16.0	1.757



OPTIMUM WATER CONTENT	**12**	(%)
MAXIMUM DRY DENSITY	**1.83**	(Mg/m^3)

REMARKS
As received water content = 17.9%

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

SIGNED

DATE 23-May-23

M U R R A Y R I X

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

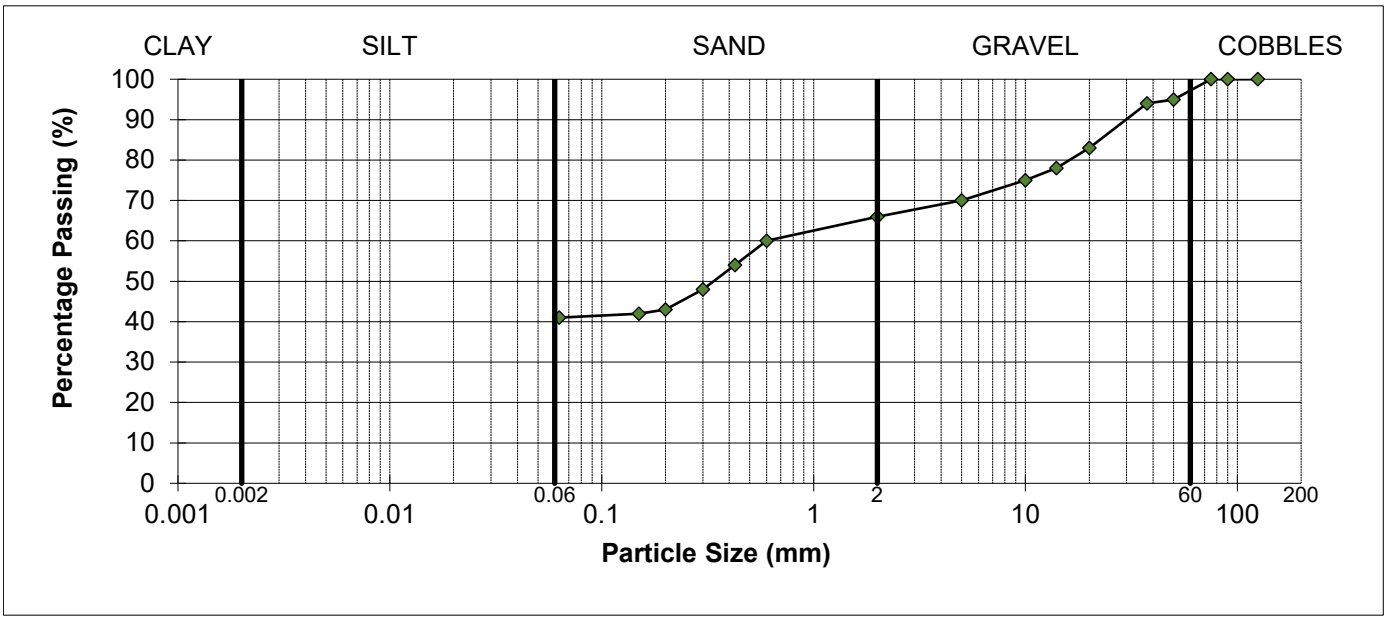
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/50

SAMPLE LABEL	Stockpile 7	DATE SAMPLED	12-May-23
LAB SAMPLE No	125397	DATE RECEIVED	12-May-23
DATE TESTED	16-May-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	70	
90	100		2	66	15-80
75	100		0.6	60	
50	95		0.425	54	
37.5	94		0.3	48	
20	83		0.2	43	
14	78		0.15	42	
10	75		0.063	41	15-80



REMARKS

As received water content = 22.9%

Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 23-May-23

MURRAY RIX
CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client e3p

Address Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

Contract Don Street

Job Number MRN 4588/56
Date of Issue 09 June 2023
Page 1 of 7

Approved Signatories

S J Hutchings, O P Davies

Notes

1 All remaining samples and remnants from this contract will be disposed 28 days from the date of this report unless you notify us to the contrary.

2 Result certificates, in this report, not bearing a UKAS mark, are not included in our UKAS accreditation schedule.

3 Opinions and interpretations expressed herein are outside the scope of our UKAS accreditation.

4 Certified that the samples have been examined and tested in accordance with the terms of the contract/order and unless otherwise stated conform to the standards/specifications quoted.

5 The results included within the report are representative of the samples submitted for analysis.

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ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-4:1990
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

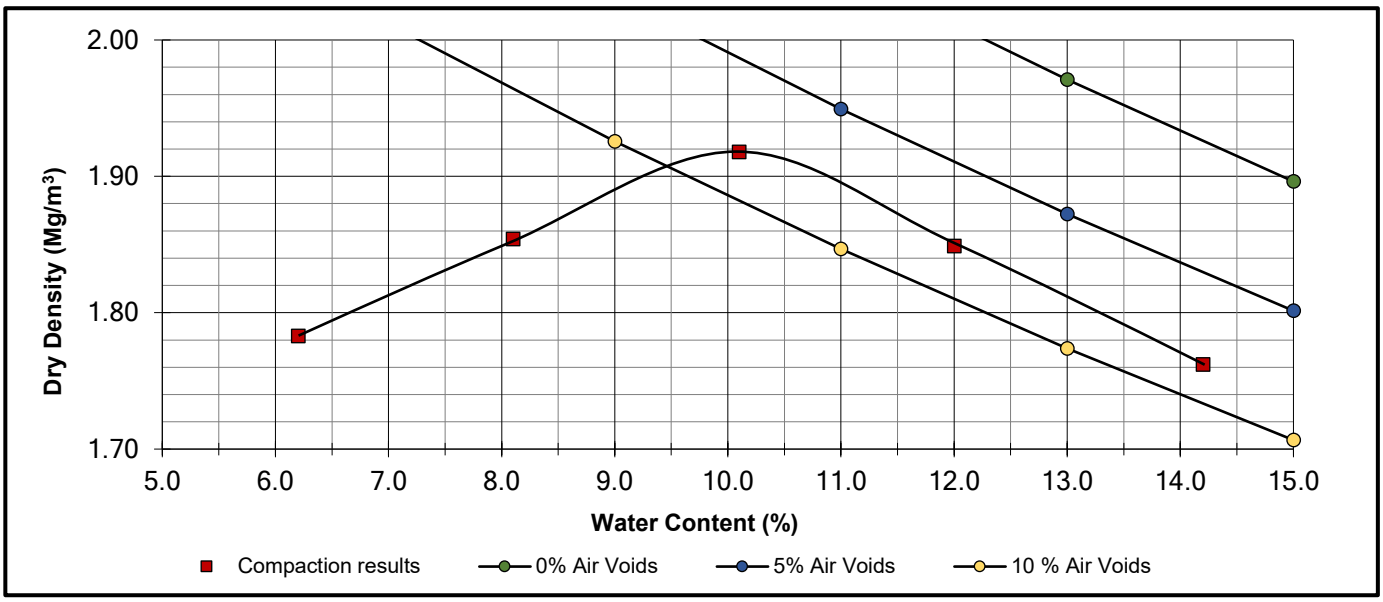
CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/56

SAMPLE LABEL	Stockpile 9	DATE SAMPLED	23-May-23
SAMPLE NUMBER	125712	DATE RECEIVED	23-May-23
DATE TESTED	26-May-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won
PRE TREATMENT	Air Dried / Single Sample

RETAINED 37.5mm	5 %	GRADING ZONE	Zone 4
RETAINED 20mm	25 %	PARTICLE DENSITY	2.65 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	6.2	1.783
2	8.1	1.854
3	10.1	1.918
4	12.0	1.849
5	14.2	1.762



OPTIMUM WATER CONTENT	**10**	(%)
MAXIMUM DRY DENSITY	**1.92**	(Mg/m^3)

REMARKS

NAME S.J Hutchings (Director) SIGNED DATE 09-Jun-23

M U R R A Y R I X
ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

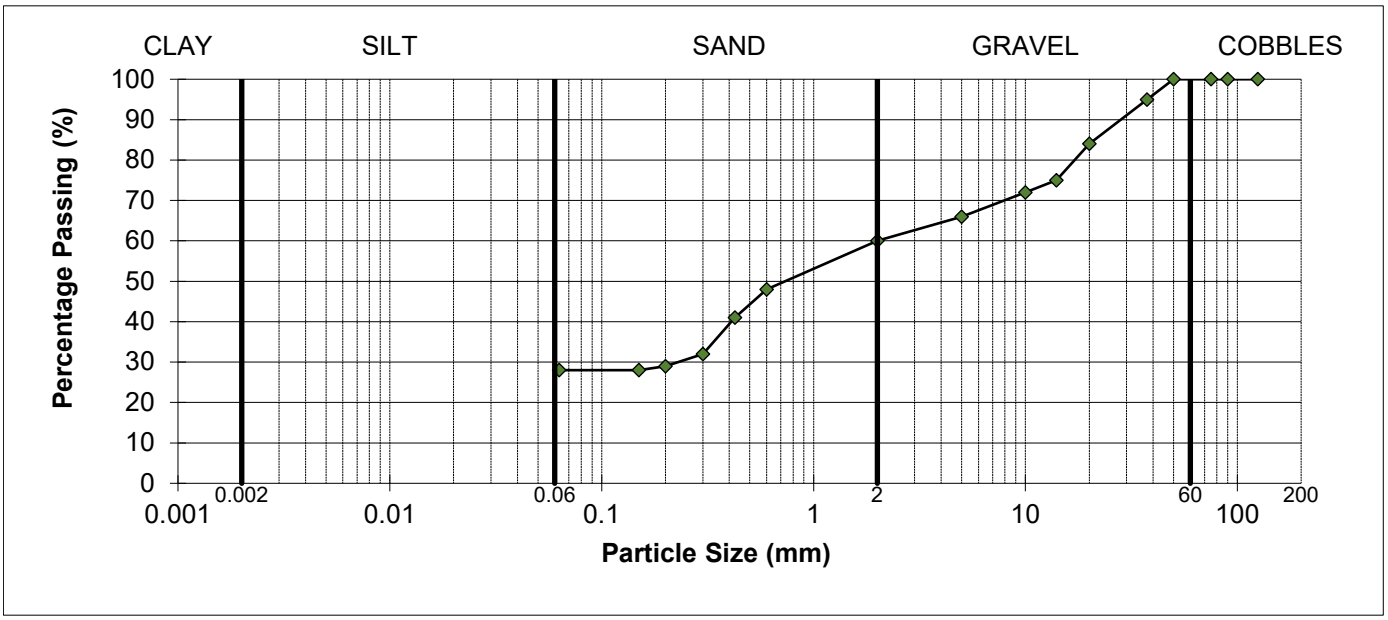
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/56

SAMPLE LABEL	Stockpile 9	DATE SAMPLED	23-May-23
LAB SAMPLE No	125712	DATE RECEIVED	23-May-23
DATE TESTED	26-May-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	66	
90	100		2	60	15-80
75	100		0.6	48	
50	100		0.425	41	
37.5	95		0.3	32	
20	84		0.2	29	
14	75		0.15	28	
10	72		0.063	28	15-80



REMARKS
As received water content = 15.6%
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME S.J. Hutchings (Director) DATE 09-Jun-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

TEST CERTIFICATE

ACID SOLUBLE SULFIDE CONTENT
BS EN 1744-1:2009+A1:2012 Cl. 13

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/56

DATE TESTED	26 May 2023	DATE SAMPLED	02 May 2023
SAMPLED BY	Client	DATE RECEIVED	23 May 2023

Sample Number	Site Mark	Aggregate Type	Acid Soluble Sulfide % S
125704	Stockpile 1	General Fill	<0.01
125705	Stockpile 2	General Fill	<0.01
125706	Stockpile 3	General Fill	<0.01
125707	Stockpile 4	General Fill	<0.01

REMARKS

SIGNED

NAME S.J Hutchings
(Director)

DATE 09 June 2023

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

TEST CERTIFICATE

ACID SOLUBLE SULFIDE CONTENT
BS EN 1744-1:2009+A1:2012 Cl. 13

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/56

DATE TESTED	26 May 2023	DATE SAMPLED	23 May 2023
SAMPLED BY	Client	DATE RECEIVED	23 May 2023

Sample Number	Site Mark	Aggregate Type	Acid Soluble Sulfide % S
125708	Stockpile 5	General Fill	<0.01
125709	Stockpile 6	General Fill	<0.01
125710	Stockpile 7	General Fill	<0.01
125711	Stockpile 8	General Fill	<0.01
125712	Stockpile 9	General Fill	<0.01

REMARKS

SIGNED

NAME S.J Hutchings
(Director)

DATE 09 June 2023

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

TEST CERTIFICATE

TOTAL SULFUR CONTENT
BS EN 1744-1:2009+A1:2012 Cl. 11

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/56

DATE TESTED	26 May 2023	DATE SAMPLED	02 May 2023
SAMPLED BY	Client	DATE RECEIVED	23 May 2023

Sample Number	Site Mark	Aggregate Type	Total Sulfur % S
125704	Stockpile 1	General Fill	<0.1
125705	Stockpile 2	General Fill	<0.1
125706	Stockpile 3	General Fill	0.2
125707	Stockpile 4	General Fill	0.1

REMARKS

SIGNED

NAME S.J. Hutchings (Director) DATE 09 June 2023

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

TEST CERTIFICATE

TOTAL SULFUR CONTENT
BS EN 1744-1:2009+A1:2012 Cl. 11

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/56

DATE TESTED	26 May 2023	DATE SAMPLED	23 May 2023
SAMPLED BY	Client	DATE RECEIVED	23 May 2023

Sample Number	Site Mark	Aggregate Type	Total Sulfur % S
125708	Stockpile 5	General Fill	0.1
125709	Stockpile 6	General Fill	0.2
125710	Stockpile 7	General Fill	0.2
125711	Stockpile 8	General Fill	<0.1
125712	Stockpile 9	General Fill	0.1

REMARKS

SIGNED 

NAME S.J. Hutchings
(Director)

DATE 09 June 2023

MURRAY RIX
CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client e3p

Address Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

Contract Don Street

Job Number MRN 4588/56
Date of Issue 09 June 2023
Page 1 of 7

Approved Signatories

S J Hutchings, O P Davies

Notes

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MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-4:1990
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

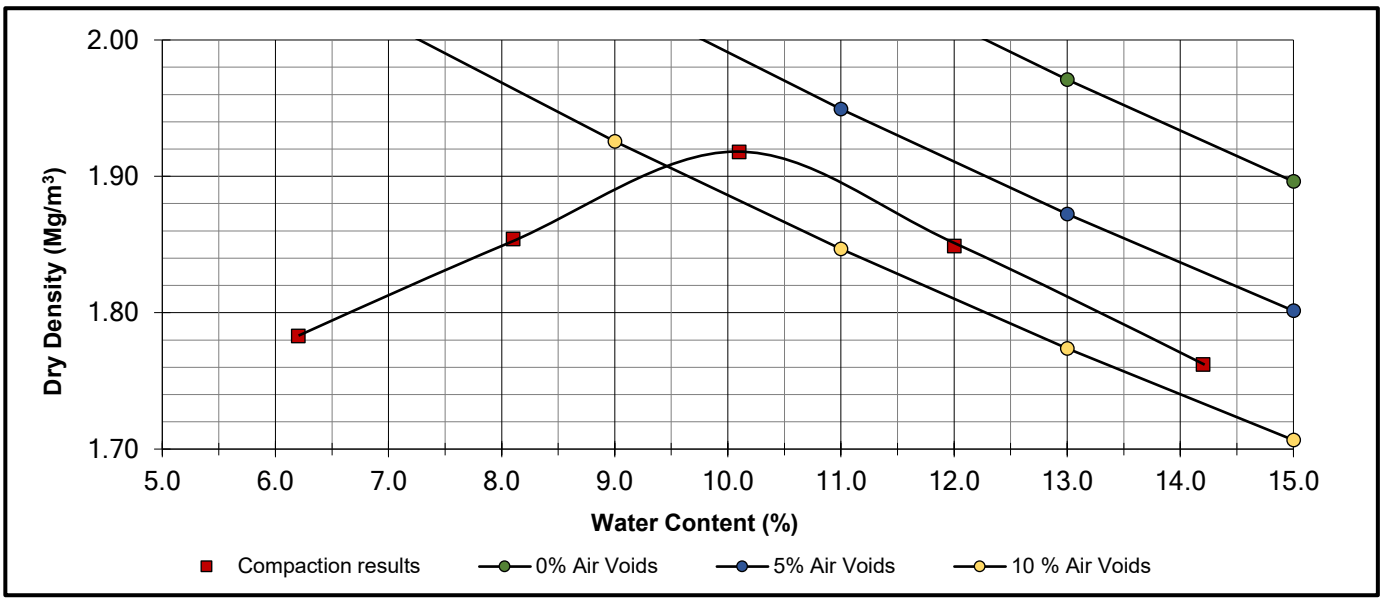
CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/56

SAMPLE LABEL	Stockpile 9	DATE SAMPLED	23-May-23
SAMPLE NUMBER	125712	DATE RECEIVED	23-May-23
DATE TESTED	26-May-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won
PRE TREATMENT	Air Dried / Single Sample

RETAINED 37.5mm	5 %	GRADING ZONE	Zone 4
RETAINED 20mm	25 %	PARTICLE DENSITY	2.65 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	6.2	1.783
2	8.1	1.854
3	10.1	1.918
4	12.0	1.849
5	14.2	1.762



OPTIMUM WATER CONTENT	**10**	(%)
MAXIMUM DRY DENSITY	**1.92**	(Mg/m^3)

REMARKS

NAME S.J Hutchings (Director) SIGNED DATE 09-Jun-23

M U R R A Y R I X
ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

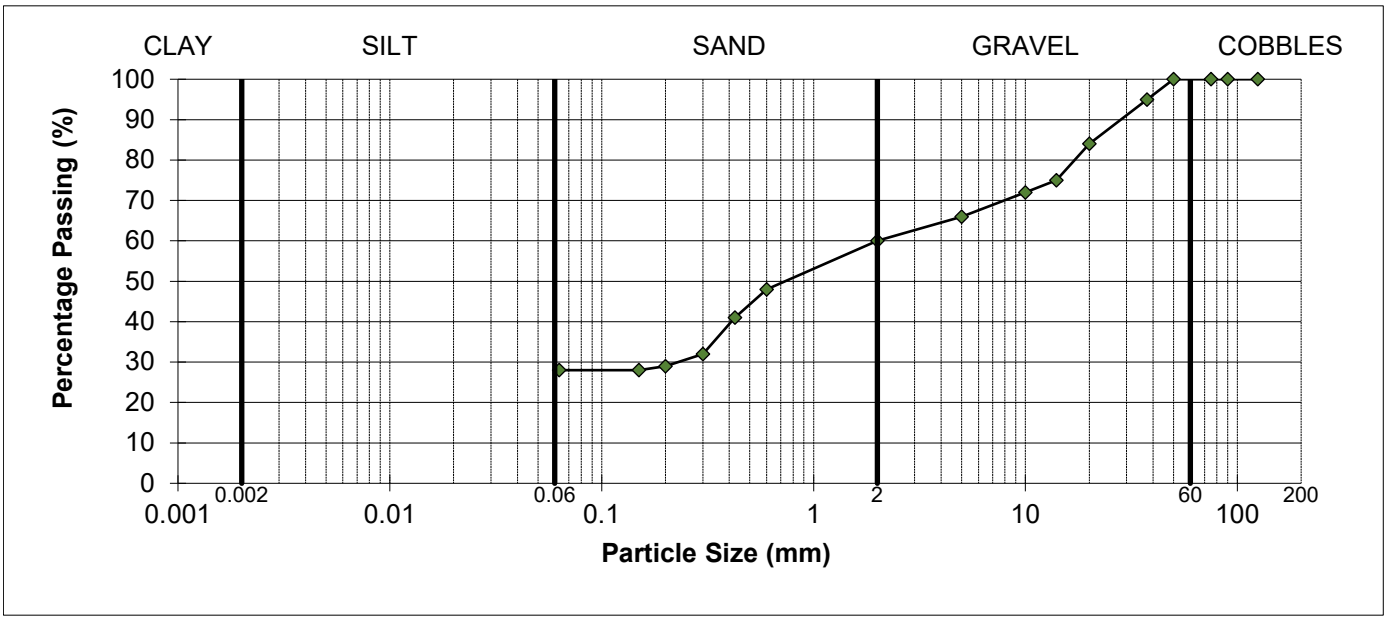
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/56

SAMPLE LABEL	Stockpile 9	DATE SAMPLED	23-May-23
LAB SAMPLE No	125712	DATE RECEIVED	23-May-23
DATE TESTED	26-May-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	66	
90	100		2	60	15-80
75	100		0.6	48	
50	100		0.425	41	
37.5	95		0.3	32	
20	84		0.2	29	
14	75		0.15	28	
10	72		0.063	28	15-80



REMARKS
As received water content = 15.6%
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME S.J. Hutchings (Director) DATE 09-Jun-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

TEST CERTIFICATE

ACID SOLUBLE SULFIDE CONTENT
BS EN 1744-1:2009+A1:2012 Cl. 13

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/56

DATE TESTED	26 May 2023	DATE SAMPLED	02 May 2023
SAMPLED BY	Client	DATE RECEIVED	23 May 2023

Sample Number	Site Mark	Aggregate Type	Acid Soluble Sulfide % S
125704	Stockpile 1	General Fill	<0.01
125705	Stockpile 2	General Fill	<0.01
125706	Stockpile 3	General Fill	<0.01
125707	Stockpile 4	General Fill	<0.01

REMARKS

SIGNED

NAME S.J Hutchings
(Director)

DATE 09 June 2023

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

TEST CERTIFICATE

ACID SOLUBLE SULFIDE CONTENT
BS EN 1744-1:2009+A1:2012 Cl. 13

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/56

DATE TESTED	26 May 2023	DATE SAMPLED	23 May 2023
SAMPLED BY	Client	DATE RECEIVED	23 May 2023

Sample Number	Site Mark	Aggregate Type	Acid Soluble Sulfide % S
125708	Stockpile 5	General Fill	<0.01
125709	Stockpile 6	General Fill	<0.01
125710	Stockpile 7	General Fill	<0.01
125711	Stockpile 8	General Fill	<0.01
125712	Stockpile 9	General Fill	<0.01

REMARKS

SIGNED

NAME S.J Hutchings
(Director)

DATE 09 June 2023

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

TEST CERTIFICATE

TOTAL SULFUR CONTENT
BS EN 1744-1:2009+A1:2012 Cl. 11

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/56

DATE TESTED	26 May 2023	DATE SAMPLED	02 May 2023
SAMPLED BY	Client	DATE RECEIVED	23 May 2023

Sample Number	Site Mark	Aggregate Type	Total Sulfur % S
125704	Stockpile 1	General Fill	<0.1
125705	Stockpile 2	General Fill	<0.1
125706	Stockpile 3	General Fill	0.2
125707	Stockpile 4	General Fill	0.1

REMARKS

SIGNED

NAME S.J. Hutchings (Director) DATE 09 June 2023

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

TEST CERTIFICATE

TOTAL SULFUR CONTENT
BS EN 1744-1:2009+A1:2012 Cl. 11

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/56

DATE TESTED	26 May 2023	DATE SAMPLED	23 May 2023
SAMPLED BY	Client	DATE RECEIVED	23 May 2023

Sample Number	Site Mark	Aggregate Type	Total Sulfur % S
125708	Stockpile 5	General Fill	0.1
125709	Stockpile 6	General Fill	0.2
125710	Stockpile 7	General Fill	0.2
125711	Stockpile 8	General Fill	<0.1
125712	Stockpile 9	General Fill	0.1

REMARKS

SIGNED 

NAME S.J. Hutchings
(Director)

DATE 09 June 2023

MURRAY RIX
CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client e3p

Address Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

Contract Don Street

Job Number MRN 4588/62
Date of Issue 26 June 2023

Approved Signatories

S J Hutchings, O P Davies

Notes

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Andrew House, Hadfield Street, Dukinfield, Cheshire SK16 4QX Tel: 0161 475 0870
Email: enquiries@murrayrix.com Website: www.murrayrix.com

Also at: London: 020 8523 1999

UKAS TESTING 1580

Murray Rix is the trading name of Murray Rix (Northern) Limited. Registered in England 2878361

M U R R A Y R I X
ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

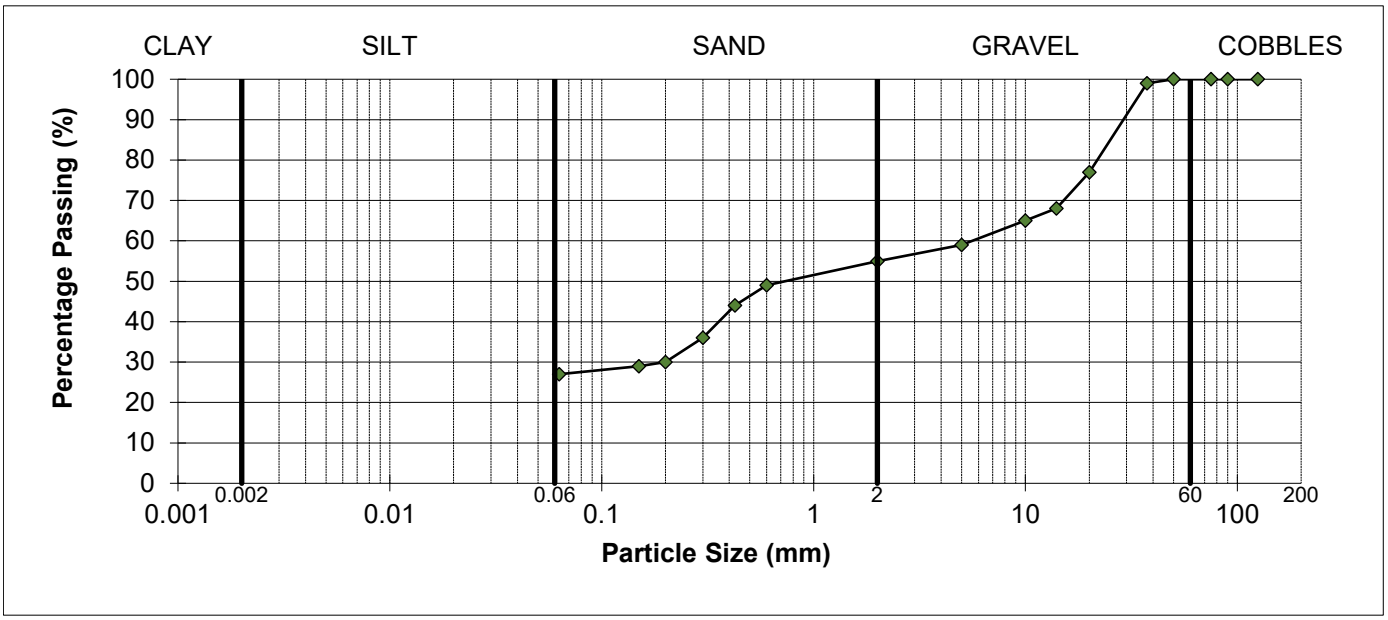
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/62

SAMPLE LABEL	Landfill Stockpile 10	DATE SAMPLED	31-May-23
LAB SAMPLE No	126407	DATE RECEIVED	05-Jun-23
DATE TESTED	09-Jun-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	59	
90	100		2	55	15-80
75	100		0.6	49	
50	100		0.425	44	
37.5	99		0.3	36	
20	77		0.2	30	
14	68		0.15	29	
10	65		0.063	27	15-80



REMARKS
As received water content = 6.5%
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 26-Jun-23

M U R R A Y R I X
ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

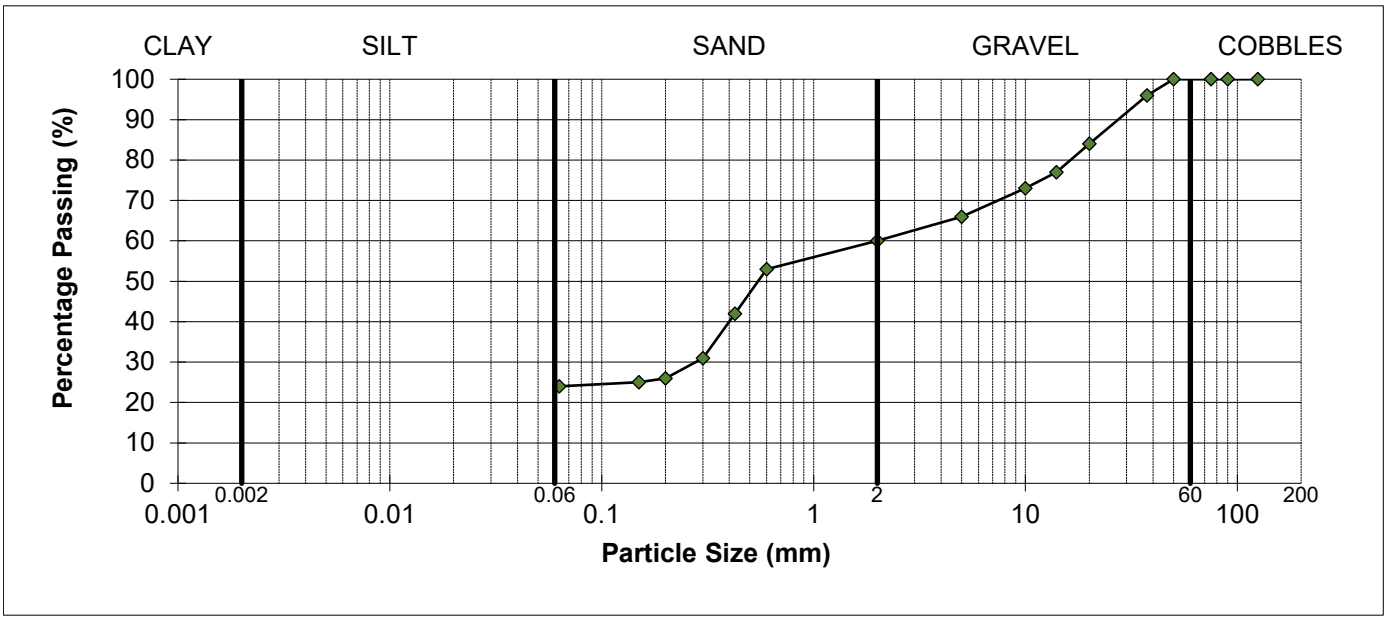
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/62

SAMPLE LABEL	Landfill Stockpile 11	DATE SAMPLED	31-May-23
LAB SAMPLE No	126408	DATE RECEIVED	05-Jun-23
DATE TESTED	09-Jun-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	66	
90	100		2	60	15-80
75	100		0.6	53	
50	100		0.425	42	
37.5	96		0.3	31	
20	84		0.2	26	
14	77		0.15	25	
10	73		0.063	24	15-80



REMARKS
As received water content = 10.3%
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 26-Jun-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-4:1990
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

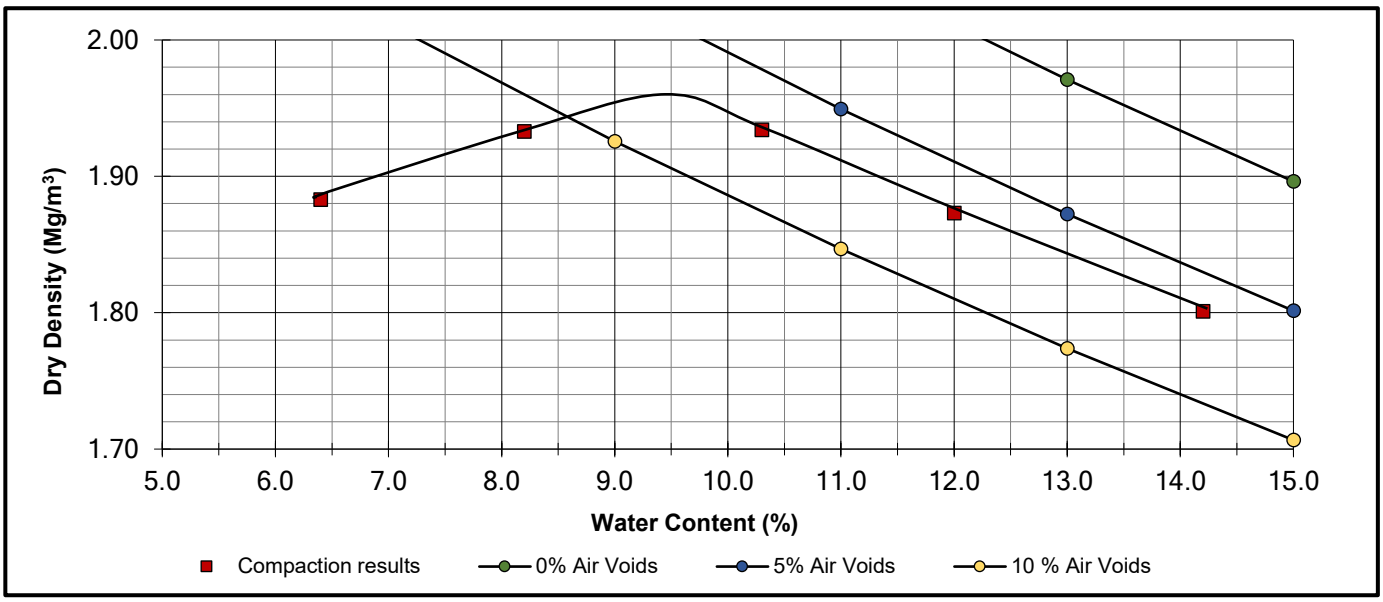
CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/62

SAMPLE LABEL	Landfill Stockpile 10	DATE SAMPLED	31-May-23
SAMPLE NUMBER	126407	DATE RECEIVED	05-Jun-23
DATE TESTED	09-Jun-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won
PRE TREATMENT	Air Dried / Single Sample

RETAINED 37.5mm	1 %	GRADING ZONE	Zone 4
RETAINED 20mm	23 %	PARTICLE DENSITY	2.65 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	6.4	1.883
2	8.2	1.933
3	10.3	1.934
4	12.0	1.873
5	14.2	1.801



OPTIMUM WATER CONTENT	**10**	(%)
MAXIMUM DRY DENSITY	**1.96**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

SIGNED

DATE 26-Jun-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

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BS 1377-4:1990
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

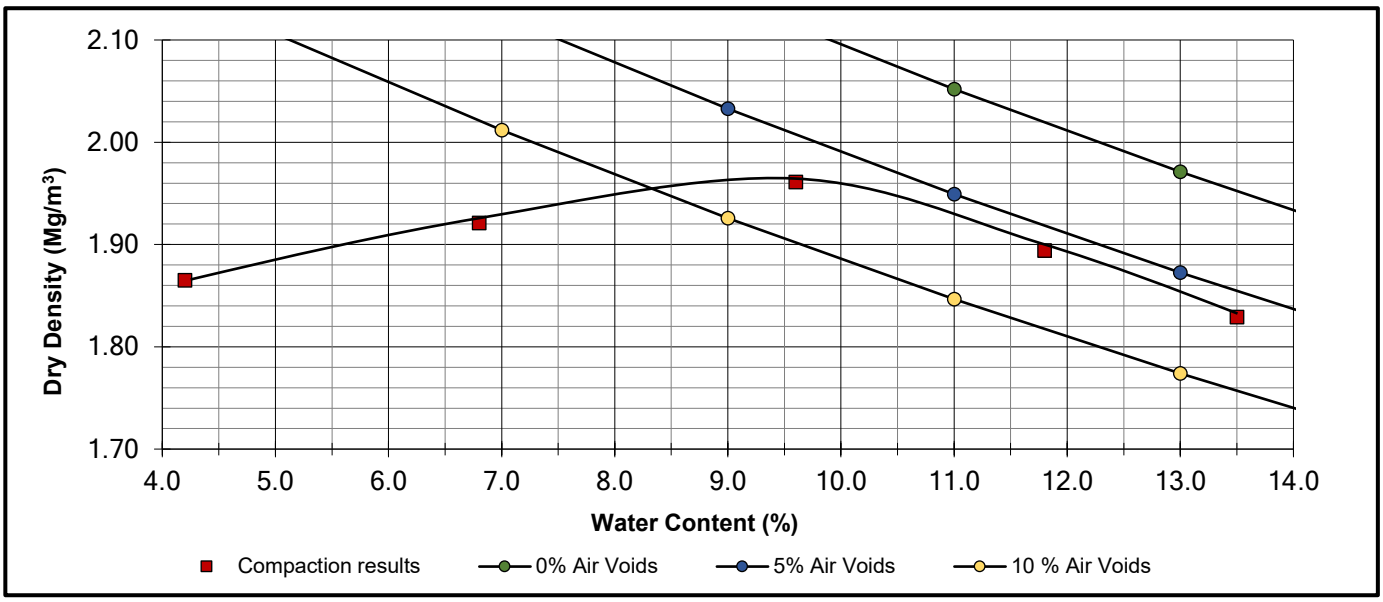
CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/62

SAMPLE LABEL	Landfill Stockpile 11	DATE SAMPLED	31-May-23
SAMPLE NUMBER	126408	DATE RECEIVED	05-Jun-23
DATE TESTED	09-Jun-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won
PRE TREATMENT	Air Dried / Single Sample

RETAINED 37.5mm	4 %	GRADING ZONE	Zone 4
RETAINED 20mm	16 %	PARTICLE DENSITY	2.65 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	4.2	1.865
2	6.8	1.921
3	9.6	1.961
4	11.8	1.894
5	13.5	1.829



OPTIMUM WATER CONTENT	**10**	(%)
MAXIMUM DRY DENSITY	**1.96**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 26-Jun-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

TEST CERTIFICATE

ACID SOLUBLE SULFIDE CONTENT
BS EN 1744-1:2009+A1:2012 Cl. 13

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/62

DATE TESTED	09 June 2023	DATE SAMPLED	31 May 2023
SAMPLED BY	Client	DATE RECEIVED	05 June 2023

Sample Number	Site Mark	Aggregate Type	Acid Soluble Sulfide % S
126407	Landfill Stockpile 10	General Fill	<0.01
126408	Landfill Stockpile 11	General Fill	<0.01

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 26 June 2023

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

TEST CERTIFICATE

TOTAL SULFUR CONTENT
BS EN 1744-1:2009+A1:2012 Cl. 11

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/62

DATE TESTED	09 June 2023	DATE SAMPLED	31 May 2023
SAMPLED BY	Client	DATE RECEIVED	05 June 2023

Sample Number	Site Mark	Aggregate Type	Total Sulfur % S
126407	Landfill Stockpile 10	General Fill	<0.1
126408	Landfill Stockpile 11	General Fill	<0.1

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 26 June 2023

MURRAY RIX
CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client e3p

Address Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

Contract Don Street

Job Number MRN 4588/64
Date of Issue 26 June 2023

Approved Signatories

S J Hutchings, O P Davies

Notes

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UKAS TESTING 1580

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M U R R A Y R I X

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DETERMINATION OF CONSTITUENTS OF COARSE RECYCLED AGGREGATE

BS EN 933-11:2009

CLIENT	e3p
SITE	Don Street

SAMPLE DETAILS

Job Number	:	MRN 4588/64
Laboratory sample number	:	125821
Material	:	General Fill
Advised source	:	Site won
Site mark	:	Stockpile 8
Certificate of sampling received	:	No
Date and time of sampling	:	25 May 2023
Date received at Laboratory	:	25 May 2023
Date of start of test	:	01 June 2023
Sampling Location	:	Not advised
Method of sampling	:	BS EN 932-1 : 1997
Sampled by	:	Client
Mass of dry sample tested	:	50 kg
Drying Temperature	:	105 ± 5°C

RESULT

Constituent	Description	Proportion (%)
Rc	Concrete, Concrete products, Mortar, Concrete masonry units	7.2
Ru	Unbound aggregate, Natural stone, Hydraulically bound aggregate	32
Rb	Clay masonry units (i.e. bricks & tiles), Calcium silicate masonry units, Aerated non-floating concrete	8.6
Ra	Bituminous materials	2.8
Rg	Glass	0.1
X	Other: Cohesive (i.e. clay & soil), Metals (ferrous & non-ferrous), Non-floating wood, plastic & rubber, Gypsum plaster	49
FL	Floating Particles (cm^3/kg)	0.7

Comments
Client requested constituent X to be reported separately to clay/soil. No other consituent X was present, above consituent X figure is shown as the clay/soil proportion.

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 26-Jun-23

MURRAY RIX
CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client e3p

Address Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

Contract Don Street

Job Number MRN 4588/68
Date of Issue 07 July 2023

Approved Signatories

S J Hutchings, O P Davies

Notes

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Email: enquiries@murrayrix.com Website: www.murrayrix.com

Also at: London: 020 8523 1999

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M U R R A Y R I X
ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

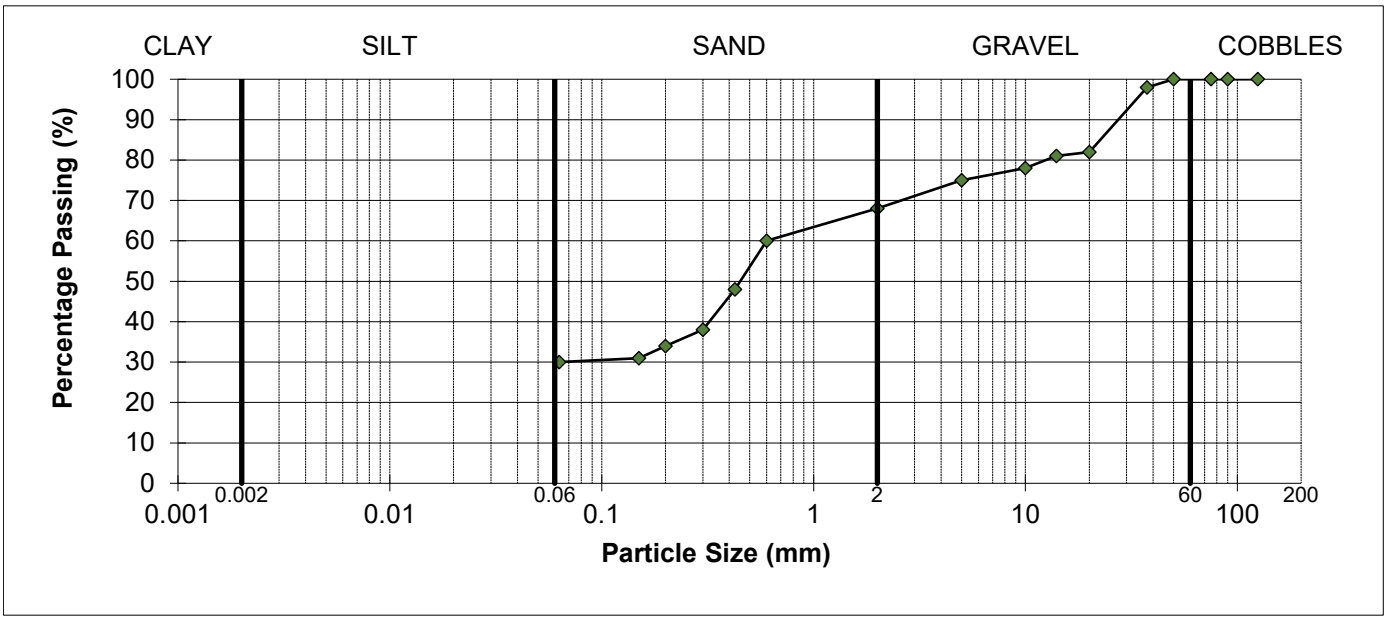
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/68

SAMPLE LABEL	Stockpile 12	DATE SAMPLED	06-Jun-23
LAB SAMPLE No	126544	DATE RECEIVED	08-Jun-23
DATE TESTED	15-Jun-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	75	
90	100		2	68	15-80
75	100		0.6	60	
50	100		0.425	48	
37.5	98		0.3	38	
20	82		0.2	34	
14	81		0.15	31	
10	78		0.063	30	15-80



REMARKS
As received water content = 9.4%
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 07-Jul-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-4:1990
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

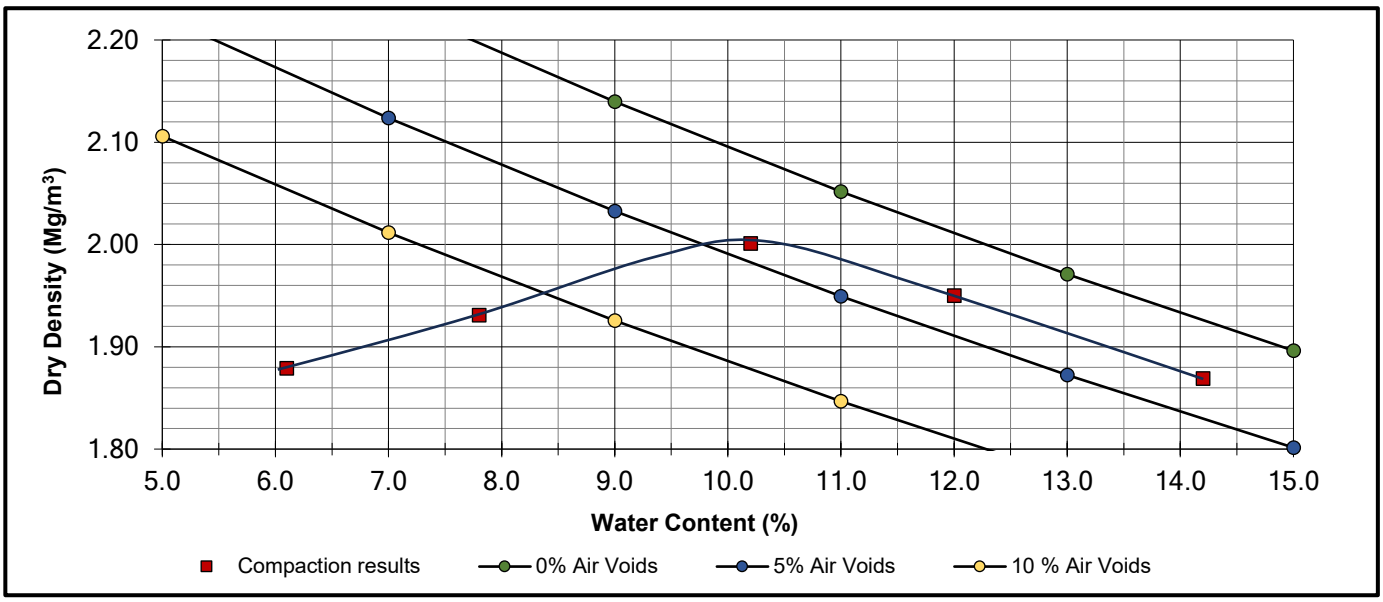
CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/68

SAMPLE LABEL	Stockpile 12	DATE SAMPLED	06-Jun-23
SAMPLE NUMBER	126544	DATE RECEIVED	08-Jun-23
DATE TESTED	15-Jun-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won
PRE TREATMENT	Air Dried / Single Sample

RETAINED 37.5mm	2 %	GRADING ZONE	Zone 4
RETAINED 20mm	18 %	PARTICLE DENSITY	2.65 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	6.1	1.879
2	7.8	1.931
3	10.2	2.001
4	12.0	1.950
5	14.2	1.869



OPTIMUM WATER CONTENT	**10**	(%)
MAXIMUM DRY DENSITY	**2.00**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 07-Jul-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

TEST CERTIFICATE

ACID SOLUBLE SULFIDE CONTENT
BS EN 1744-1:2009+A1:2012 Cl. 13

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/68

DATE TESTED	09 June 2023	DATE SAMPLED	06 June 2023
SAMPLED BY	Client	DATE RECEIVED	08 June 2023

Sample Number	Site Mark	Aggregate Type	Acid Soluble Sulfide % S
126544	Stockpile 12	General Fill	<0.01

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 07 July 2023

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

TEST CERTIFICATE

TOTAL SULFUR CONTENT
BS EN 1744-1:2009+A1:2012 Cl. 11

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/68

DATE TESTED	09 June 2023	DATE SAMPLED	06 June 2023
SAMPLED BY	Client	DATE RECEIVED	08 June 2023

Sample Number	Site Mark	Aggregate Type	Total Sulfur % S
126544	Stockpile 12	General Fill	<0.1

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 07 July 2023

MURRAY RIX
CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client e3p

Address Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

Contract Don Street

Job Number MRN 4588/72
Date of Issue 14 July 2023

Approved Signatories

S J Hutchings, O P Davies

Notes

1 All remaining samples and remnants from this contract will be disposed 28 days from the date of this report unless you notify us to the contrary.

2 Result certificates, in this report, not bearing a UKAS mark, are not included in our UKAS accreditation schedule.

3 Opinions and interpretations expressed herein are outside the scope of our UKAS accreditation.

4 Certified that the samples have been examined and tested in accordance with the terms of the contract/order and unless otherwise stated conform to the standards/specifications quoted.

5 The results included within the report are representative of the samples submitted for analysis.

6 This certificate should not be reproduced, except in full, without the express permission of the laboratory.

Andrew House, Hadfield Street, Dukinfield, Cheshire SK16 4QX Tel: 0161 475 0870
Email: enquiries@murrayrix.com Website: www.murrayrix.com

Also at: London: 020 8523 1999

UKAS TESTING 1580

Murray Rix is the trading name of Murray Rix (Northern) Limited. Registered in England 2878361

M U R R A Y R I X
ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

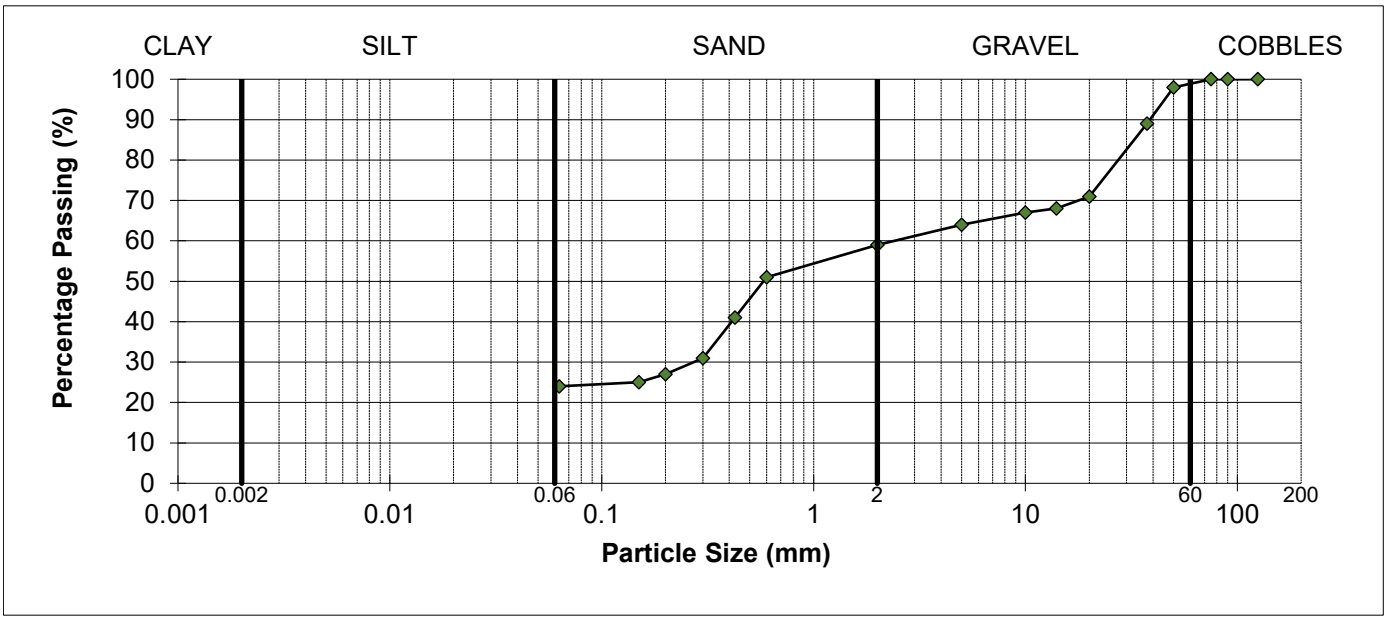
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/72

SAMPLE LABEL	Stockpile 8	DATE SAMPLED	18-May-23
LAB SAMPLE No	126619	DATE RECEIVED	13-Jun-23
DATE TESTED	20-Jun-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	64	
90	100		2	59	15-80
75	100		0.6	51	
50	98		0.425	41	
37.5	89		0.3	31	
20	71		0.2	27	
14	68		0.15	25	
10	67		0.063	24	15-80



REMARKS
As received water content = 8.6%
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 14-Jul-23

M U R R A Y R I X
ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

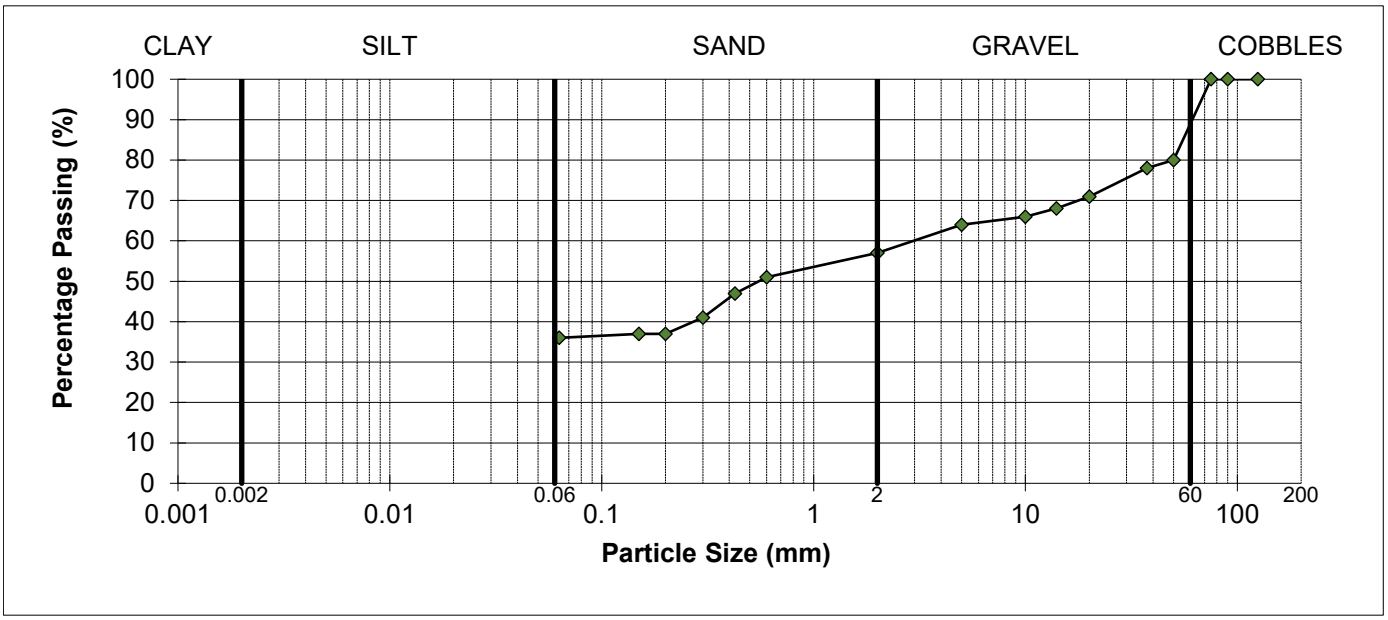
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/72

SAMPLE LABEL	Stockpile 5	DATE SAMPLED	18-May-23
LAB SAMPLE No	126621	DATE RECEIVED	13-Jun-23
DATE TESTED	20-Jun-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	64	
90	100		2	57	15-80
75	100		0.6	51	
50	80		0.425	47	
37.5	78		0.3	41	
20	71		0.2	37	
14	68		0.15	37	
10	66		0.063	36	15-80



REMARKS
As received water content = 16.4%
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 14-Jul-23

M U R R A Y R I X
ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

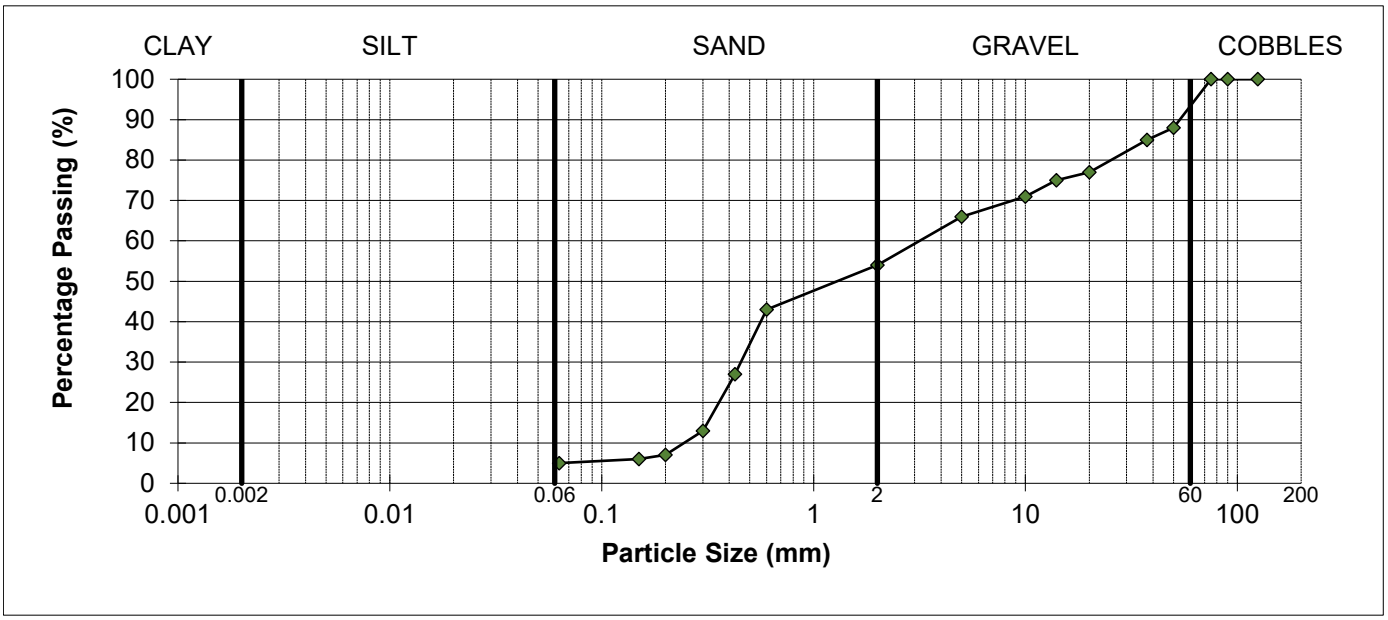
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/72

SAMPLE LABEL	Cell 2 Natural	DATE SAMPLED	18-May-23
LAB SAMPLE No	126622	DATE RECEIVED	13-Jun-23
DATE TESTED	20-Jun-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	95-100	5	66	
90	100		2	54	
75	100		0.6	43	
50	88		0.425	27	
37.5	85		0.3	13	
20	77		0.2	7	
14	75		0.15	6	
10	71		0.063	5	<15



REMARKS
As received water content = 8.1%
Sample complies with the advised grading specification for a 1A material (SHW 2016), Uniformity coefficient = >10

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 14-Jul-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-4:1990
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

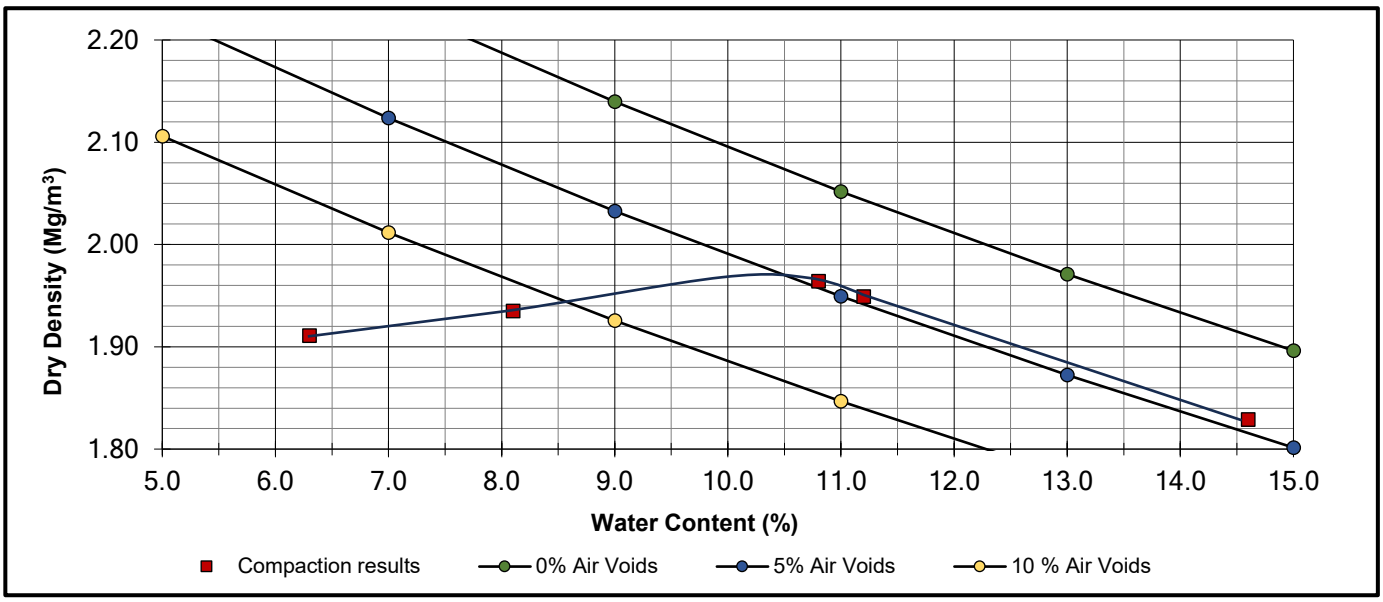
CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/72

SAMPLE LABEL	Stockpile 8	DATE SAMPLED	18-May-23
SAMPLE NUMBER	126620	DATE RECEIVED	13-Jun-23
DATE TESTED	27-Jun-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won
PRE TREATMENT	Air Dried / Single Sample

RETAINED 37.5mm	9 %	GRADING ZONE	Zone 5
RETAINED 20mm	25 %	PARTICLE DENSITY	2.65 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	6.3	1.911
2	8.1	1.935
3	10.8	1.964
4	11.2	1.949
5	14.6	1.829



OPTIMUM WATER CONTENT	**11**	(%)
MAXIMUM DRY DENSITY	**1.97**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 14-Jul-23

MURRAY RIX

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DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-4:1990
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

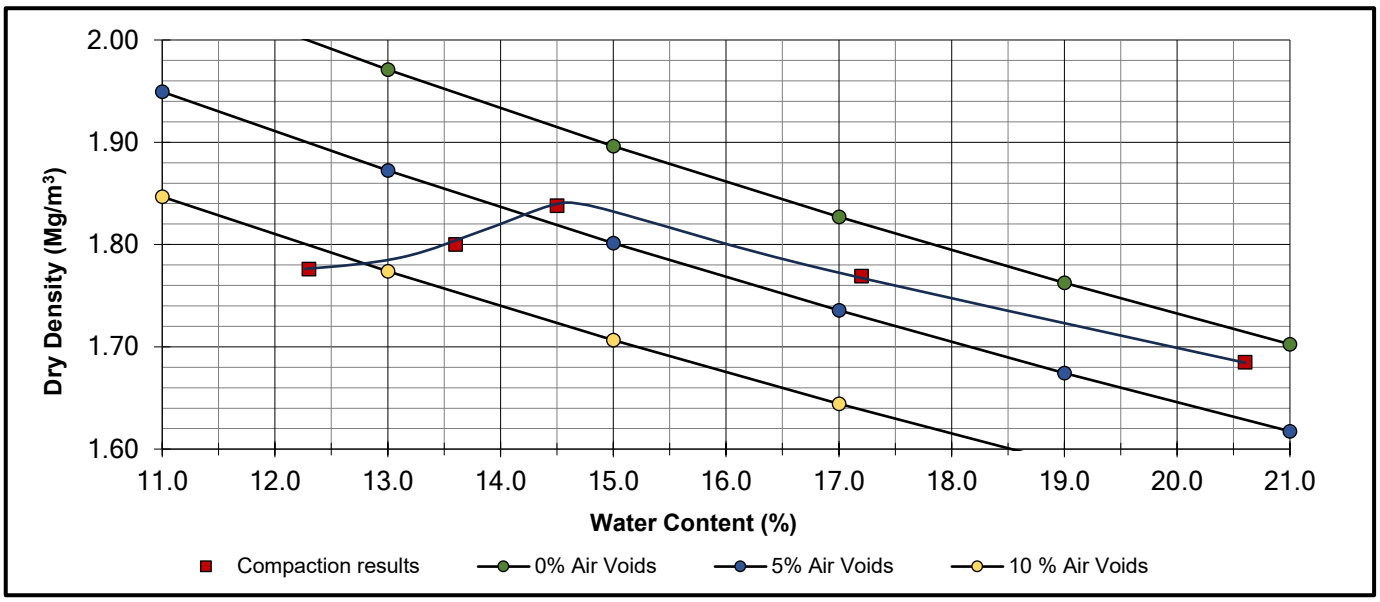
CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/72

SAMPLE LABEL	Stockpile 5	DATE SAMPLED	18-May-23
SAMPLE NUMBER	126621	DATE RECEIVED	13-Jun-23
DATE TESTED	27-Jun-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won
PRE TREATMENT	Air Dried / Single Sample

RETAINED 37.5mm	22 %	GRADING ZONE	Zone X
RETAINED 20mm	29 %	PARTICLE DENSITY	2.65 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	12.3	1.776
2	13.6	1.800
3	14.5	1.838
4	17.2	1.769
5	20.6	1.685



OPTIMUM WATER CONTENT	**15**	(%)
MAXIMUM DRY DENSITY	**1.84**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 14-Jul-23

MURRAY RIX

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TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-4:1990
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

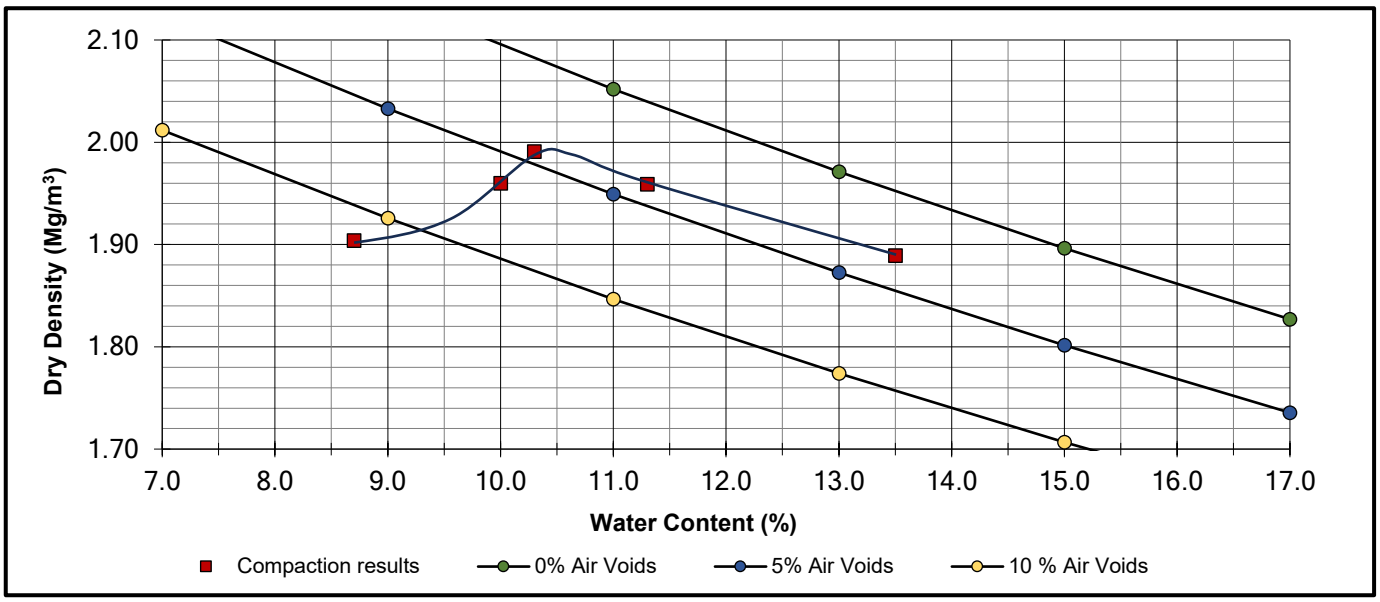
CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/72

SAMPLE LABEL	Cell 2 Natural	DATE SAMPLED	18-May-23
SAMPLE NUMBER	126622	DATE RECEIVED	13-Jun-23
DATE TESTED	27-Jun-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won
PRE TREATMENT	Air Dried / Single Sample

RETAINED 37.5mm	15 %	GRADING ZONE	Zone X
RETAINED 20mm	23 %	PARTICLE DENSITY	2.65 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	8.7	1.904
2	10.0	1.960
3	10.3	1.991
4	11.3	1.959
5	13.5	1.889



OPTIMUM WATER CONTENT	**10**	(%)
MAXIMUM DRY DENSITY	**1.99**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 14-Jul-23

MURRAY RIX
CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client e3p

Address Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

Contract Don Street

Job Number MRN 4588/73
Date of Issue 14 July 2023

Approved Signatories

S J Hutchings, O P Davies

Notes

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M U R R A Y R I X
ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

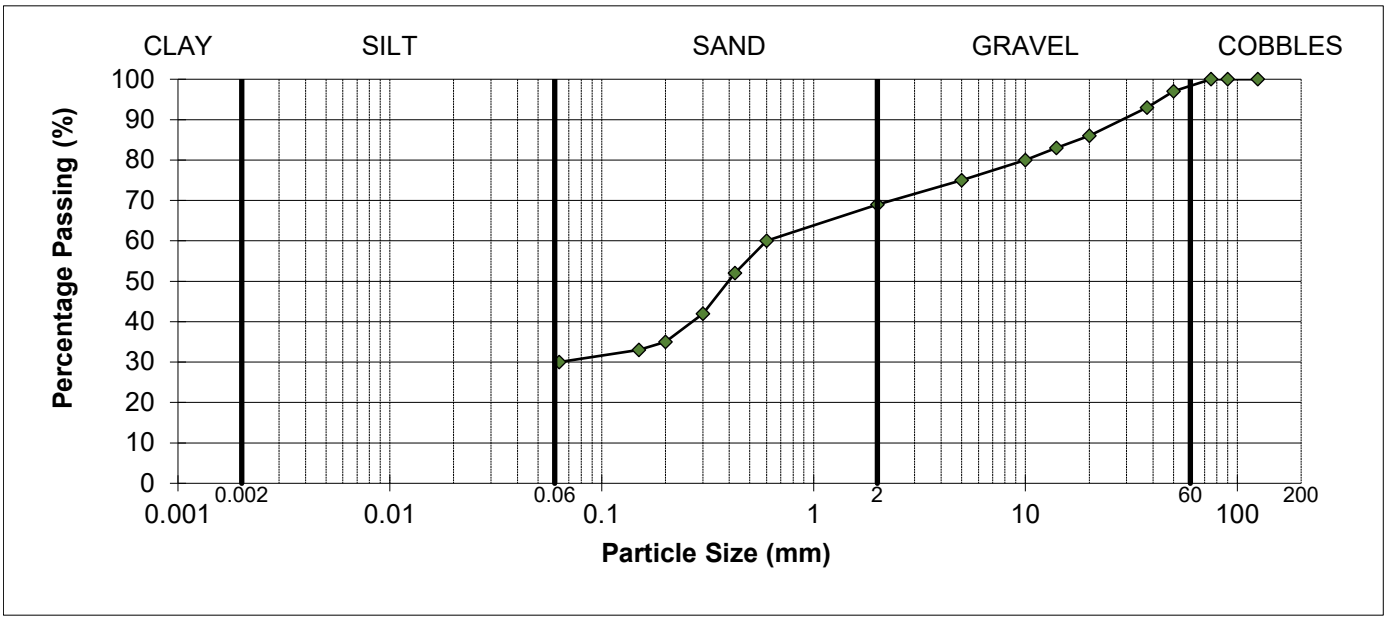
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/73

SAMPLE LABEL	Stockpile 14	DATE SAMPLED	16-Jun-23
LAB SAMPLE No	127153	DATE RECEIVED	20-Jun-23
DATE TESTED	22-Jun-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	75	
90	100		2	69	15-80
75	100		0.6	60	
50	97		0.425	52	
37.5	93		0.3	42	
20	86		0.2	35	
14	83		0.15	33	
10	80		0.063	30	15-80



REMARKS
As received water content = 9.2%
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 14-Jul-23

M U R R A Y R I X
ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

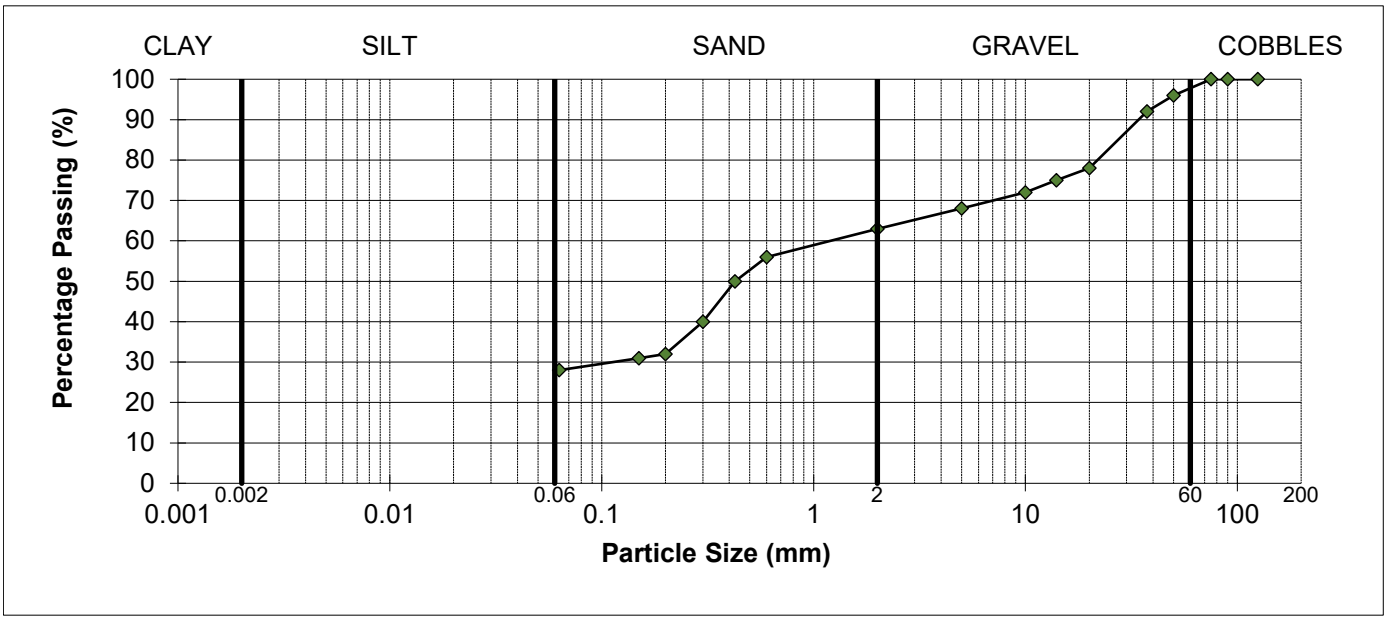
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/73

SAMPLE LABEL	Stockpile 15	DATE SAMPLED	16-Jun-23
LAB SAMPLE No	127154	DATE RECEIVED	20-Jun-23
DATE TESTED	22-Jun-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	68	
90	100		2	63	15-80
75	100		0.6	56	
50	96		0.425	50	
37.5	92		0.3	40	
20	78		0.2	32	
14	75		0.15	31	
10	72		0.063	28	15-80



REMARKS
As received water content = 10.0%
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 14-Jul-23

M U R R A Y R I X
ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

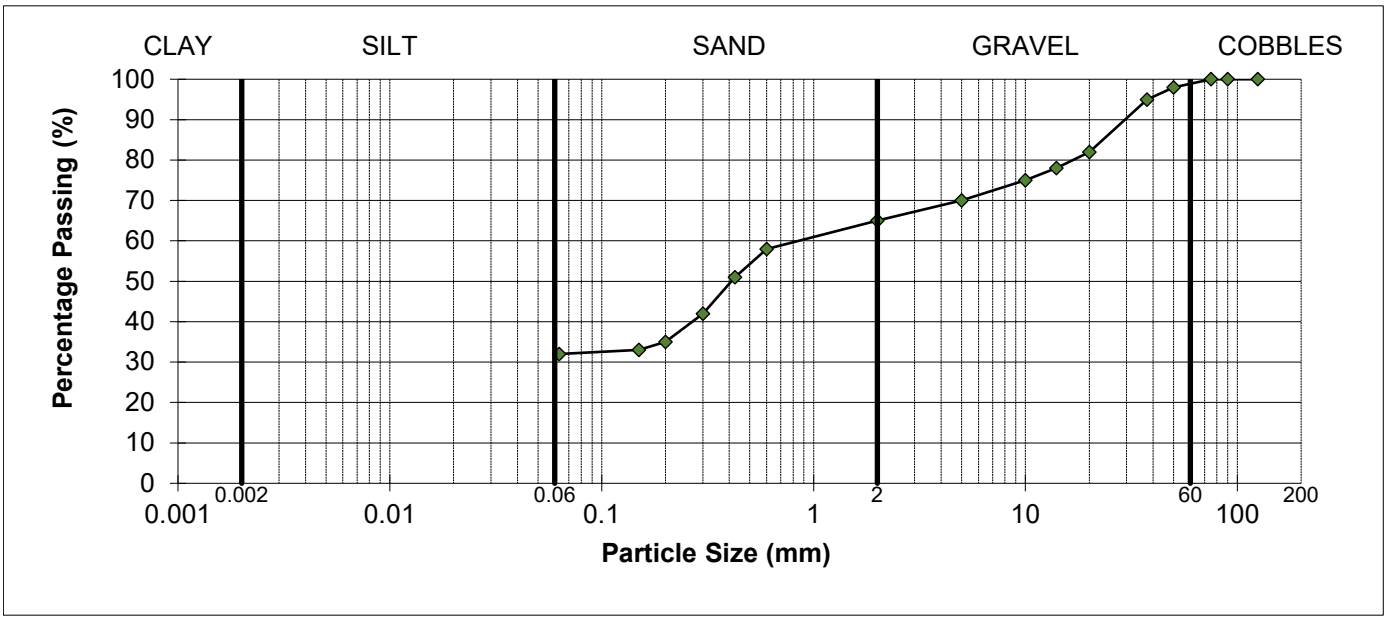
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/73

SAMPLE LABEL	Stockpile 13	DATE SAMPLED	08-Jun-23
LAB SAMPLE No	127155	DATE RECEIVED	20-Jun-23
DATE TESTED	22-Jun-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	70	
90	100		2	65	15-80
75	100		0.6	58	
50	98		0.425	51	
37.5	95		0.3	42	
20	82		0.2	35	
14	78		0.15	33	
10	75		0.063	32	15-80



REMARKS
As received water content = 10.5%
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 14-Jul-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-4:1990
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

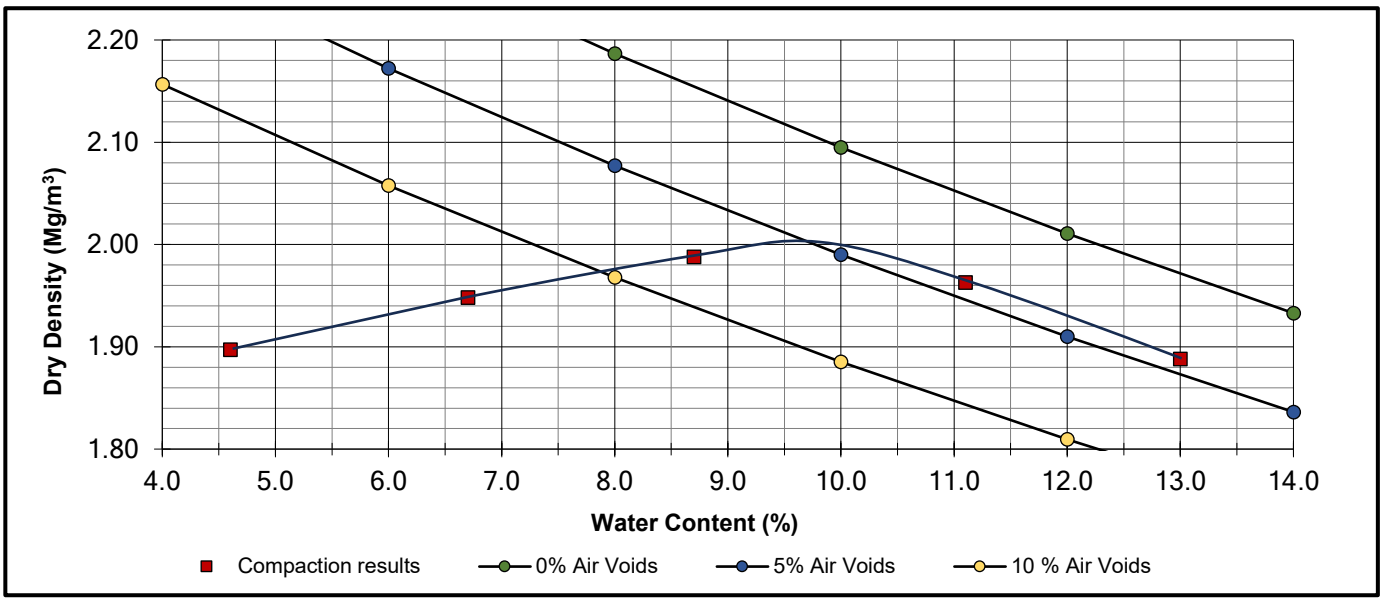
CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/73

SAMPLE LABEL	Stockpile 14	DATE SAMPLED	16-Jun-23
SAMPLE NUMBER	127153	DATE RECEIVED	20-Jun-23
DATE TESTED	29-Jun-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won
PRE TREATMENT	Air Dried / Single Sample

RETAINED 37.5mm	7 %	GRADING ZONE	Zone 5
RETAINED 20mm	14 %	PARTICLE DENSITY	2.65 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	4.6	1.897
2	6.7	1.948
3	8.7	1.988
4	11.1	1.963
5	13.0	1.888



OPTIMUM WATER CONTENT	**9.7**	(%)
MAXIMUM DRY DENSITY	**2.00**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 14-Jul-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-4:1990
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

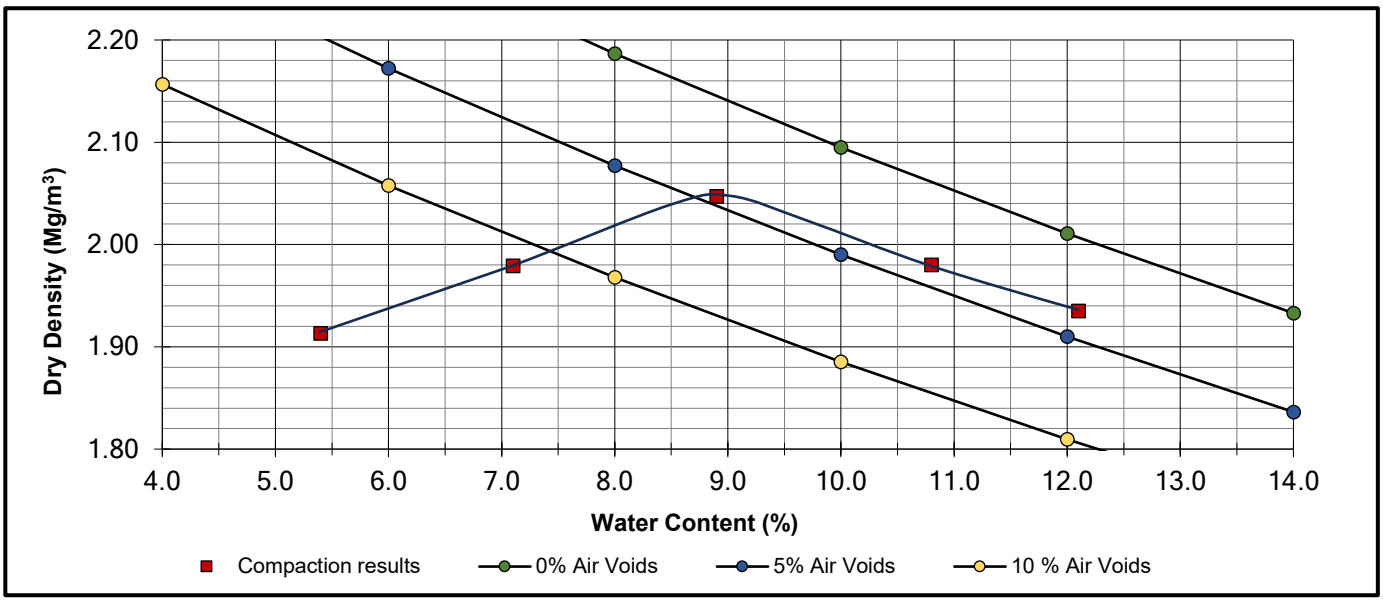
CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/73

SAMPLE LABEL	Stockpile 15	DATE SAMPLED	16-Jun-23
SAMPLE NUMBER	127154	DATE RECEIVED	20-Jun-23
DATE TESTED	29-Jun-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won
PRE TREATMENT	Air Dried / Single Sample

RETAINED 37.5mm	8 %	GRADING ZONE	Zone 5
RETAINED 20mm	22 %	PARTICLE DENSITY	2.65 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	5.4	1.913
2	7.1	1.979
3	8.9	2.047
4	10.8	1.980
5	12.1	1.935



OPTIMUM WATER CONTENT	**8.9**	(%)
MAXIMUM DRY DENSITY	**2.05**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 14-Jul-23

MURRAY RIX

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DUKINFIELD, CHESHIRE SK16 4QX
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UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-4:1990
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

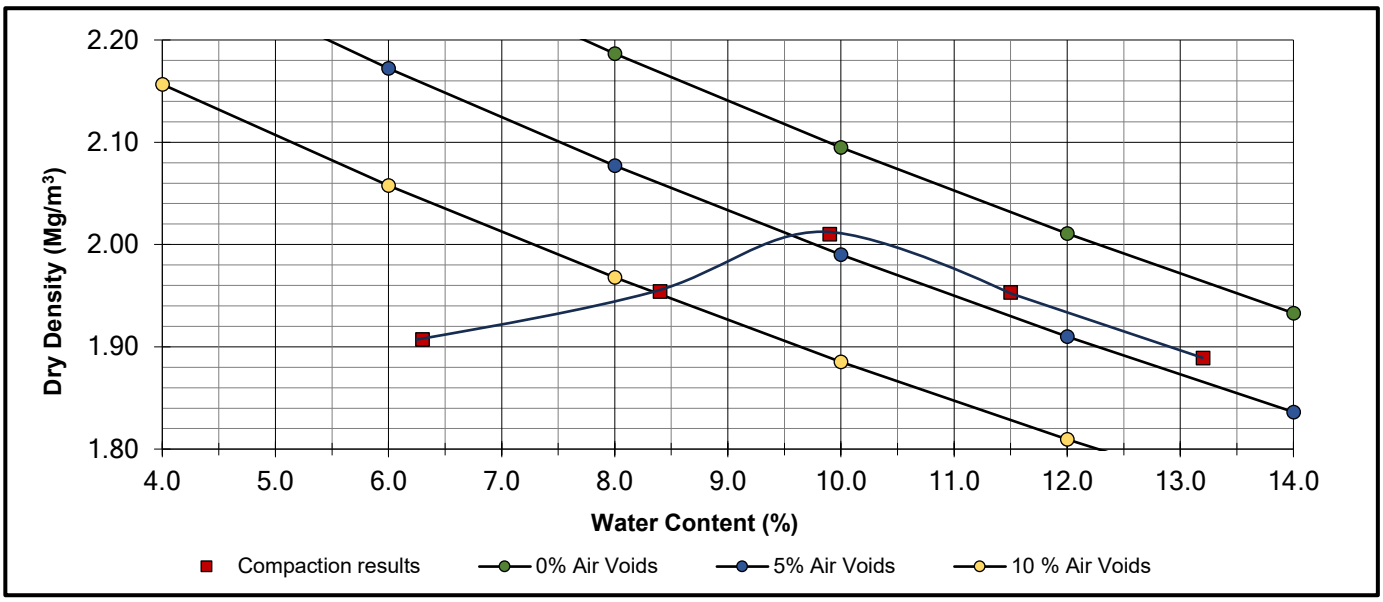
CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/73

SAMPLE LABEL	Stockpile 13	DATE SAMPLED	08-Jun-23
SAMPLE NUMBER	127155	DATE RECEIVED	20-Jun-23
DATE TESTED	29-Jun-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won
PRE TREATMENT	Air Dried / Single Sample

RETAINED 37.5mm	5 %	GRADING ZONE	Zone 4
RETAINED 20mm	18 %	PARTICLE DENSITY	2.65 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	6.3	1.907
2	8.4	1.954
3	9.9	2.010
4	11.5	1.953
5	13.2	1.889



OPTIMUM WATER CONTENT	**9.8**	(%)
MAXIMUM DRY DENSITY	**2.01**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 14-Jul-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

TEST CERTIFICATE

ACID SOLUBLE SULFIDE CONTENT
BS EN 1744-1:2009+A1:2012 Cl. 13

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/73

DATE TESTED	23 June 2023	DATE SAMPLED	08/16-Jun-23
SAMPLED BY	Client	DATE RECEIVED	20 June 2023

Sample Number	Site Mark	Aggregate Type	Acid Soluble Sulfide % S
127153	Stockpile 14	General Fill	0.03
127154	Stockpile 15	General Fill	0.04
127155	Stockpile 13	General Fill	0.02

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 14 July 2023

MURRAY RIX

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DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

TEST CERTIFICATE

TOTAL SULFUR CONTENT
BS EN 1744-1:2009+A1:2012 Cl. 11

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/73

DATE TESTED	23 June 2023	DATE SAMPLED	08/16-Jun-23
SAMPLED BY	Client	DATE RECEIVED	20 June 2023

Sample Number	Site Mark	Aggregate Type	Total Sulfur % S
127153	Stockpile 14	General Fill	<0.1
127154	Stockpile 15	General Fill	<0.1
127155	Stockpile 13	General Fill	<0.1

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 14 July 2023

MURRAY RIX
CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client e3p

Address Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

Contract Don Street

Job Number MRN 4588/74
Date of Issue 14 July 2023

Approved Signatories

S J Hutchings, O P Davies

Notes

1 All remaining samples and remnants from this contract will be disposed 28 days from the date of this report unless you notify us to the contrary.

2 Result certificates, in this report, not bearing a UKAS mark, are not included in our UKAS accreditation schedule.

3 Opinions and interpretations expressed herein are outside the scope of our UKAS accreditation.

4 Certified that the samples have been examined and tested in accordance with the terms of the contract/order and unless otherwise stated conform to the standards/specifications quoted.

5 The results included within the report are representative of the samples submitted for analysis.

6 This certificate should not be reproduced, except in full, without the express permission of the laboratory.

Andrew House, Hadfield Street, Dukinfield, Cheshire SK16 4QX Tel: 0161 475 0870
Email: enquiries@murrayrix.com Website: www.murrayrix.com

Also at: London: 020 8523 1999

UKAS TESTING 1580

Murray Rix is the trading name of Murray Rix (Northern) Limited. Registered in England 2878361

M U R R A Y R I X

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

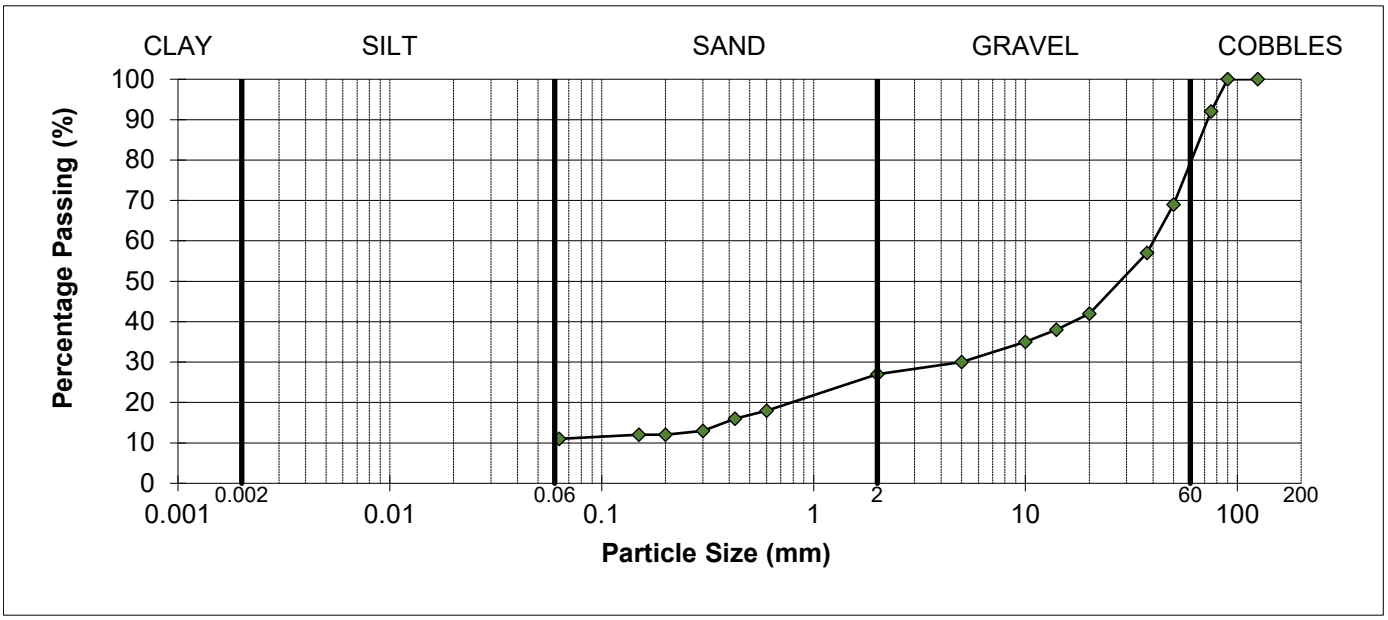
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/74

SAMPLE LABEL	LK CRUSH 101	DATE SAMPLED	20-Jun-23
LAB SAMPLE No	127153	DATE RECEIVED	20-Jun-23
DATE TESTED	22-Jun-23	SAMPLED BY	Client

MATERIAL	Crush
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	30	10-45
90	100	80-100	2	27	
75	92	65-100	0.6	18	0-25
50	69		0.425	16	
37.5	57	45-100	0.3	13	
20	42		0.2	12	
14	38		0.15	12	
10	35	15-60	0.063	11	0-12



REMARKS

Sample complies with the advised grading specification for a 6F2 material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 14-Jul-23

MURRAY RIX
CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client e3p

Address Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

Contract Don Street

Job Number MRN 4588/85
Date of Issue 08 August 2023

Approved Signatories

S J Hutchings, O P Davies

Notes

1 All remaining samples and remnants from this contract will be disposed 28 days from the date of this report unless you notify us to the contrary.

2 Result certificates, in this report, not bearing a UKAS mark, are not included in our UKAS accreditation schedule.

3 Opinions and interpretations expressed herein are outside the scope of our UKAS accreditation.

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TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

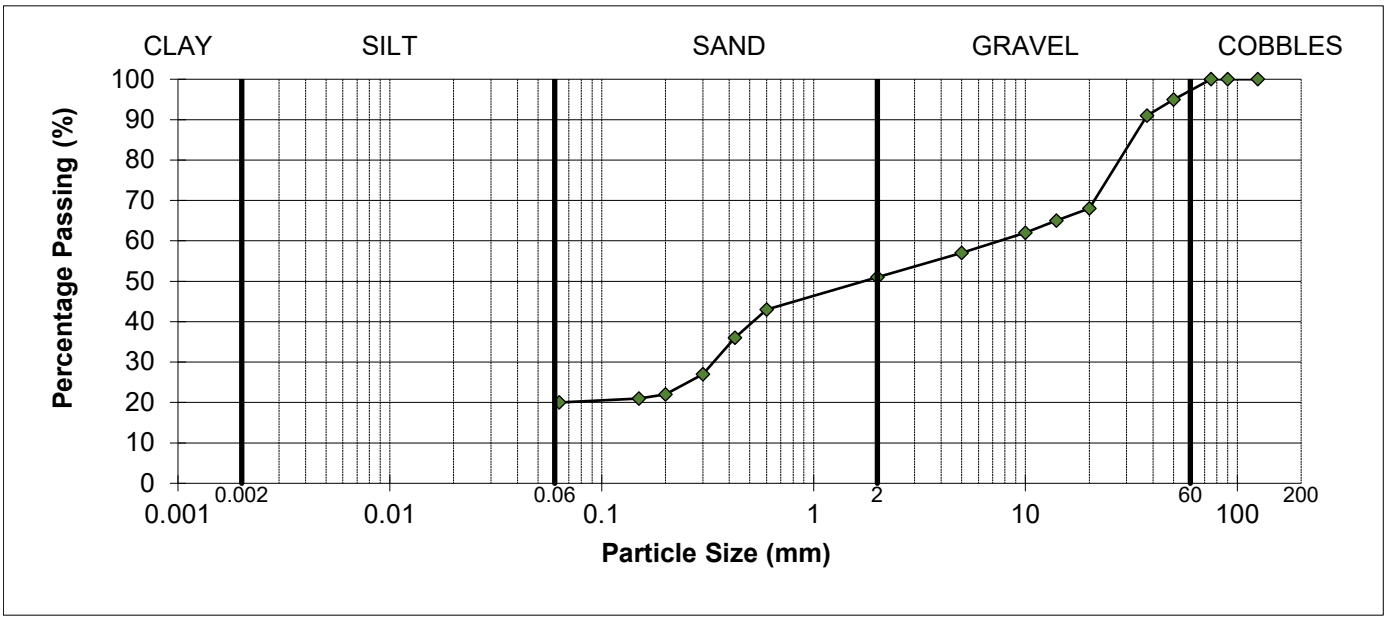
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/85

SAMPLE LABEL	Landfill Stockpile 16	DATE SAMPLED	27-May-23
LAB SAMPLE No	128192	DATE RECEIVED	07-Jul-23
DATE TESTED	14-Jul-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	57	
90	100		2	51	15-80
75	100		0.6	43	
50	95		0.425	36	
37.5	91		0.3	27	
20	68		0.2	22	
14	65		0.15	21	
10	62		0.063	20	15-80



REMARKS
As received water content = 15.0%
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 08-Aug-23

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ANDREW HOUSE, HADFIELD STREET,
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TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

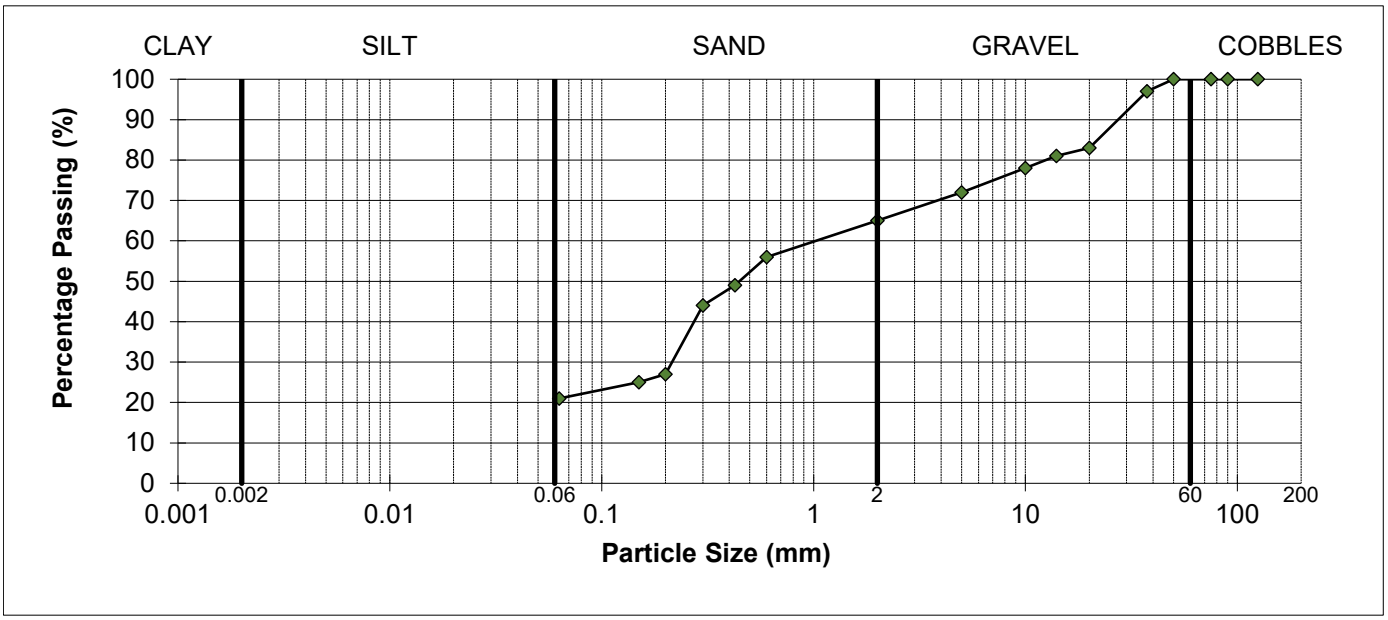
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/85

SAMPLE LABEL	Landfill Stockpile 17	DATE SAMPLED	27-May-23
LAB SAMPLE No	128193	DATE RECEIVED	07-Jul-23
DATE TESTED	14-Jul-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	72	
90	100		2	65	15-80
75	100		0.6	56	
50	100		0.425	49	
37.5	97		0.3	44	
20	83		0.2	27	
14	81		0.15	25	
10	78		0.063	21	15-80



REMARKS
As received water content = 13.6%
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 08-Aug-23

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TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

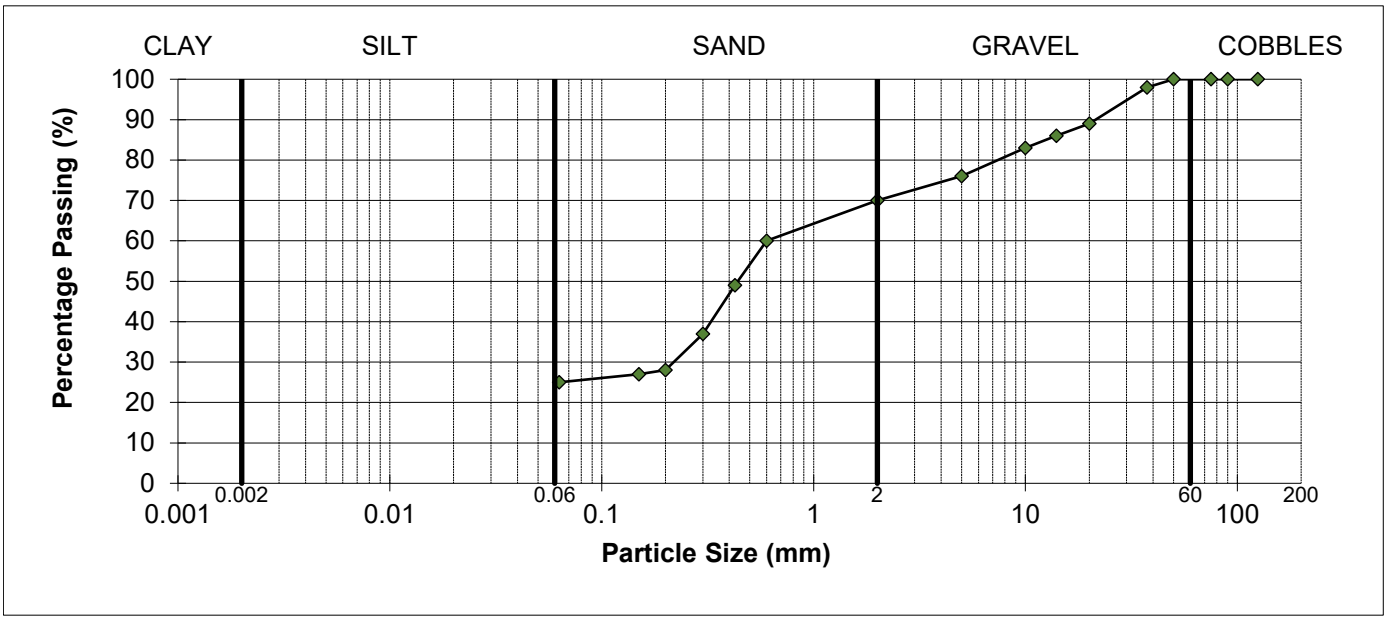
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/85

SAMPLE LABEL	Landfill Stockpile 18	DATE SAMPLED	07-May-23
LAB SAMPLE No	128194	DATE RECEIVED	07-Jul-23
DATE TESTED	14-Jul-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	76	
90	100		2	70	15-80
75	100		0.6	60	
50	100		0.425	49	
37.5	98		0.3	37	
20	89		0.2	28	
14	86		0.15	27	
10	83		0.063	25	15-80



REMARKS
As received water content = 15.8%
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 08-Aug-23

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ANDREW HOUSE, HADFIELD STREET,
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UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

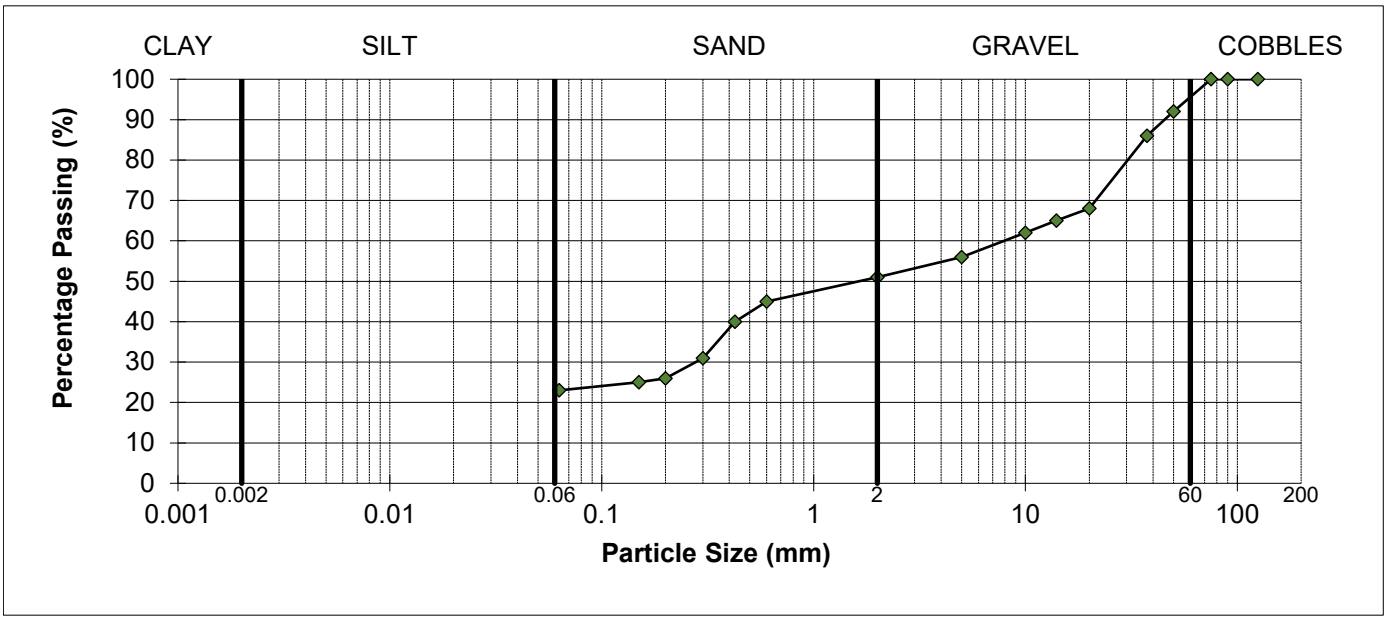
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/85

SAMPLE LABEL	Landfill Stockpile 21	DATE SAMPLED	27-May-23
LAB SAMPLE No	128195	DATE RECEIVED	07-Jul-23
DATE TESTED	14-Jul-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	56	
90	100		2	51	15-80
75	100		0.6	45	
50	92		0.425	40	
37.5	86		0.3	31	
20	68		0.2	26	
14	65		0.15	25	
10	62		0.063	23	15-80



REMARKS
As received water content = 13.2%
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 08-Aug-23

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TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

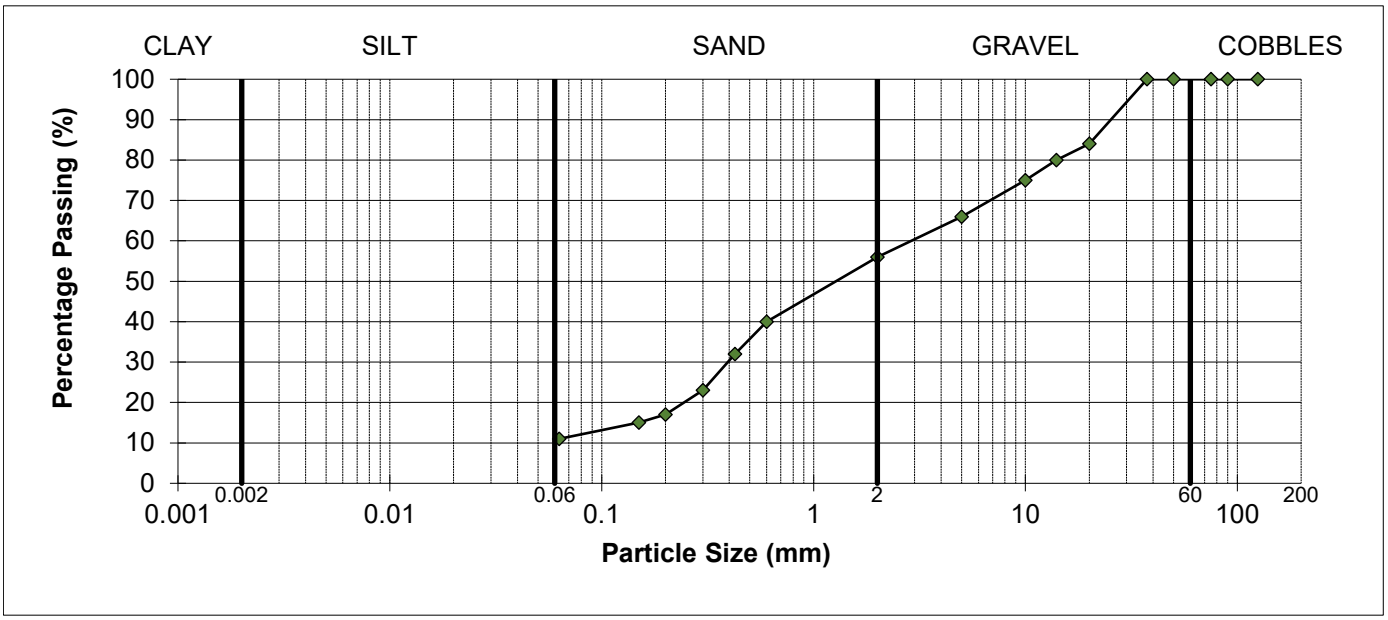
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/85

SAMPLE LABEL	Landfill Stockpile 20	DATE SAMPLED	07-May-23
LAB SAMPLE No	128196	DATE RECEIVED	07-Jul-23
DATE TESTED	14-Jul-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	95-100	5	66	
90	100		2	56	
75	100		0.6	40	
50	100		0.425	32	
37.5	100		0.3	23	
20	84		0.2	17	
14	80		0.15	15	
10	75		0.063	11	<15



REMARKS
As received water content = 13.2%
Sample complies with the advised grading specification for a 1A material (SHW 2016), Uniformity coefficient = >10

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 08-Aug-23

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UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

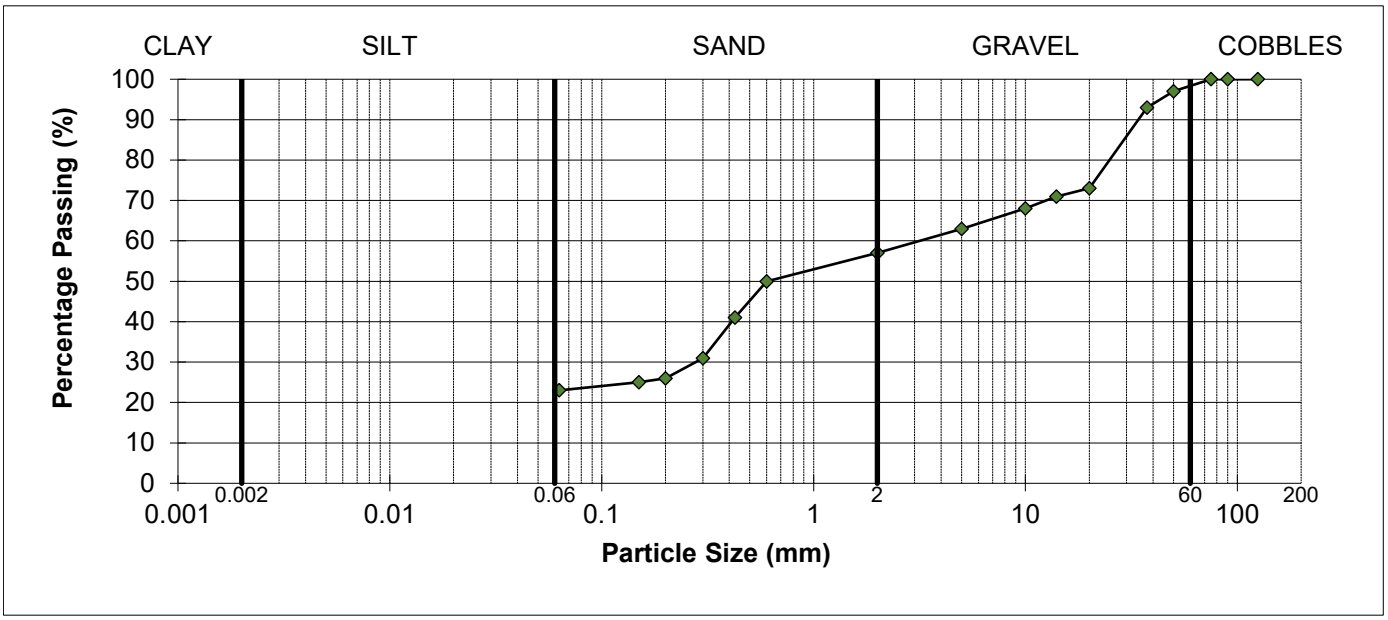
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/85

SAMPLE LABEL	Landfill Stockpile 23	DATE SAMPLED	07-May-23
LAB SAMPLE No	128197	DATE RECEIVED	07-Jul-23
DATE TESTED	14-Jul-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	63	
90	100		2	57	15-80
75	100		0.6	50	
50	97		0.425	41	
37.5	93		0.3	31	
20	73		0.2	26	
14	71		0.15	25	
10	68		0.063	23	15-80



REMARKS

As received water content = 13.8%

Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 08-Aug-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-2:2022 Cl.11
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

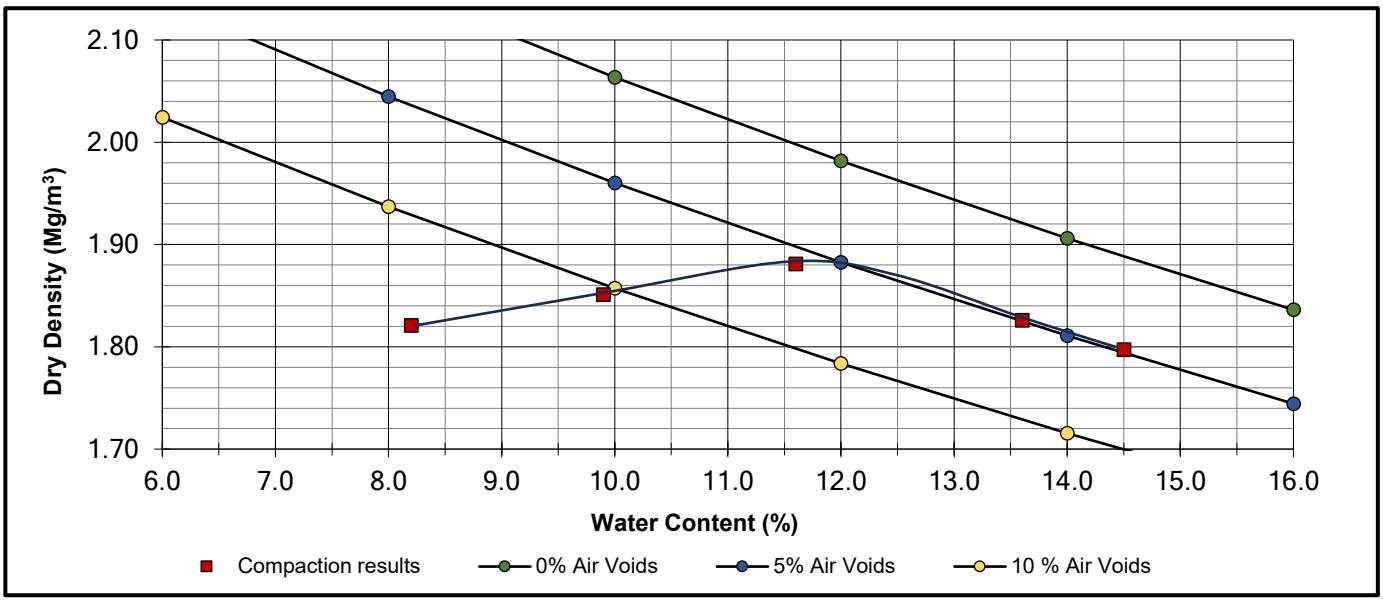
CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/85

SAMPLE LABEL	Landfill Stockpile 16	DATE SAMPLED	27-May-23
SAMPLE NUMBER	128192	DATE RECEIVED	07-Jul-23
DATE TESTED	17-Jul-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won
PRE TREATMENT	Air Dried / Single Sample

RETAINED 37.5mm	9 %	GRADING ZONE	Zone X
RETAINED 20mm	32 %	PARTICLE DENSITY	2.60 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	8.2	1.821
2	9.9	1.851
3	11.6	1.881
4	13.6	1.826
5	14.5	1.797



OPTIMUM WATER CONTENT	**12**	(%)
MAXIMUM DRY DENSITY	**1.88**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 08-Aug-23

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UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-2:2022 Cl.11
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

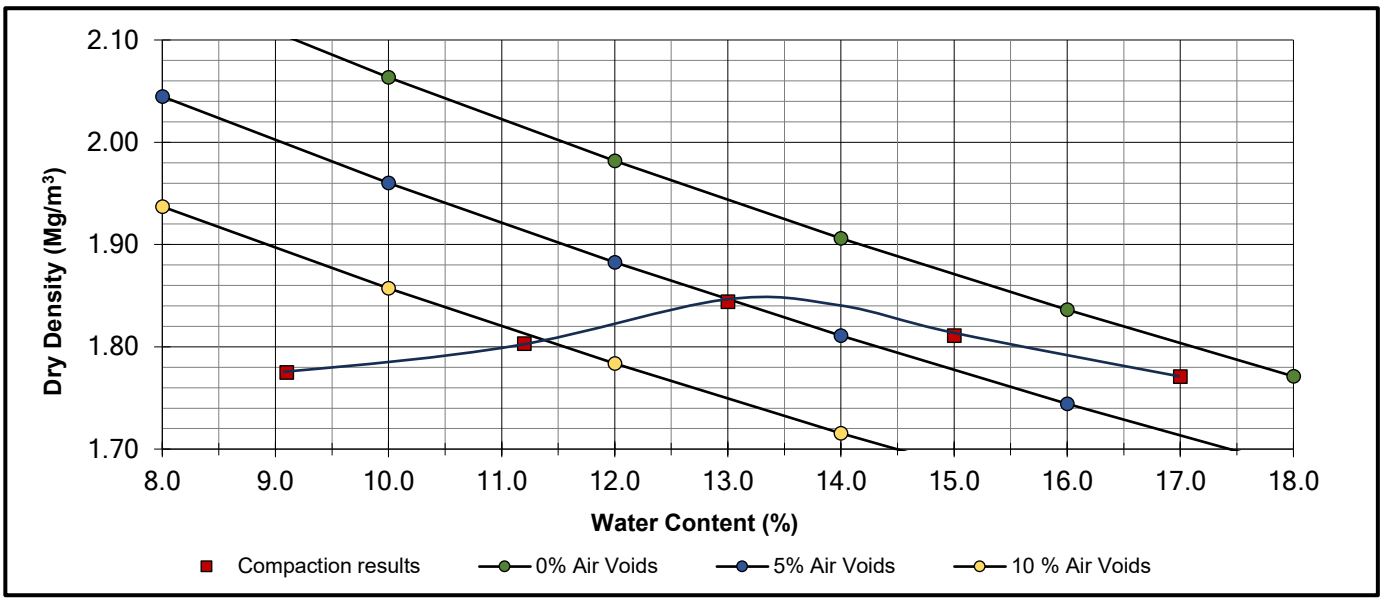
CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/85

SAMPLE LABEL	Landfill Stockpile 17	DATE SAMPLED	27-May-23
SAMPLE NUMBER	128193	DATE RECEIVED	07-Jul-23
DATE TESTED	17-Jul-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won
PRE TREATMENT	Air Dried / Single Sample

RETAINED 37.5mm	3 %	GRADING ZONE	Zone 5
RETAINED 20mm	17 %	PARTICLE DENSITY	2.60 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	9.1	1.775
2	11.2	1.803
3	13.0	1.844
4	15.0	1.811
5	17.0	1.771



OPTIMUM WATER CONTENT	**13**	(%)
MAXIMUM DRY DENSITY	**1.85**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 08-Aug-23

MURRAY RIX

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TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-2:2022 Cl.11
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

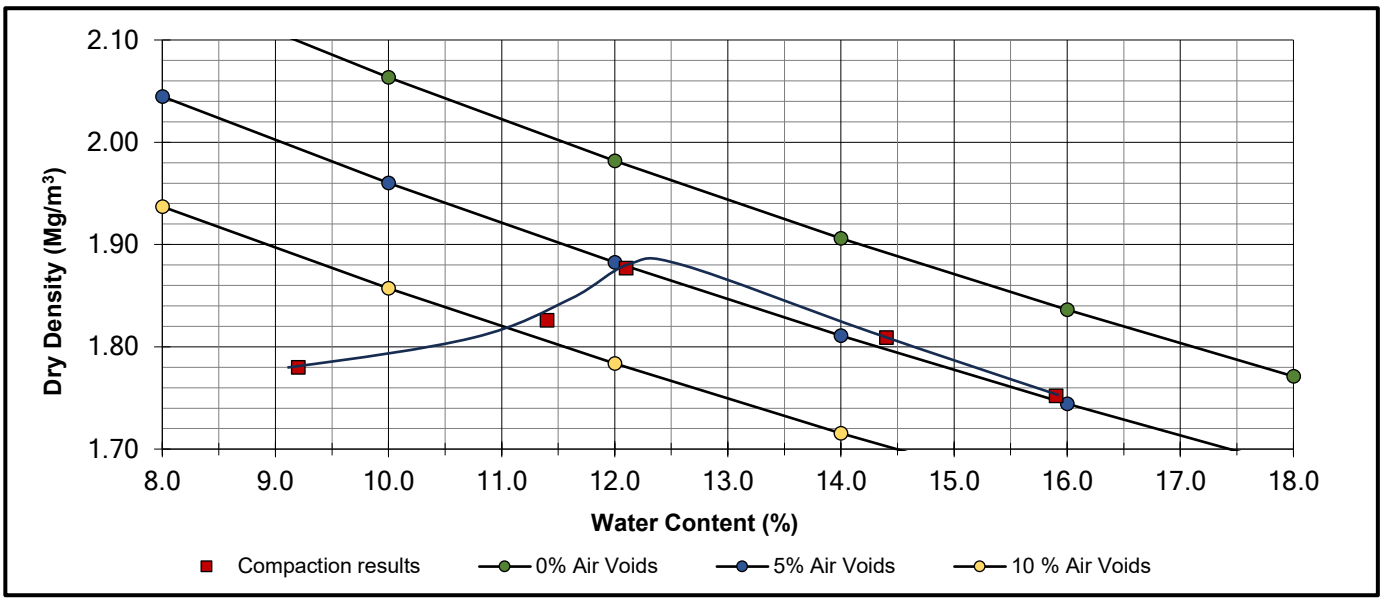
CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/85

SAMPLE LABEL	Landfill Stockpile 18	DATE SAMPLED	07-May-23
SAMPLE NUMBER	128194	DATE RECEIVED	07-Jul-23
DATE TESTED	17-Jul-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won
PRE TREATMENT	Air Dried / Single Sample

RETAINED 37.5mm	2	%	GRADING ZONE	Zone 5	
RETAINED 20mm	11	%	PARTICLE DENSITY	2.60	Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	9.2	1.780
2	11.4	1.826
3	12.1	1.877
4	14.4	1.809
5	15.9	1.752



OPTIMUM WATER CONTENT	**12**	(%)
MAXIMUM DRY DENSITY	**1.88**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 08-Aug-23

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TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-2:2022 Cl.11
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

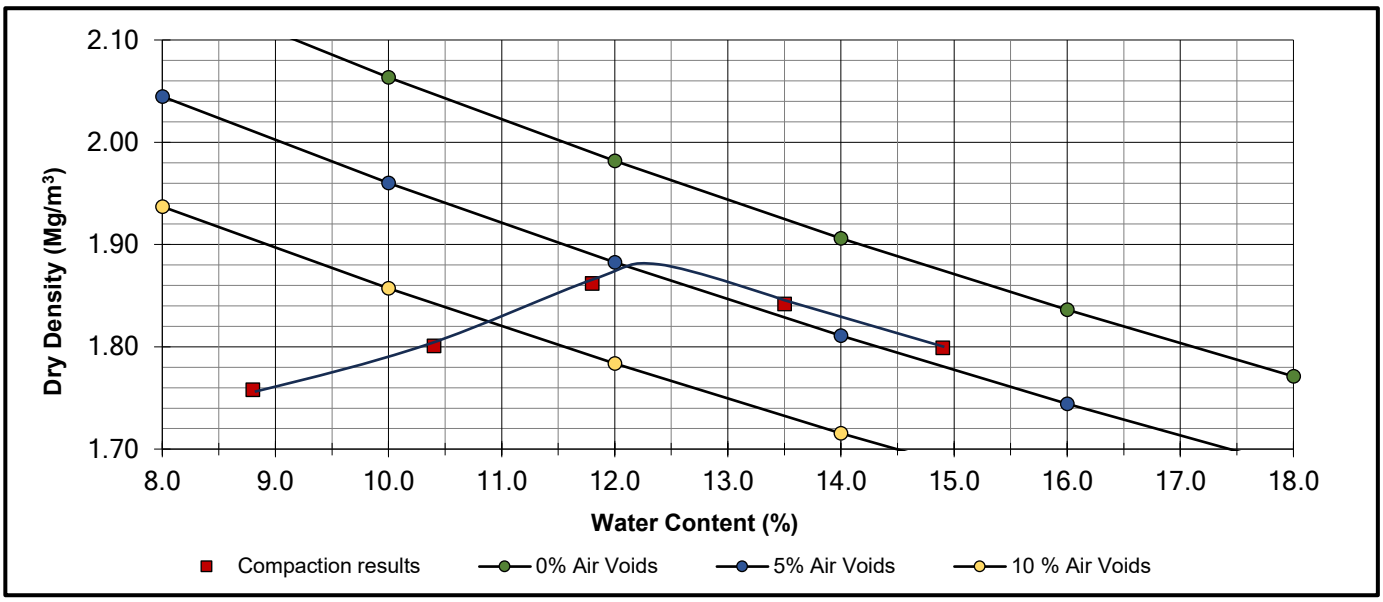
CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/85

SAMPLE LABEL	Landfill Stockpile 21	DATE SAMPLED	27-May-23
SAMPLE NUMBER	128195	DATE RECEIVED	07-Jul-23
DATE TESTED	17-Jul-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won
PRE TREATMENT	Air Dried / Single Sample

RETAINED 37.5mm	14 %	GRADING ZONE	Zone X
RETAINED 20mm	32 %	PARTICLE DENSITY	2.60 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	8.8	1.758
2	10.4	1.801
3	11.8	1.862
4	13.5	1.842
5	14.9	1.799



OPTIMUM WATER CONTENT	**12**	(%)
MAXIMUM DRY DENSITY	**1.88**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 08-Aug-23

MURRAY RIX

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UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-2:2022 Cl.11
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

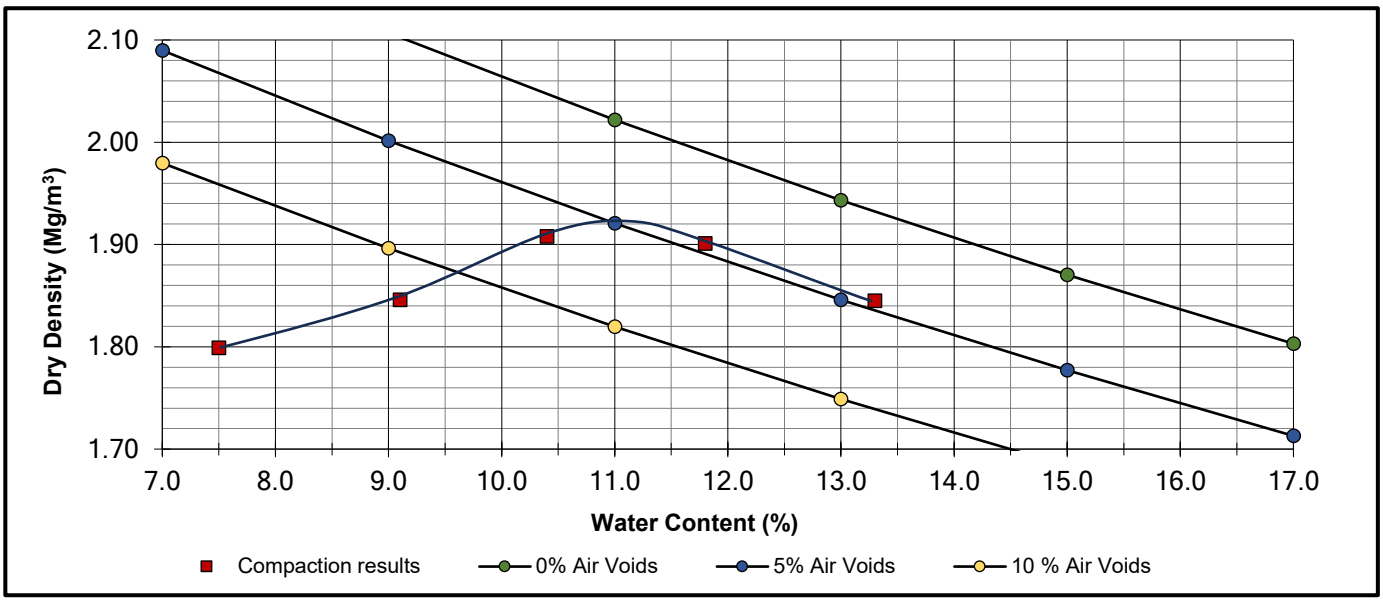
CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/85

SAMPLE LABEL	Landfill Stockpile 20	DATE SAMPLED	07-May-23
SAMPLE NUMBER	128196	DATE RECEIVED	07-Jul-23
DATE TESTED	17-Jul-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won
PRE TREATMENT	Air Dried / Single Sample

RETAINED 37.5mm	0	%	GRADING ZONE	Zone 3	
RETAINED 20mm	6	%	PARTICLE DENSITY	2.60	Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	7.5	1.799
2	9.1	1.846
3	10.4	1.908
4	11.8	1.901
5	13.3	1.845



OPTIMUM WATER CONTENT	**11**	(%)
MAXIMUM DRY DENSITY	**1.92**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 08-Aug-23

MURRAY RIX

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TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-2:2022 Cl.11
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

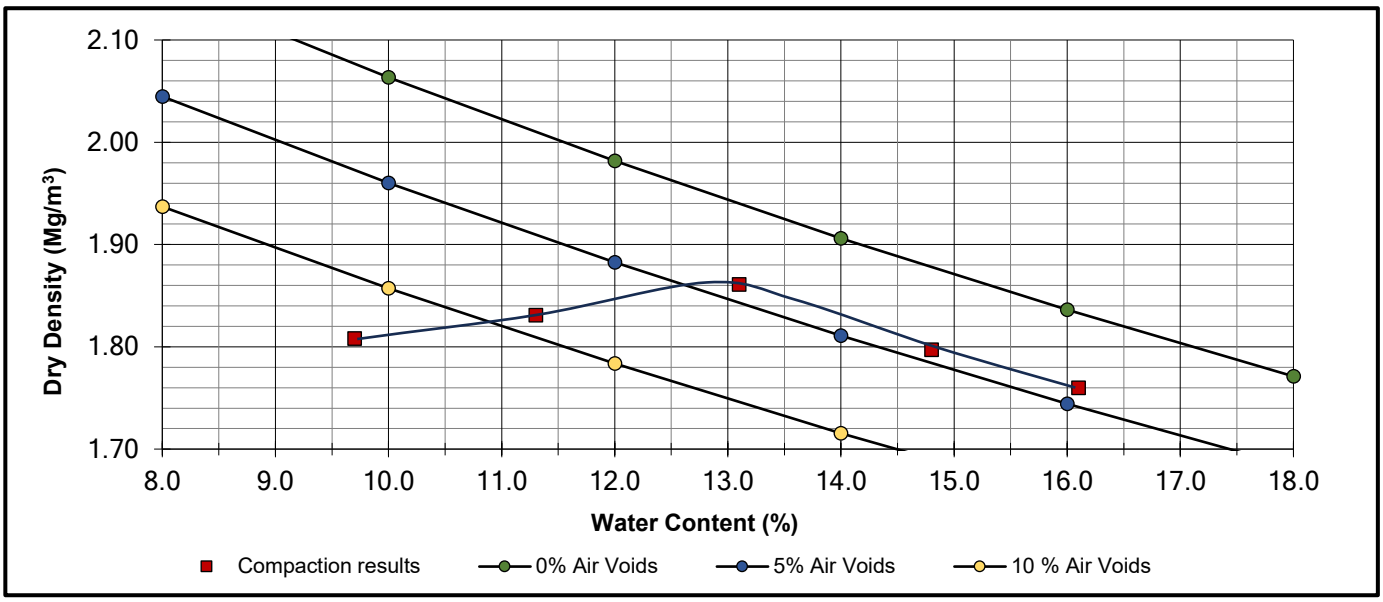
CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/85

SAMPLE LABEL	Landfill Stockpile 23	DATE SAMPLED	07-May-23
SAMPLE NUMBER	128197	DATE RECEIVED	07-Jul-23
DATE TESTED	17-Jul-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won
PRE TREATMENT	Air Dried / Single Sample

RETAINED 37.5mm	7 %	GRADING ZONE	Zone 5
RETAINED 20mm	27 %	PARTICLE DENSITY	2.60 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	9.7	1.808
2	11.3	1.831
3	13.1	1.861
4	14.8	1.797
5	16.1	1.760



OPTIMUM WATER CONTENT	**13**	(%)
MAXIMUM DRY DENSITY	**1.86**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 08-Aug-23

MURRAY RIX

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TEL 0161 475 0870

TEST CERTIFICATE

ACID SOLUBLE SULFIDE CONTENT
BS EN 1744-1:2009+A1:2012 Cl. 13

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/85

DATE TESTED	17 July 2023	DATE SAMPLED	07, 27 May 2023
SAMPLED BY	Client	DATE RECEIVED	07 July 2023

Sample Number	Site Mark	Aggregate Type	Acid Soluble Sulfide % S
128192	Landfill Stockpile 16	General Fill	<0.01
128193	Landfill Stockpile 17	General Fill	<0.01
128194	Landfill Stockpile 18	General Fill	<0.01
128195	Landfill Stockpile 21	General Fill	<0.01
128196	Landfill Stockpile 20	General Fill	<0.01
128197	Landfill Stockpile 23	General Fill	<0.01

REMARKS

SIGNED 

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 08 August 2023

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

TEST CERTIFICATE

TOTAL SULFUR CONTENT
BS EN 1744-1:2009+A1:2012 Cl. 11

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/85

DATE TESTED	17 July 2023	DATE SAMPLED	07, 27 May 2023
SAMPLED BY	Client	DATE RECEIVED	07 July 2023

Sample Number	Site Mark	Aggregate Type	Total Sulfur % S
128192	Landfill Stockpile 16	General Fill	0.1
128193	Landfill Stockpile 17	General Fill	0.1
128194	Landfill Stockpile 18	General Fill	0.1
128195	Landfill Stockpile 21	General Fill	0.1
128196	Landfill Stockpile 20	General Fill	0.1
128197	Landfill Stockpile 23	General Fill	0.1

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 08 August 2023

MURRAY RIX
CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client e3p

Address Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

Contract Don Street

Job Number MRN 4588/86
Date of Issue 08 August 2023

Approved Signatories

S J Hutchings, O P Davies

Notes

1 All remaining samples and remnants from this contract will be disposed 28 days from the date of this report unless you notify us to the contrary.

2 Result certificates, in this report, not bearing a UKAS mark, are not included in our UKAS accreditation schedule.

3 Opinions and interpretations expressed herein are outside the scope of our UKAS accreditation.

4 Certified that the samples have been examined and tested in accordance with the terms of the contract/order and unless otherwise stated conform to the standards/specifications quoted.

5 The results included within the report are representative of the samples submitted for analysis.

6 This certificate should not be reproduced, except in full, without the express permission of the laboratory.

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M U R R A Y R I X
ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

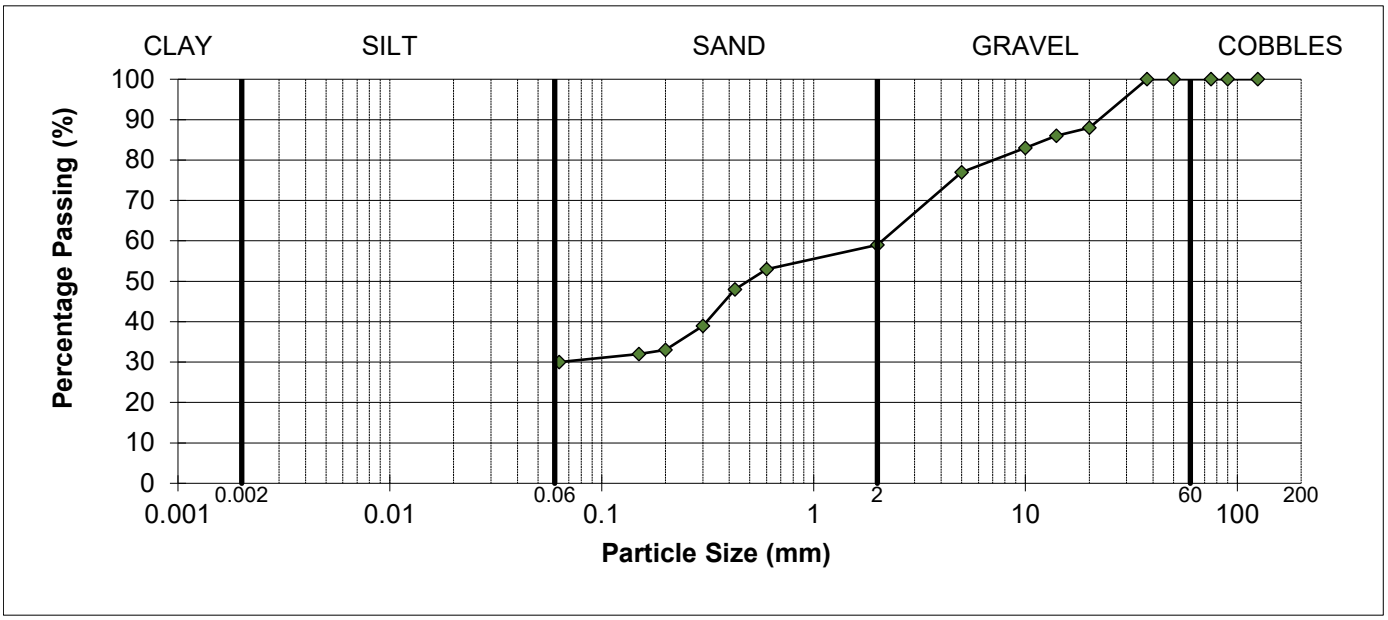
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/86

SAMPLE LABEL	Landfill Stockpile 22	DATE SAMPLED	11-Jul-23
LAB SAMPLE No	128397	DATE RECEIVED	12-Jul-23
DATE TESTED	17-Jul-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	77	
90	100		2	59	15-80
75	100		0.6	53	
50	100		0.425	48	
37.5	100		0.3	39	
20	88		0.2	33	
14	86		0.15	32	
10	83		0.063	30	15-80



REMARKS
As received water content = 14.8%
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 08-Aug-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-2:2022 Cl.11
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

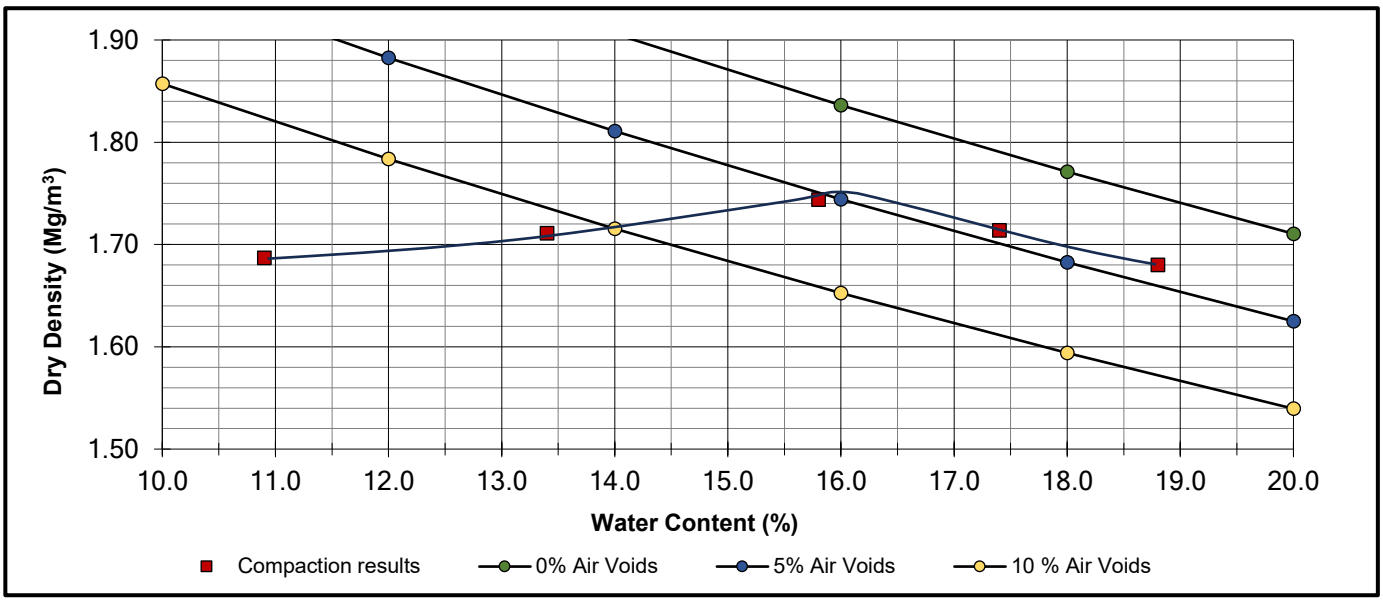
CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/86

SAMPLE LABEL	Landfill Stockpile 22	DATE SAMPLED	11-Jul-23
SAMPLE NUMBER	128192	DATE RECEIVED	12-Jul-23
DATE TESTED	17-Jul-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won
PRE TREATMENT	Air Dried / Single Sample

RETAINED 37.5mm	0 %	GRADING ZONE	Zone 3
RETAINED 20mm	12 %	PARTICLE DENSITY	2.60 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	10.9	1.687
2	13.4	1.711
3	15.8	1.744
4	17.4	1.714
5	18.8	1.680



OPTIMUM WATER CONTENT	**16**	(%)
MAXIMUM DRY DENSITY	**1.75**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 08-Aug-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

TEST CERTIFICATE

ACID SOLUBLE SULFIDE CONTENT
BS EN 1744-1:2009+A1:2012 Cl. 13

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/86

DATE TESTED	17 July 2023	DATE SAMPLED	11 July 2023
SAMPLED BY	Client	DATE RECEIVED	12 July 2023

Sample Number	Site Mark	Aggregate Type	Acid Soluble Sulfide % S
128397	Landfill Stockpile 22	General Fill	<0.01

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 08 August 2023

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

TEST CERTIFICATE

TOTAL SULFUR CONTENT
BS EN 1744-1:2009+A1:2012 Cl. 11

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/86

DATE TESTED	17 July 2023	DATE SAMPLED	11 July 2023
SAMPLED BY	Client	DATE RECEIVED	12 July 2023

Sample Number	Site Mark	Aggregate Type	Total Sulfur % S
128397	Landfill Stockpile 22	General Fill	0.1

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 08 August 2023

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

TEST CERTIFICATE

WATER SOLUBLE SULFATE CONTENT
BS EN 1744-1:2009+A1:2012 Cl. 10

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/86

DATE TESTED	17 July 2023	DATE SAMPLED	11 July 2023
SAMPLED BY	Client	DATE RECEIVED	29 June 2023

Sample Number	Site Mark	Aggregate Type	Water Soluble Sulfate % SO_4
128398	Landfill Stockpile 18	General Fill	0.02

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 08 August 2023

M U R R A Y R I X

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DETERMINATION OF CONSTITUENTS OF COARSE RECYCLED AGGREGATE

BS EN 933-11:2009

CLIENT	e3p
SITE	Don Street

SAMPLE DETAILS

Job Number	:	MRN 4588/86
Laboratory sample number	:	128397
Material	:	General Fill
Advised source	:	Site won
Site mark	:	Landfill Stockpile 18
Certificate of sampling received	:	No
Date and time of sampling	:	29 June 2023
Date received at Laboratory	:	11 July 2023
Date of start of test	:	17 July 2023
Sampling Location	:	Not advised
Method of sampling	:	BS EN 932-1 : 1997
Sampled by	:	Client
Mass of dry sample tested	:	50 kg
Drying Temperature	:	40 ± 5°C

RESULT

Constituent	Description	Proportion (%)
Rc	Concrete, Concrete products, Mortar, Concrete masonry units	1.3
Ru	Unbound aggregate, Natural stone, Hydraulically bound aggregate	15
Rb	Clay masonry units (i.e. bricks & tiles), Calcium silicate masonry units, Aerated non-floating concrete	2.8
Ra	Bituminous materials	0.0
Rg	Glass	0.1
X	Other: Cohesive (i.e. clay & soil), Metals (ferrous & non-ferrous), Non-floating wood, plastic & rubber, Gypsum plaster	81
FL	Floating Particles (cm^3/kg)	0.1

Comments
Client requested constituent X to be reported separately to clay/soil. No other consituent X was present, above consituent X figure is shown as the clay/soil proportion.

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 08-Aug-23

MURRAY RIX
CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client e3p

Address Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

Contract Don Street

Job Number MRN 4588/105
Date of Issue 25 September 2023
Page 1 of 7

Approved Signatories

S J Hutchings, O P Davies

Notes

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M U R R A Y R I X
ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

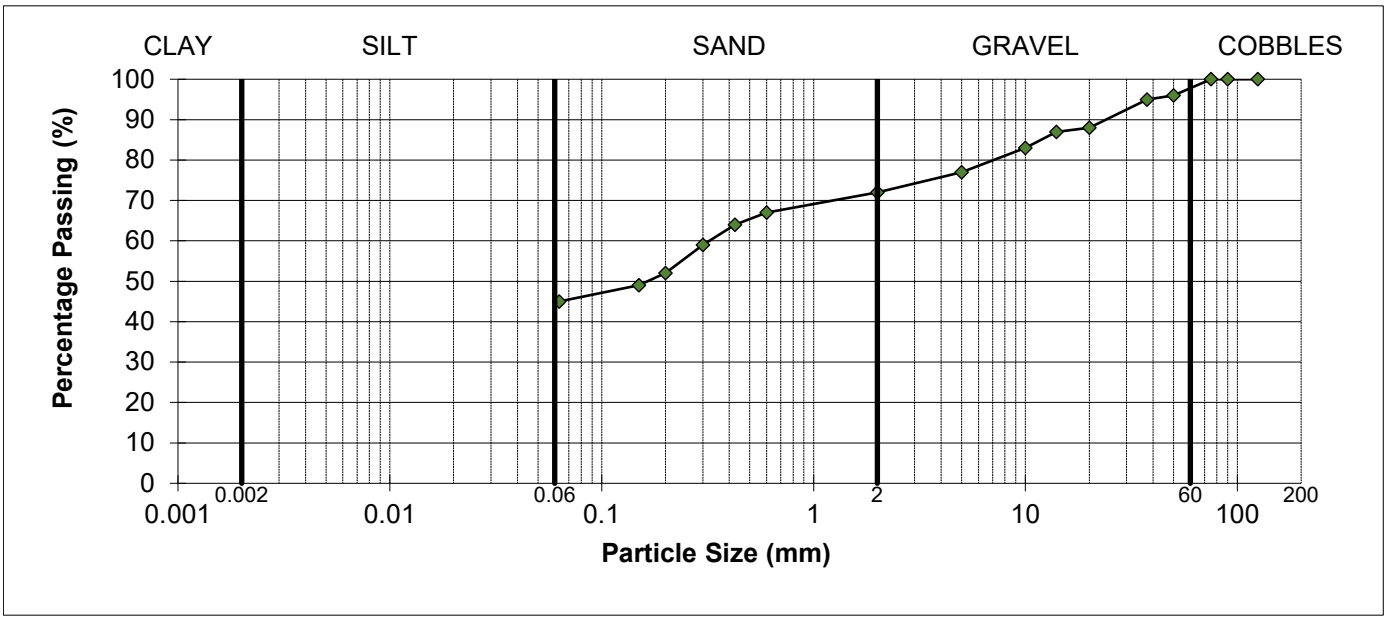
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/105

SAMPLE LABEL	Stockpile 28	DATE SAMPLED	25-Aug-23
LAB SAMPLE No	130512	DATE RECEIVED	28-Aug-23
DATE TESTED	30-Aug-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	77	
90	100		2	72	15-80
75	100		0.6	67	
50	96		0.425	64	
37.5	95		0.3	59	
20	88		0.2	52	
14	87		0.15	49	
10	83		0.063	45	15-80



REMARKS
As received water content = 14.2%
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 25-Sep-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-2:2022 Cl.11
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

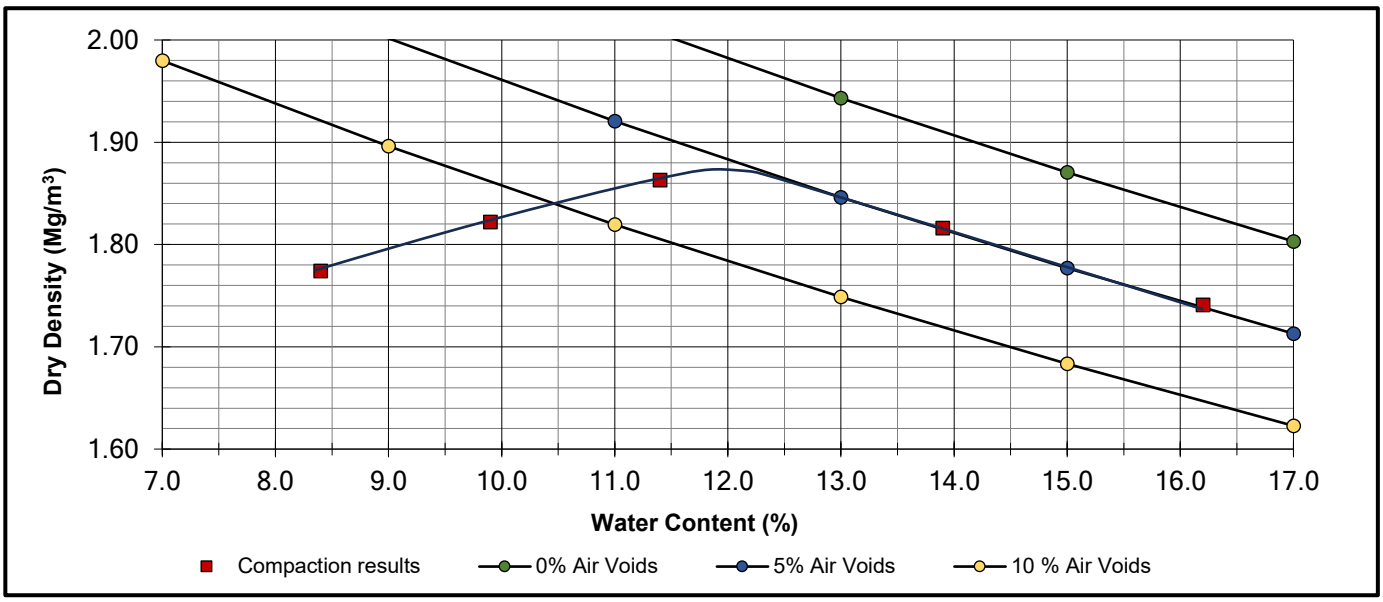
CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/105

SAMPLE LABEL	Stockpile 28	DATE SAMPLED	28-Aug-23
SAMPLE NUMBER	128192	DATE RECEIVED	28-Aug-23
DATE TESTED	31-Aug-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won
PRE TREATMENT	Air Dried / Single Sample

RETAINED 37.5mm	5 %	GRADING ZONE	Zone 4
RETAINED 20mm	12 %	PARTICLE DENSITY	2.60 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	8.4	1.774
2	9.9	1.822
3	11.4	1.863
4	13.9	1.816
5	16.2	1.741



OPTIMUM WATER CONTENT	**12**	(%)
MAXIMUM DRY DENSITY	**1.87**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 25-Sep-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

TEST CERTIFICATE

ACID SOLUBLE SULFIDE CONTENT
BS EN 1744-1:2009+A1:2012 Cl. 13

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/105

DATE TESTED	31 August 2023	DATE SAMPLED	31-Jul-23, 25-Aug-23
SAMPLED BY	Client	DATE RECEIVED	28 August 2023

Sample Number	Site Mark	Aggregate Type	Acid Soluble Sulfide % S
130511	SP18	General Fill	<0.01
130512	Stockpile 28	General Fill	<0.01

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 25 September 2023

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

TEST CERTIFICATE

TOTAL SULFUR CONTENT
BS EN 1744-1:2009+A1:2012 Cl. 11

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/105

DATE TESTED	31 August 2023	DATE SAMPLED	31-Jul-23, 25-Aug-23
SAMPLED BY	Client	DATE RECEIVED	28 August 2023

Sample Number	Site Mark	Aggregate Type	Total Sulfur % S
130511	SP18	General Fill	<0.1
130512	Stockpile 28	General Fill	0.1

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 25 September 2023

M U R R A Y R I X

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DETERMINATION OF CONSTITUENTS OF COARSE RECYCLED AGGREGATE

BS EN 933-11:2009

CLIENT	e3p
SITE	Don Street

SAMPLE DETAILS

Job Number	:	MRN 4588/105
Laboratory sample number	:	130512
Material	:	General Fill
Advised source	:	Site won
Site mark	:	Stockpile 28
Certificate of sampling received	:	No
Date and time of sampling	:	25 August 2023
Date received at Laboratory	:	28 August 2023
Date of start of test	:	31 August 2023
Sampling Location	:	Not advised
Method of sampling	:	BS EN 932-1 : 1997
Sampled by	:	Client
Mass of dry sample tested	:	50 kg
Drying Temperature	:	40 ± 5°C

RESULT

Constituent	Description	Proportion (%)
Rc	Concrete, Concrete products, Mortar, Concrete masonry units	0.0
Ru	Unbound aggregate, Natural stone, Hydraulically bound aggregate	12
Rb	Clay masonry units (i.e. bricks & tiles), Calcium silicate masonry units, Aerated non-floating concrete	4.3
Ra	Bituminous materials	0.0
Rg	Glass	0.0
X	Other: Cohesive (i.e. clay & soil), Metals (ferrous & non-ferrous), Non-floating wood, plastic & rubber, Gypsum plaster	84
FL	Floating Particles (cm^3/kg)	0.6

Comments
Client requested constituent X to be reported separately to clay/soil. No other consituent X was present, above consituent X figure is shown as the clay/soil proportion.

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 25-Sep-23

M U R R A Y R I X

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DETERMINATION OF CONSTITUENTS OF COARSE RECYCLED AGGREGATE

BS EN 933-11:2009

CLIENT	e3p
SITE	Don Street

SAMPLE DETAILS

Job Number	:	MRN 4588/105
Laboratory sample number	:	130511
Material	:	General Fill
Advised source	:	Site won
Site mark	:	SP19
Certificate of sampling received	:	No
Date and time of sampling	:	31 July 2023
Date received at Laboratory	:	28 August 2023
Date of start of test	:	31 August 2023
Sampling Location	:	Not advised
Method of sampling	:	BS EN 932-1 : 1997
Sampled by	:	Client
Mass of dry sample tested	:	50 kg
Drying Temperature	:	40 ± 5°C

RESULT

Constituent	Description	Proportion (%)
Rc	Concrete, Concrete products, Mortar, Concrete masonry units	0.7
Ru	Unbound aggregate, Natural stone, Hydraulically bound aggregate	18
Rb	Clay masonry units (i.e. bricks & tiles), Calcium silicate masonry units, Aerated non-floating concrete	3.9
Ra	Bituminous materials	0.0
Rg	Glass	0.2
X	Other: Cohesive (i.e. clay & soil), Metals (ferrous & non-ferrous), Non-floating wood, plastic & rubber, Gypsum plaster	77
FL	Floating Particles (cm^3/kg)	0.1

Comments
Client requested constituent X to be reported separately to clay/soil. No other consituent X was present, above consituent X figure is shown as the clay/soil proportion.

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 25-Sep-23

MURRAY RIX
CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client e3p

Address Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

Contract Don Street

Job Number MRN 4588/106
Date of Issue 22 September 2023

Approved Signatories

S J Hutchings, O P Davies

Notes

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Andrew House, Hadfield Street, Dukinfield, Cheshire SK16 4QX Tel: 0161 475 0870
Email: enquiries@murrayrix.com Website: www.murrayrix.com

Also at: London: 020 8523 1999

UKAS TESTING 1580

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M U R R A Y R I X
ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

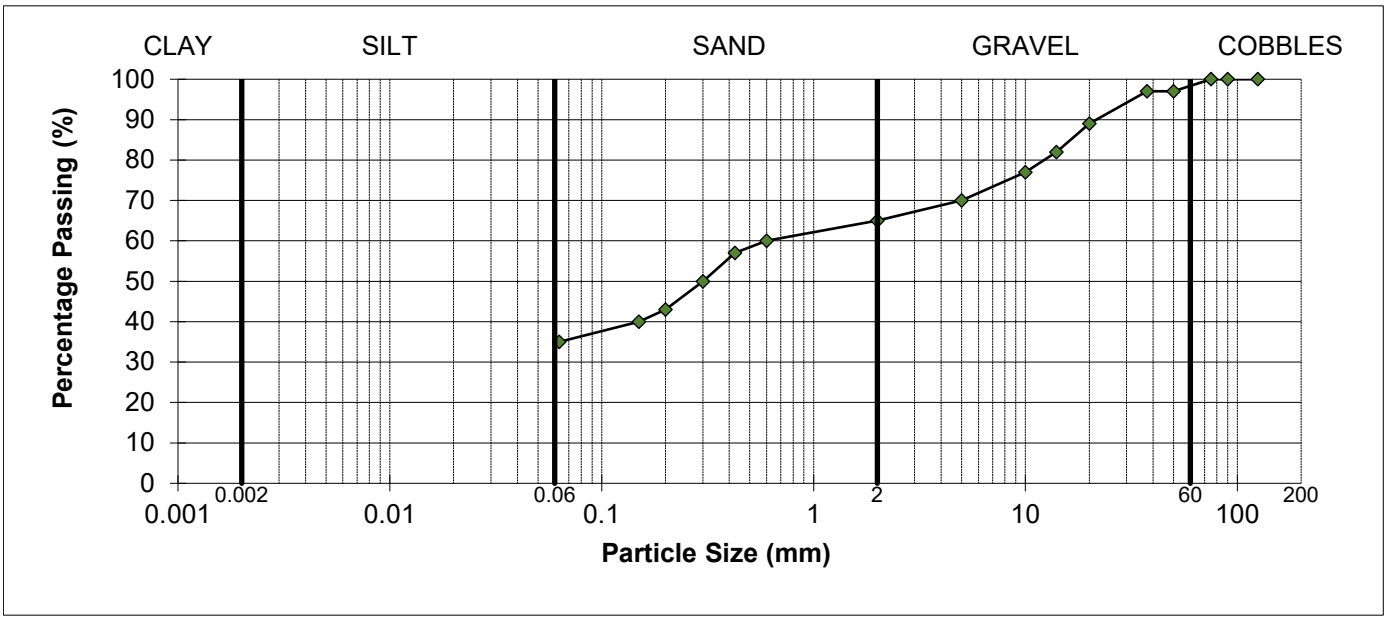
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/106

SAMPLE LABEL	SP25	DATE SAMPLED	11-Aug-23
LAB SAMPLE No	130521	DATE RECEIVED	28-Aug-23
DATE TESTED	30-Aug-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	70	
90	100		2	65	15-80
75	100		0.6	60	
50	97		0.425	57	
37.5	97		0.3	50	
20	89		0.2	43	
14	82		0.15	40	
10	77		0.063	35	15-80



REMARKS
As received water content = 14.2%
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 22-Sep-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-2:2022 Cl.11
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

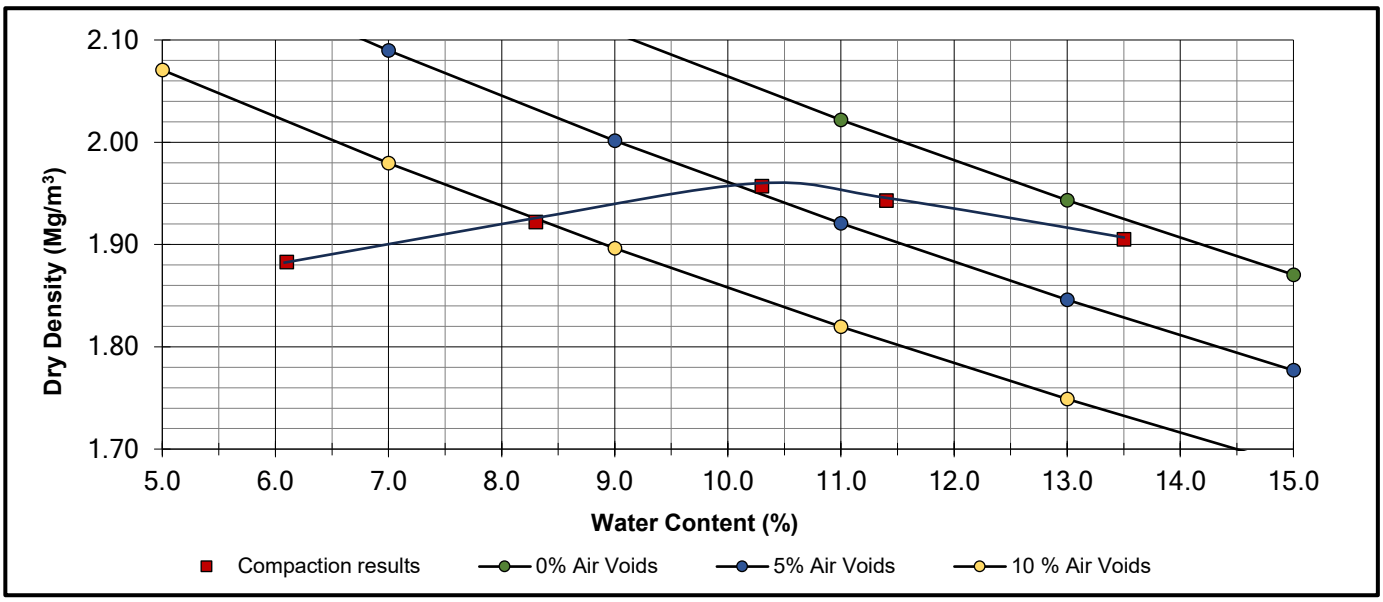
CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/106

SAMPLE LABEL	SP25	DATE SAMPLED	11-Aug-23
SAMPLE NUMBER	130521	DATE RECEIVED	28-Aug-23
DATE TESTED	31-Aug-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won
PRE TREATMENT	Air Dried / Single Sample

RETAINED 37.5mm	3 %	GRADING ZONE	Zone 4
RETAINED 20mm	11 %	PARTICLE DENSITY	2.60 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	6.1	1.883
2	8.3	1.922
3	10.3	1.957
4	11.4	1.943
5	13.5	1.905



OPTIMUM WATER CONTENT	**10**	(%)
MAXIMUM DRY DENSITY	**1.96**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 22-Sep-23

M U R R A Y R I X
ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

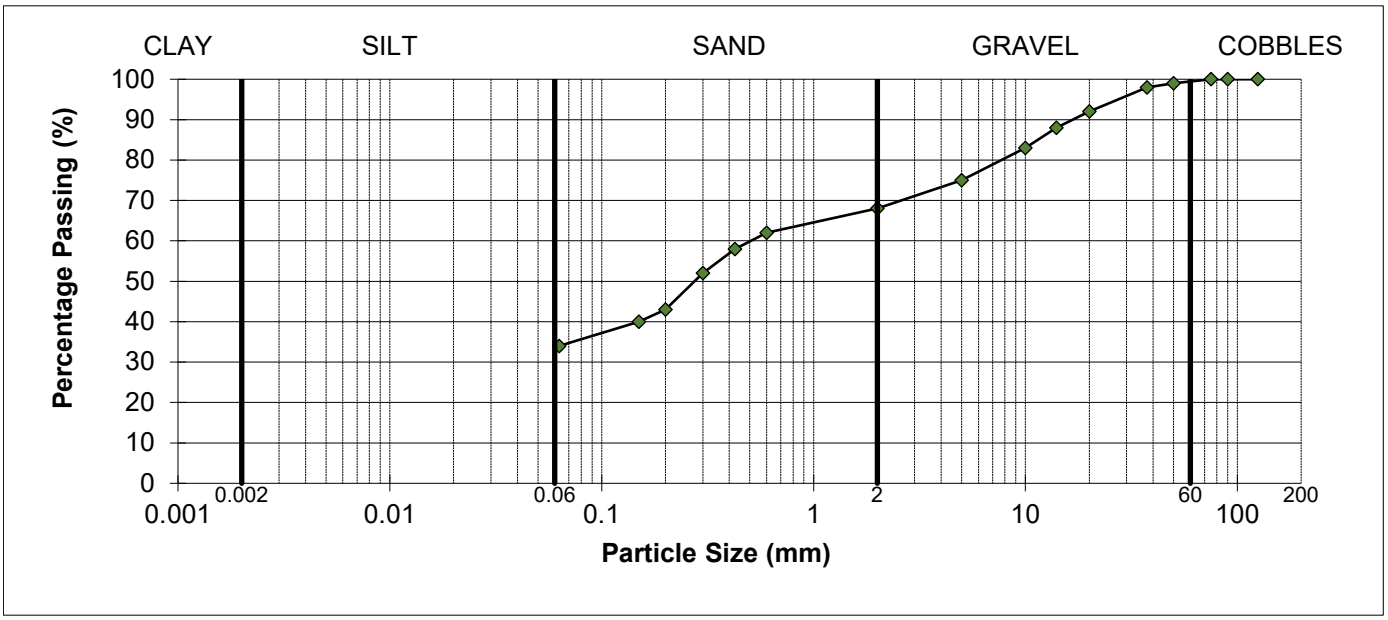
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/106

SAMPLE LABEL	SP26	DATE SAMPLED	11-Aug-23
LAB SAMPLE No	130522	DATE RECEIVED	28-Aug-23
DATE TESTED	30-Aug-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	75	
90	100		2	68	15-80
75	100		0.6	62	
50	99		0.425	58	
37.5	98		0.3	52	
20	92		0.2	43	
14	88		0.15	40	
10	83		0.063	34	15-80



REMARKS
As received water content = 12.4%
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 22-Sep-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-2:2022 Cl.11
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

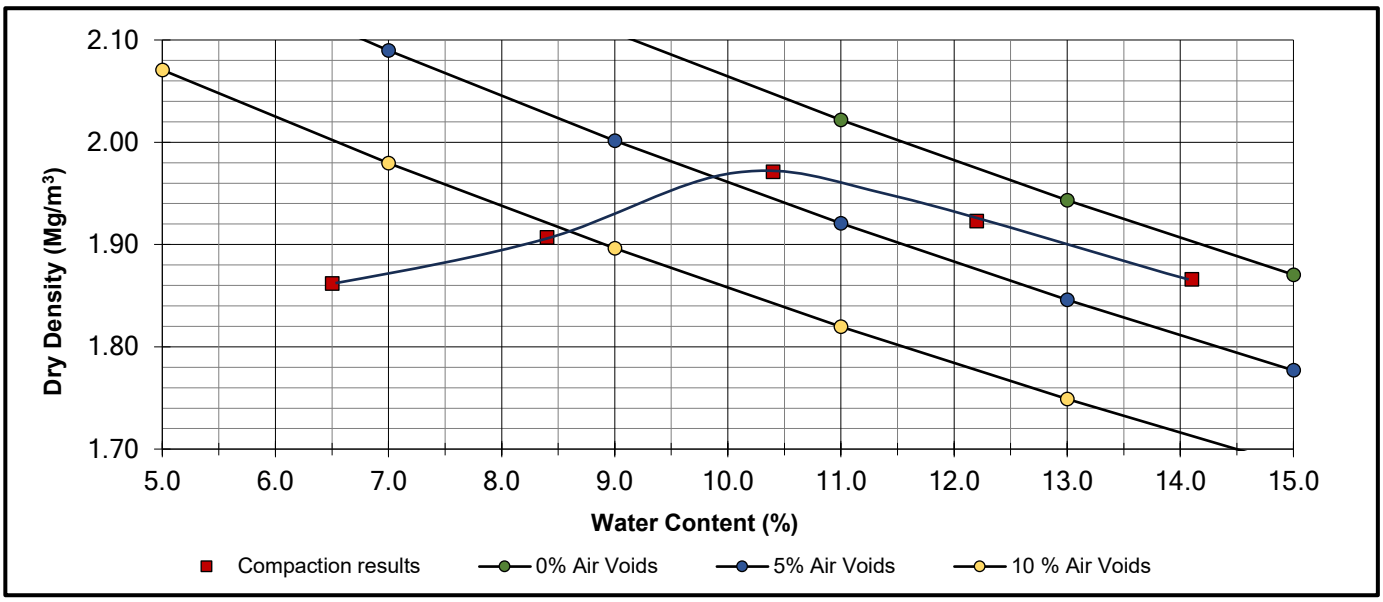
CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/106

SAMPLE LABEL	SP26	DATE SAMPLED	11-Aug-23
SAMPLE NUMBER	130522	DATE RECEIVED	28-Aug-23
DATE TESTED	31-Aug-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won
PRE TREATMENT	Air Dried / Single Sample

RETAINED 37.5mm	1 %	GRADING ZONE	Zone 4
RETAINED 20mm	8 %	PARTICLE DENSITY	2.60 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	6.5	1.862
2	8.4	1.907
3	10.4	1.971
4	12.2	1.923
5	14.1	1.866



OPTIMUM WATER CONTENT	**10**	(%)
MAXIMUM DRY DENSITY	**1.97**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 22-Sep-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

TEST CERTIFICATE

ACID SOLUBLE SULFIDE CONTENT
BS EN 1744-1:2009+A1:2012 Cl. 13

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/106

DATE TESTED	31 August 2023	DATE SAMPLED	11 August 2023
SAMPLED BY	Client	DATE RECEIVED	28 August 2023

Sample Number	Site Mark	Aggregate Type	Acid Soluble Sulfide % S
130521	SP25	General Fill	<0.01
130522	SP26	General Fill	<0.01

REMARKS

SIGNED 

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 22 September 2023

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

TEST CERTIFICATE

TOTAL SULFUR CONTENT
BS EN 1744-1:2009+A1:2012 Cl. 11

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/106

DATE TESTED	31 August 2023	DATE SAMPLED	11 August 2023
SAMPLED BY	Client	DATE RECEIVED	28 August 2023

Sample Number	Site Mark	Aggregate Type	Total Sulfur % S
130521	SP25	General Fill	<0.1
130522	SP26	General Fill	<0.1

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 22 September 2023

MURRAY RIX
CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client e3p

Address Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

Contract Don Street

Job Number MRN 4588/107
Date of Issue 22 September 2023

Approved Signatories

S J Hutchings, O P Davies

Notes

1 All remaining samples and remnants from this contract will be disposed 28 days from the date of this report unless you notify us to the contrary.

2 Result certificates, in this report, not bearing a UKAS mark, are not included in our UKAS accreditation schedule.

3 Opinions and interpretations expressed herein are outside the scope of our UKAS accreditation.

4 Certified that the samples have been examined and tested in accordance with the terms of the contract/order and unless otherwise stated conform to the standards/specifications quoted.

5 The results included within the report are representative of the samples submitted for analysis.

6 This certificate should not be reproduced, except in full, without the express permission of the laboratory.

Andrew House, Hadfield Street, Dukinfield, Cheshire SK16 4QX Tel: 0161 475 0870
Email: enquiries@murrayrix.com Website: www.murrayrix.com

Also at: London: 020 8523 1999

UKAS TESTING 1580

Murray Rix is the trading name of Murray Rix (Northern) Limited. Registered in England 2878361

M U R R A Y R I X
ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

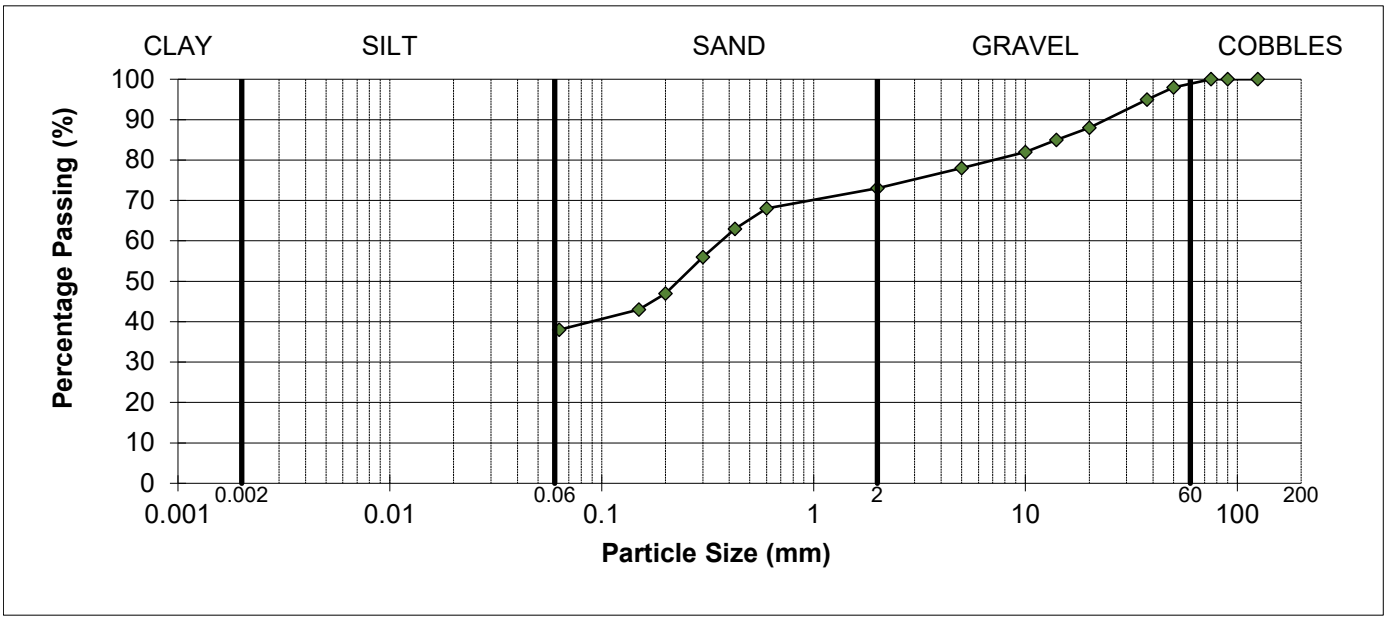
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/107

SAMPLE LABEL	SP19	DATE SAMPLED	18-Aug-23
LAB SAMPLE No	130582	DATE RECEIVED	30-Sep-23
DATE TESTED	15-Sep-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	78	
90	100		2	73	15-80
75	100		0.6	68	
50	98		0.425	63	
37.5	95		0.3	56	
20	88		0.2	47	
14	85		0.15	43	
10	82		0.063	38	15-80



REMARKS
As received water content = 11.3%
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 22-Sep-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-2:2022 Cl.11
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

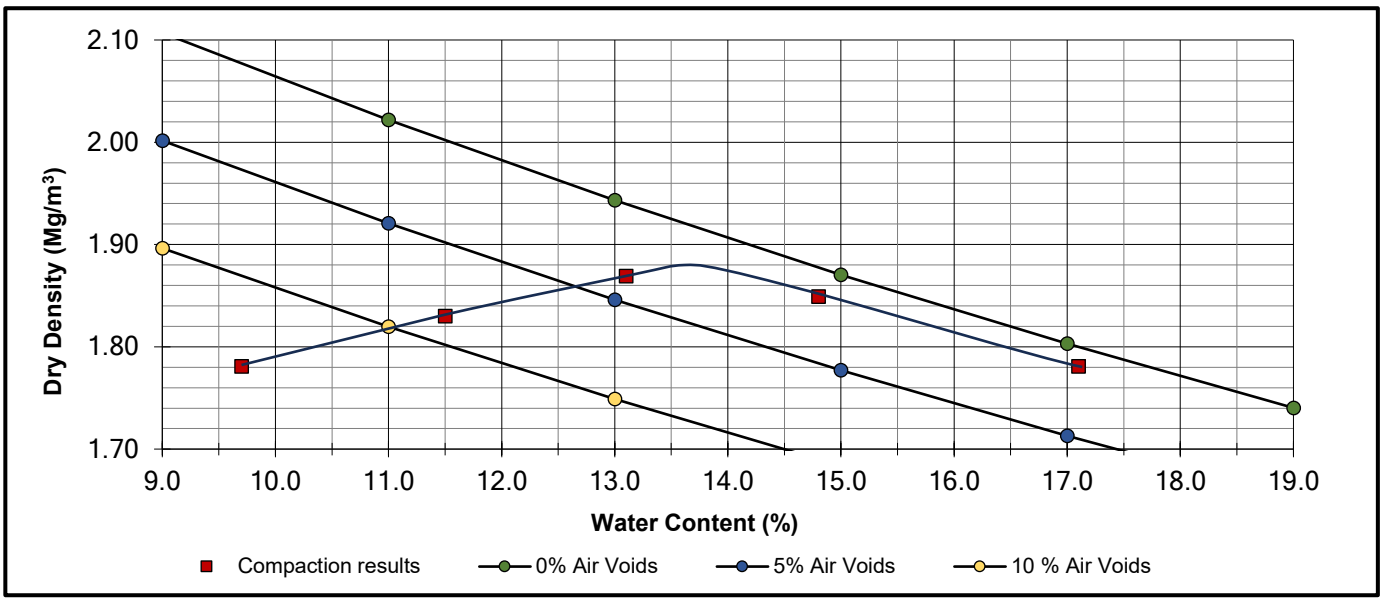
CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/107

SAMPLE LABEL	SP19	DATE SAMPLED	18-Aug-23
SAMPLE NUMBER	130582	DATE RECEIVED	30-Sep-23
DATE TESTED	15-Sep-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won
PRE TREATMENT	Air Dried / Single Sample

RETAINED 37.5mm	5 %	GRADING ZONE	Zone 4
RETAINED 20mm	12 %	PARTICLE DENSITY	2.60 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	9.7	1.781
2	11.5	1.830
3	13.1	1.869
4	14.8	1.849
5	17.1	1.781



OPTIMUM WATER CONTENT	**14**	(%)
MAXIMUM DRY DENSITY	**1.88**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 22-Sep-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

TEST CERTIFICATE

ACID SOLUBLE SULFIDE CONTENT
BS EN 1744-1:2009+A1:2012 Cl. 13

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/107

DATE TESTED	15 September 2023	DATE SAMPLED	18 August 2023
SAMPLED BY	Client	DATE RECEIVED	30 August 2023

Sample Number	Site Mark	Aggregate Type	Acid Soluble Sulfide % S
130582	SP19	General Fill	<0.01

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 22 September 2023

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

TEST CERTIFICATE

TOTAL SULFUR CONTENT
BS EN 1744-1:2009+A1:2012 Cl. 11

CLIENT	e3p
SITE	Don Street
JOB NUMBER	MRN 4588/107

DATE TESTED	15 September 2023	DATE SAMPLED	18 August 2023
SAMPLED BY	Client	DATE RECEIVED	30 August 2023

Sample Number	Site Mark	Aggregate Type	Total Sulfur % S
130582	SP19	General Fill	<0.1

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 22 September 2023

LABORATORY REPORT

4043

Contract Number: PSL22/7986

Report Date: 15 December 2022

Client's Reference:

Client Name: E3P
Taylor Road
Urmston
Manchester
M41 7JQ

For the attention of: Stuart Ellis

Contract Title: Don Street, Middleton, M24 2GG

Date Received: 14/12/2022
Date Commenced: 14/12/2022
Date Completed: 15/12/2022

Notes: Opinions and Interpretations are outside the UKAS Accreditation

A copy of the Laboratory Schedule of accredited tests as issued by UKAS is attached to this report. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced other than in full, without the prior written approval of the laboratory.

Checked and Approved Signatories:

A Watkins (Director)	R Berriman (Quality Manager)	S Royle (Laboratory Manager)
L Knight (Senior Technician)	S Eyre (Senior Technician)	T Watkins (Senior Technician)

5 – 7 Hexthorpe Road, Hexthorpe,
Doncaster DN4 0AR
tel: +44 (0)844 815 6641
fax: +44 (0)844 815 6642
e-mail: awatkins@prosoils.co.uk
rberriman@prosoils.co.uk

SUMMARY OF INSITU TESTS

BS1377 : PART : 9 : 1990

Position Number	Layer Number	Sample Number	Depth (m)	Date Tested	Moisture Content %	Bulk Density Mg/m^3 Clause 2.2	Dry Density Mg/m^3 Clause 2.2	Remarks
1				14/12/2022	19	2.00	1.68	Brown sandy CLAY
2				14/12/2022	20	1.97	1.65	Brown sandy CLAY
3				14/12/2022	20	1.95	1.62	Brown sandy CLAY
4				14/12/2022	20	2.01	1.68	Brown sandy CLAY
5				14/12/2022	20	2.01	1.68	Brown sandy CLAY
6				14/12/2022	19	2.02	1.70	Brown sandy CLAY
7				14/12/2022	20	1.99	1.65	Brown sandy CLAY
8				14/12/2022	19	1.99	1.68	Brown sandy CLAY
9				14/12/2022	20	1.96	1.63	Brown sandy CLAY
10				14/12/2022	20	2.03	1.70	Brown sandy CLAY
11				14/12/2022	20	2.05	1.71	Brown sandy CLAY
12				14/12/2022	19	2.02	1.69	Brown sandy CLAY
13				14/12/2022	20	2.01	1.68	Brown sandy CLAY
14				14/12/2022	17	1.89	1.62	Brown sandy CLAY
15				14/12/2022	18	1.96	1.67	Brown sandy CLAY
16				14/12/2022	19	2.05	1.72	Brown sandy CLAY
17				14/12/2022	18	2.02	1.71	Brown sandy CLAY
18				14/12/2022	17	2.00	1.72	Brown sandy CLAY
19				14/12/2022	17	1.99	1.70	Brown sandy CLAY
20				14/12/2022	17	1.97	1.69	Brown sandy CLAY

SRD Assessment Calculation IMS Ref: QD38-1

Job Number	14-554
Site Name	Don Street Area C
Test Date	06/12/2022

OMC/ MDD test Number	DRY Density (Mg/m³)	OMC (%)	MC (-3%)	MC (+3%)
Parcel C Bulkfill 102	1.78	13.00		
Parcel C Bulkfill 103	1.77	13.00		
Parcel C Bulkfill 104	1.80	12.00		
Parcel C Bulkfill 105	1.72	19.00		
Parcel C Bulkfill 106	1.46	24.00		
Average	**1.71**	**16.20**	**13.20**	**19.20**

SRD test number	Location id	layer / level (AOD)	Bulk Density (Mg/m³)	Dry density (Mg/m³)	Percentage compaction (%)
1	Area 2 101 MG		2.69	2.41	141.50
2	Area 2 102 MG		2.52	2.28	133.88
3	Area 2 103 MG		3.19	2.81	164.54
4	Area 2 104 MG		2.56	2.32	136.23
5	Area 2 105 MG		2.72	2.44	143.14
6	Area 2 106 S		2.22	2.06	120.75
7	Area 3 106 S		1.92	1.83	107.09
8	Area 4 106 S		2.44	2.23	130.60
9	Area 5 106 S		2.55	2.32	135.87
10	Area 6 106 S		2.11	1.97	115.65

SRD Assessment Calculation IMS Ref: QD38-1

Job Number	14-554
Site Name	Don Street Area C
Test Date	06/12/2022

OMC/ MDD test Number	DRY Density (Mg/m³)	OMC (%)	MC (-3%)	MC (+3%)
Parcel C Bulkfill 102	1.78	13.00		
Parcel C Bulkfill 103	1.77	13.00		
Parcel C Bulkfill 104	1.80	12.00		
Parcel C Bulkfill 105	1.72	19.00		
Parcel C Bulkfill 106	1.46	24.00		
Parcel C Bulkfill 101	1.65	15.00		
Average	**1.70**	**16.00**	**13.00**	**19.00**

SRD test number	Location id	Bulk Density (Mg/m³)	Dry density (Mg/m³)	Percentage compaction (%)
1	Area 2 101 MG	2.69	2.41	142.28
2	Area 2 102 MG	2.52	2.28	134.62
3	Area 2 103 MG	3.19	2.81	165.44
4	Area 2 104 MG	2.56	2.32	136.97
5	Area 2 105 MG	2.72	2.44	143.93
6	Area 2 106 S	2.22	2.06	121.41
7	Area 3 106 S	1.92	1.83	107.68
8	Area 4 106 S	2.44	2.23	131.32
9	Area 5 106 S	2.55	2.32	136.62
10	Area 6 106 S	2.11	1.97	116.29

SRD Assessment Calculation IMS Ref: QD38-1

Job Number	14-554
Site Name	Don Street Area B
Test Date	06/12/2022

OMC/ MDD test Number	DRY Density (Mg/m³)	OMC (%)	MC (-3%)	MC (+3%)
Parcel B Bulkfill 101	1.87	13.00		
Parcel B Bulkfill 102	1.79	12.00		
Parcel B Bulkfill 103	1.77	14.00		
Parcel B Bulkfill 104	1.78	12.00		
Parcel B Bulkfill 105	1.78	14.00		
Average	**1.80**	**13.00**	**10.00**	**16.00**

SRD test number	Location id	Bulk Density (Mg/m³)	Dry density (Mg/m³)	Percentage compaction (%)
11	Area 3 101S	2.75	2.46	136.82
12	Area 3 101S	2.88	2.57	142.94
13	Area 3 101S	2.10	1.97	109.34
14	Area 3 101S	2.33	2.14	119.08
15	Area 3 101S	2.70	2.43	134.87
16	Area 3 101S	3.07	2.71	150.61
17	Area 3 101S	2.88	2.57	142.77
18	Area 3 101S	3.28	2.87	159.51

SRD Assessment Calculation IMS Ref: QD38-1

Job Number	14-554
Site Name	Don Street LF Cell 5
Test Date	14/06/2023

OMC/ MDD test Number	DRY Density (Mg/m³)	OMC (%)	MC (-3%)	MC (+3%)
SP13	2.01	9.80		
SP14	2.00	9.70		
SP15	2.05	8.90		
Average	**2.02**	**9.47**	**6.47**	**12.47**

SRD test number	Location id	Bulk Density (Mg/m³)	Dry density (Mg/m³)	Percentage compaction (%)
30	Cell 5 101	2.31	2.14	105.94
31	Cell 5 102	2.26	2.12	104.95
32	Cell 5 103	2.32	2.15	106.44

MURRAY RIX
CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client Urban Regen Ltd

Address Langley Road
Pendlebury
Salford
M6 6FG

Contract Don Street, Middleton
M24 2GG

Job Number MRN 24078/2
Date of Issue 26 January 2024

Approved Signatories

S J Hutchings, O P Davies

Notes

1 All remaining samples and remnants from this contract will be disposed 28 days from the date of this report unless you notify us to the contrary.

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Also at: London: 020 8523 1999

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UKAS TESTING 1580

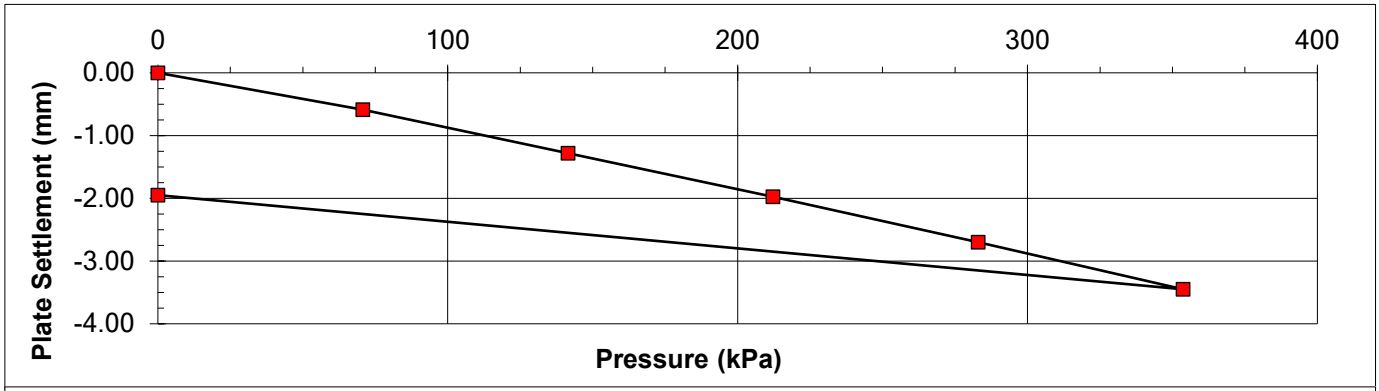
TEST CERTIFICATE

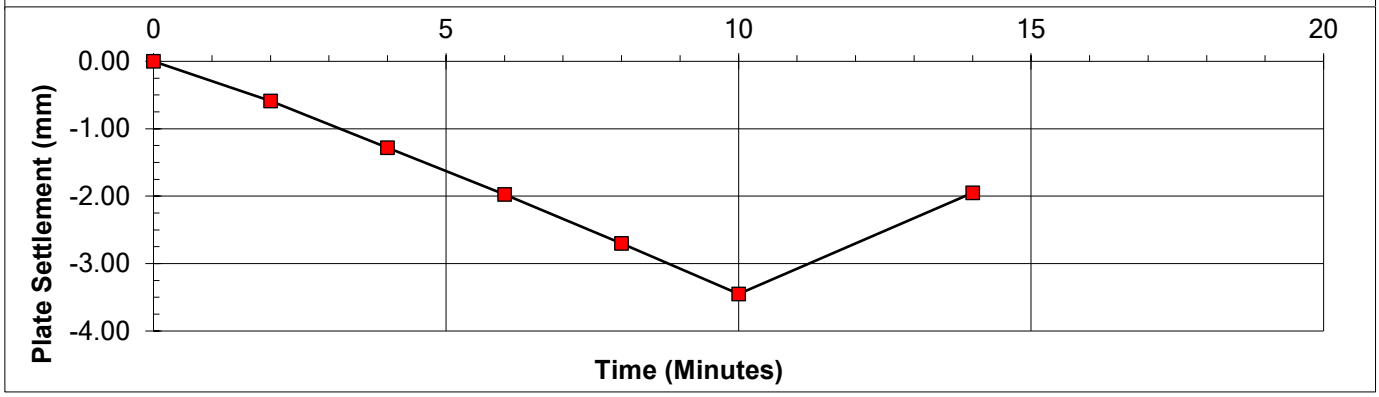
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 2GG		
JOB NUMBER	MRN 24078/2		
TEST LOCATION	Test 01	LOADING DEVICE	20 Tonne Enerpac Jack
TEST DATE	25-Jan-14	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
4576	4599	4494	4556	0.00	0.00	0.0
4522	4533	4437	4497	-0.59	5.00	70.7
4455	4461	4369	4428	-1.28	10.00	141.5
4387	4393	4297	4359	-1.97	15.00	212.2
4317	4320	4222	4286	-2.70	20.00	282.9
4243	4245	4146	4211	-3.45	25.00	353.7
4376	4343	4365	4361	-1.95	0.00	0.0





Pressure at 1.25 mm deflexion =	138	kPa
Modulus of subgrade reaction (k) =	111	MPa/m
Equivalent 762 mm plate reaction =	49	MPa/m
Equivalent CBR =	8.2	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 26-Jan-24

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

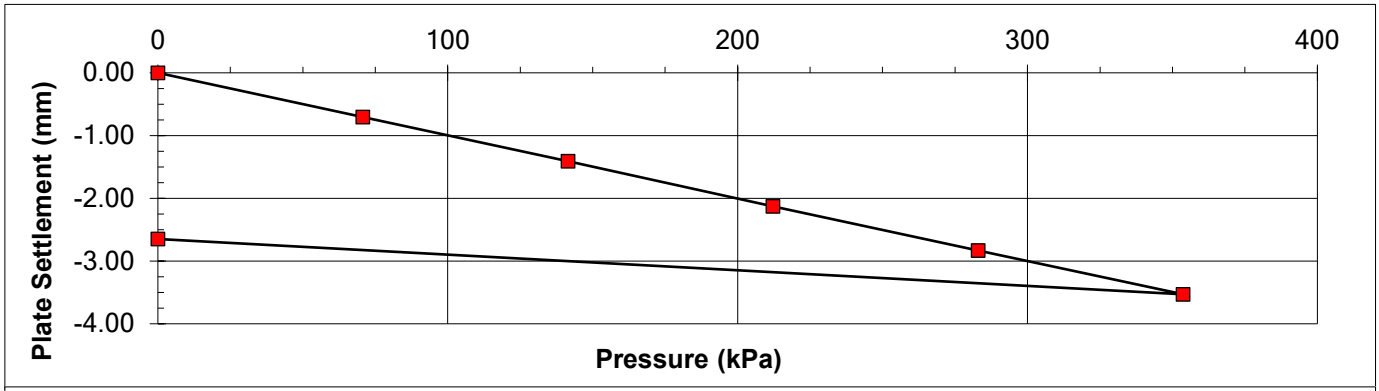
TEST CERTIFICATE

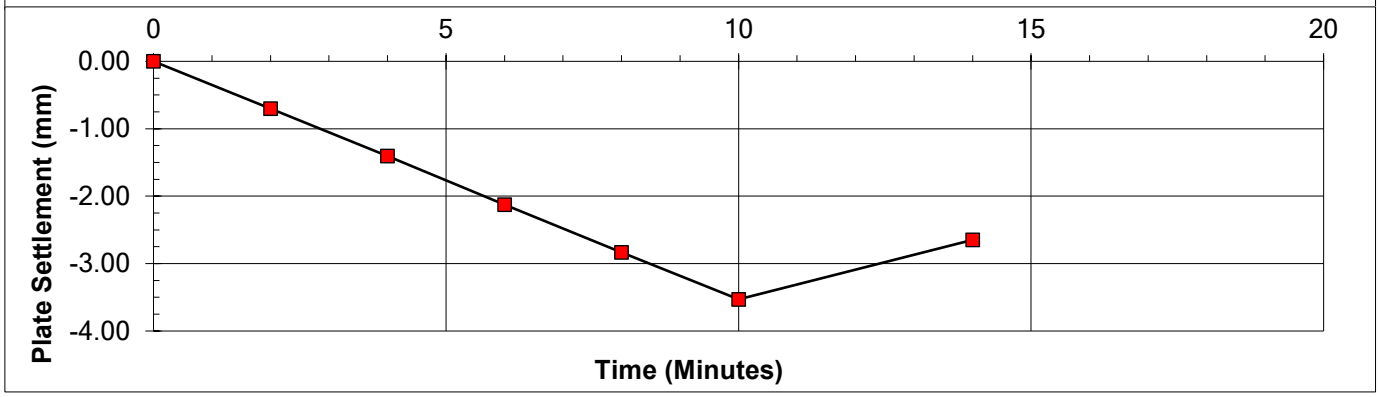
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 2GG		
JOB NUMBER	MRN 24078/2		
TEST LOCATION	Test 02	LOADING DEVICE	20 Tonne Enerpac Jack
TEST DATE	25-Jan-14	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
4607	4395	4589	4530	0.00	0.00	0.0
4546	4302	4532	4460	-0.70	5.00	70.7
4480	4233	4456	4390	-1.41	10.00	141.5
4406	4160	4387	4318	-2.13	15.00	212.2
4329	4092	4320	4247	-2.83	20.00	282.9
4260	4024	4248	4177	-3.53	25.00	353.7
4346	4105	4346	4266	-2.65	0.00	0.0





Pressure at 1.25 mm deflexion =	126	kPa
Modulus of subgrade reaction (k) =	101	MPa/m
Equivalent 762 mm plate reaction =	44	MPa/m
Equivalent CBR =	6.9	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 26-Jan-24

MURRAY RIX

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DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

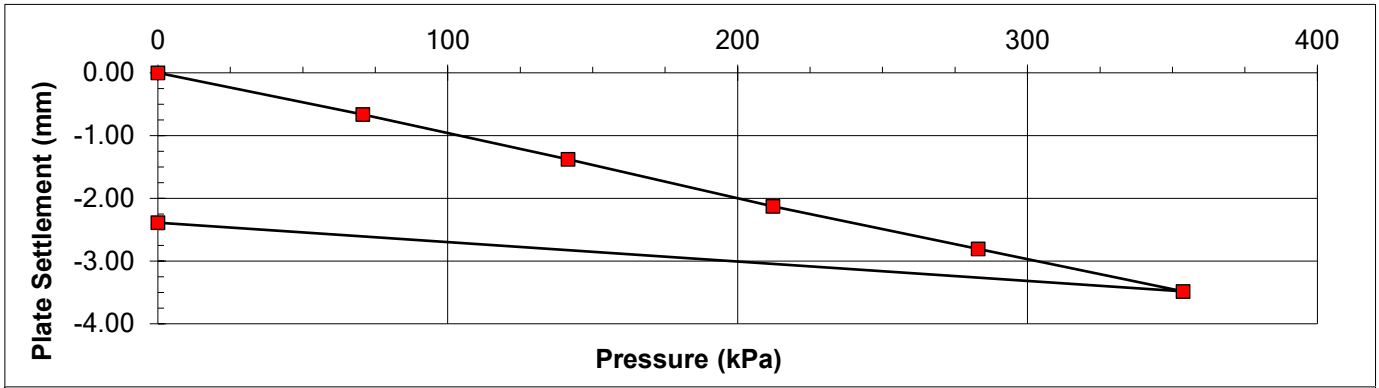
TEST CERTIFICATE

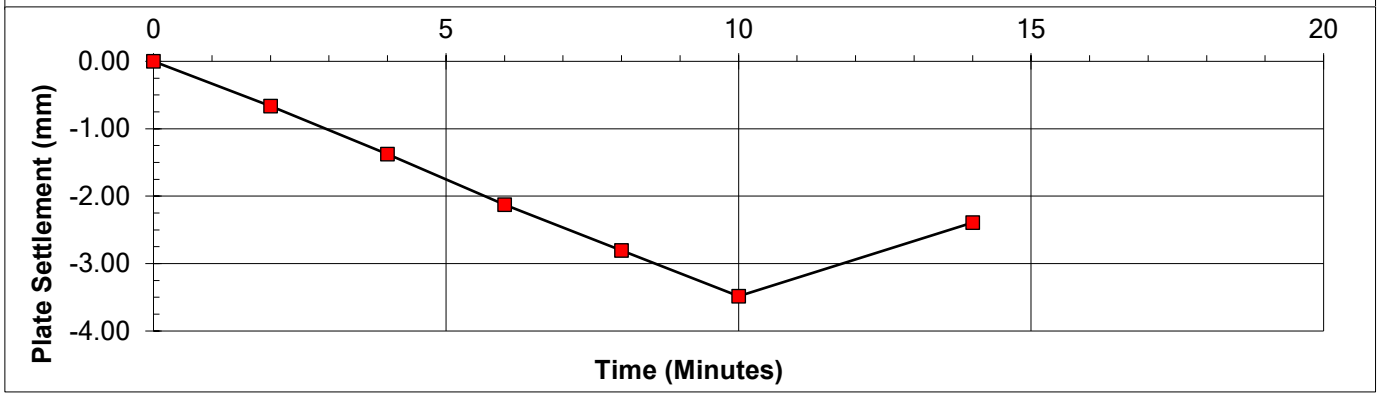
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 2GG		
JOB NUMBER	MRN 24078/2		
TEST LOCATION	Test 03	LOADING DEVICE	20 Tonne Enerpac Jack
TEST DATE	25-Jan-14	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
4427	4573	4492	4497	0.00	0.00	0.0
4364	4508	4421	4431	-0.66	5.00	70.7
4293	4437	4349	4360	-1.38	10.00	141.5
4217	4364	4273	4285	-2.13	15.00	212.2
4153	4295	4202	4217	-2.81	20.00	282.9
4085	4228	4134	4149	-3.48	25.00	353.7
4220	4301	4254	4258	-2.39	0.00	0.0





Pressure at 1.25 mm deflexion =	129	kPa
Modulus of subgrade reaction (k) =	103	MPa/m
Equivalent 762 mm plate reaction =	46	MPa/m
Equivalent CBR =	7.2	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 26-Jan-24

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

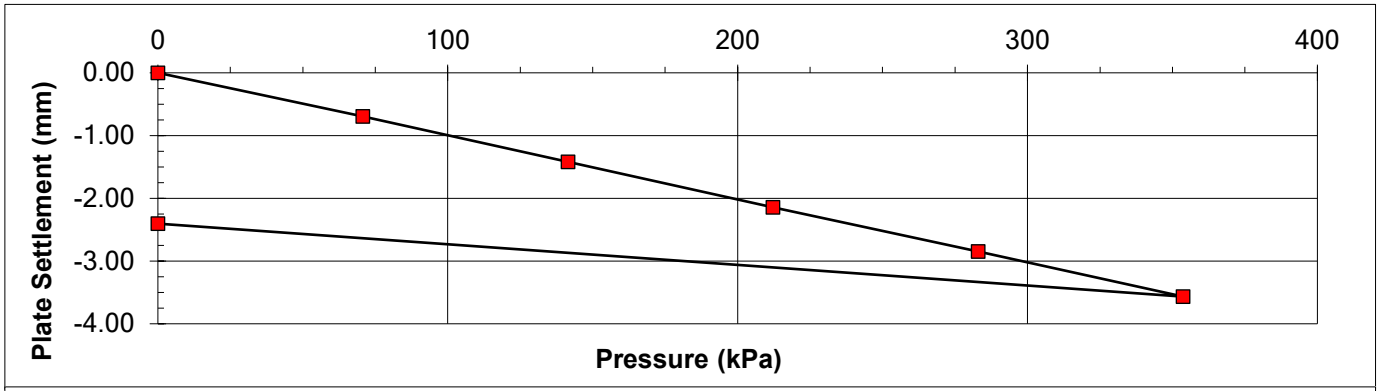
TEST CERTIFICATE

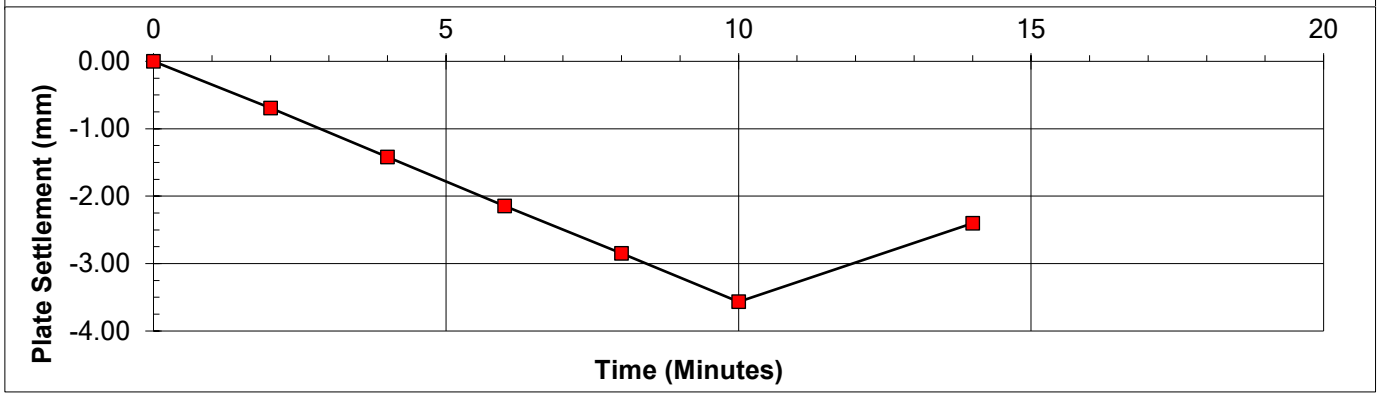
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 2GG		
JOB NUMBER	MRN 24078/2		
TEST LOCATION	Test 04	LOADING DEVICE	20 Tonne Enerpac Jack
TEST DATE	25-Jan-14	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
4322	4582	4443	4449	0.00	0.00	0.0
4253	4514	4372	4380	-0.69	5.00	70.7
4180	4441	4300	4307	-1.42	10.00	141.5
4110	4369	4225	4235	-2.14	15.00	212.2
4043	4292	4157	4164	-2.85	20.00	282.9
3967	4224	4086	4092	-3.57	25.00	353.7
4065	4366	4195	4209	-2.40	0.00	0.0





Pressure at 1.25 mm deflexion =	125	kPa
Modulus of subgrade reaction (k) =	100	MPa/m
Equivalent 762 mm plate reaction =	44	MPa/m
Equivalent CBR =	6.8	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 26-Jan-24

MURRAY RIX

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UKAS TESTING 1580

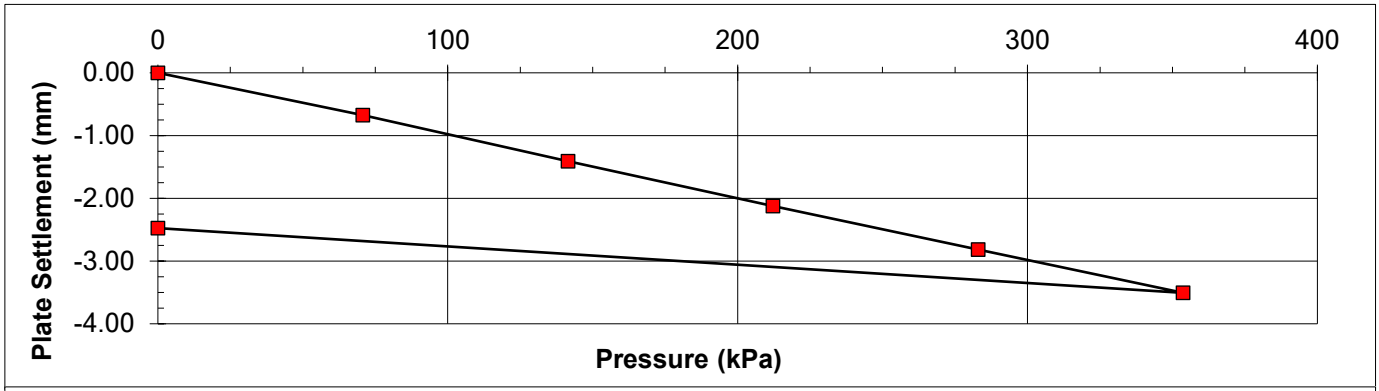
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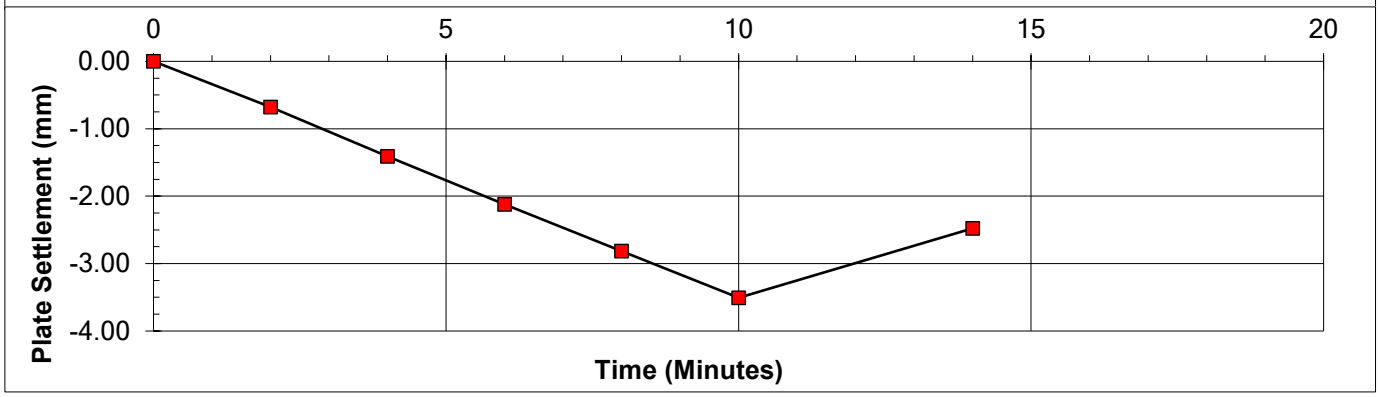
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 2GG		
JOB NUMBER	MRN 24078/2		
TEST LOCATION	Test 05	LOADING DEVICE	20 Tonne Enerpac Jack
TEST DATE	25-Jan-14	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
4582	4546	4390	4506	0.00	0.00	0.0
4519	4475	4321	4438	-0.68	5.00	70.7
4448	4399	4248	4365	-1.41	10.00	141.5
4373	4328	4180	4294	-2.12	15.00	212.2
4306	4261	4106	4224	-2.82	20.00	282.9
4234	4196	4036	4155	-3.51	25.00	353.7
4361	4289	4125	4258	-2.48	0.00	0.0





Pressure at 1.25 mm deflexion =	126	kPa
Modulus of subgrade reaction (k) =	101	MPa/m
Equivalent 762 mm plate reaction =	45	MPa/m
Equivalent CBR =	6.9	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 26-Jan-24

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UKAS TESTING 1580

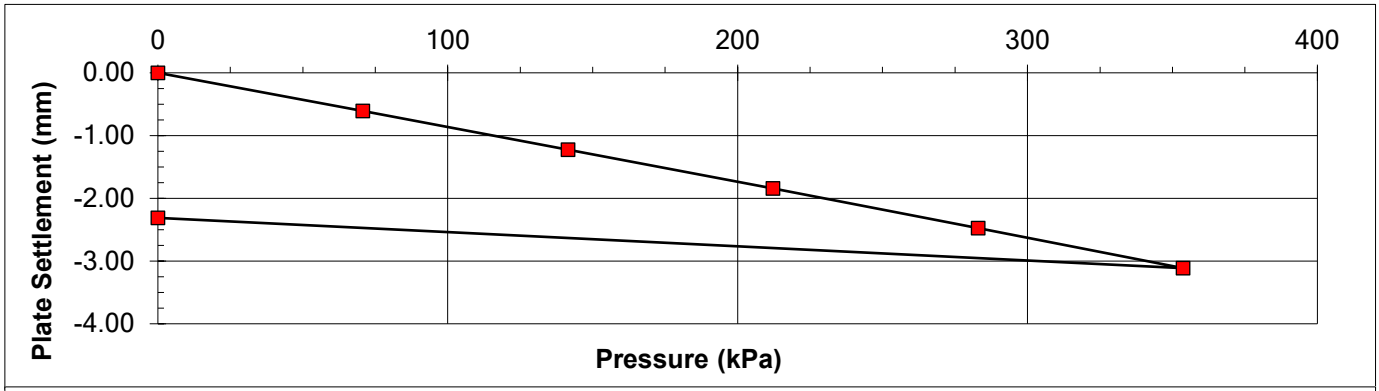
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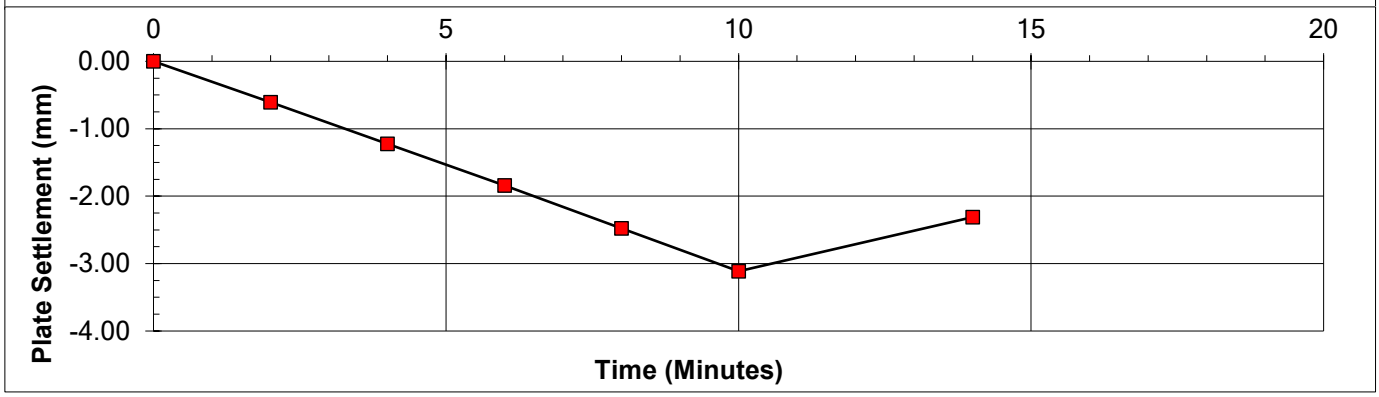
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd				
SITE	Don Street, Middleton M24 2GG				
JOB NUMBER	MRN 24078/2				
TEST LOCATION	Test 06	LOADING DEVICE	20 Tonne Enerpac Jack		
TEST DATE	25-Jan-14	PLATE SIZE (mm)	300 diameter		
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant		
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required		

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
4481	4349	4522	4451	0.00	0.00	0.0
4424	4279	4467	4390	-0.61	5.00	70.7
4360	4222	4403	4328	-1.22	10.00	141.5
4292	4163	4344	4266	-1.84	15.00	212.2
4233	4100	4276	4203	-2.48	20.00	282.9
4167	4034	4217	4139	-3.11	25.00	353.7
4249	4116	4294	4220	-2.31	0.00	0.0





Pressure at 1.25 mm deflexion =	145	kPa
Modulus of subgrade reaction (k) =	116	MPa/m
Equivalent 762 mm plate reaction =	51	MPa/m
Equivalent CBR =	8.8	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 26-Jan-24

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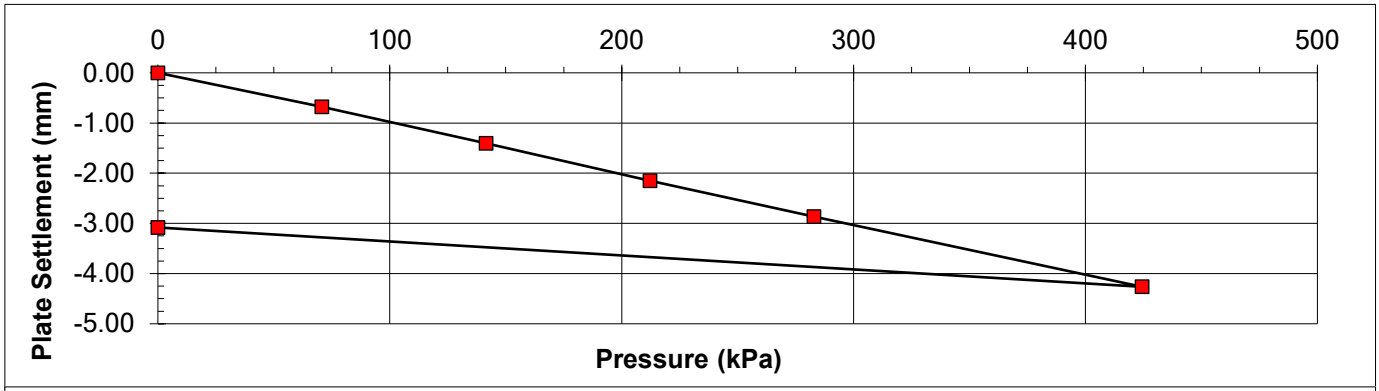
UKAS TESTING 1580

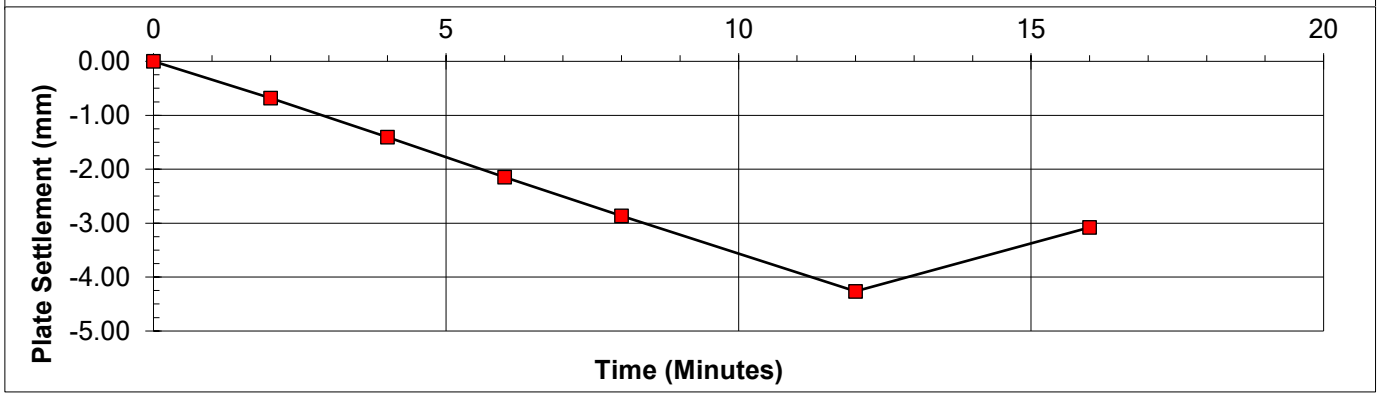
TEST CERTIFICATE

PLATE INCREMENTAL LOAD TEST
BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 2GG		
JOB NUMBER	MRN 24078/2		
TEST LOCATION	Test 07	LOADING DEVICE	20 Tonne Enerpac Jack
TEST DATE	25-Jan-14	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
4732	4532	4462	4575	0.00	0.00	0.0
4664	4466	4392	4507	-0.68	5.00	70.7
4592	4393	4320	4435	-1.40	10.00	141.5
4521	4316	4244	4360	-2.15	15.00	212.2
4446	4246	4174	4289	-2.87	20.00	282.9
4304	4105	4038	4149	-4.26	30.00	424.4
4383	4252	4167	4267	-3.08	0.00	0.0





Pressure at 1.25 mm deflexion =	126	kPa
Modulus of subgrade reaction (k) =	101	MPa/m
Equivalent 762 mm plate reaction =	45	MPa/m
Equivalent CBR =	7.0	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 26-Jan-24

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UKAS TESTING 1580

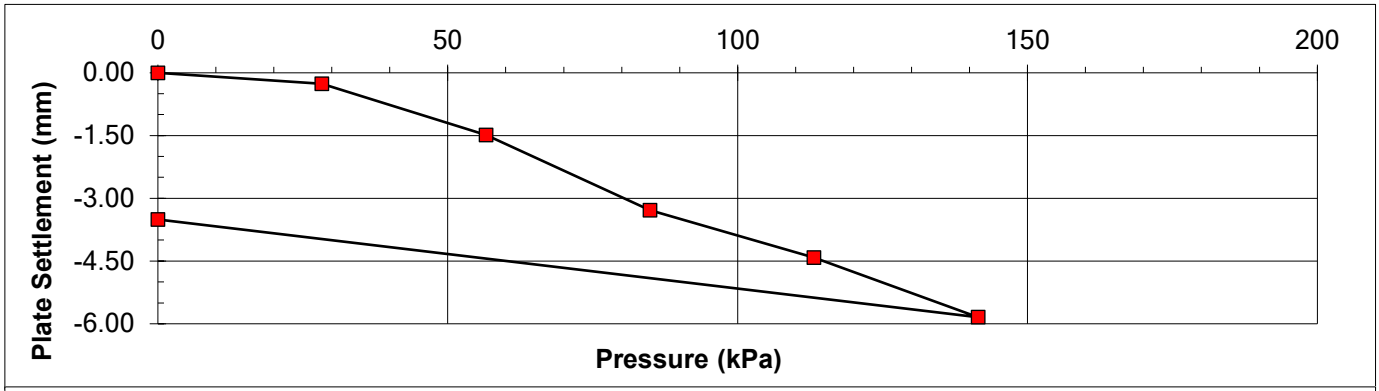
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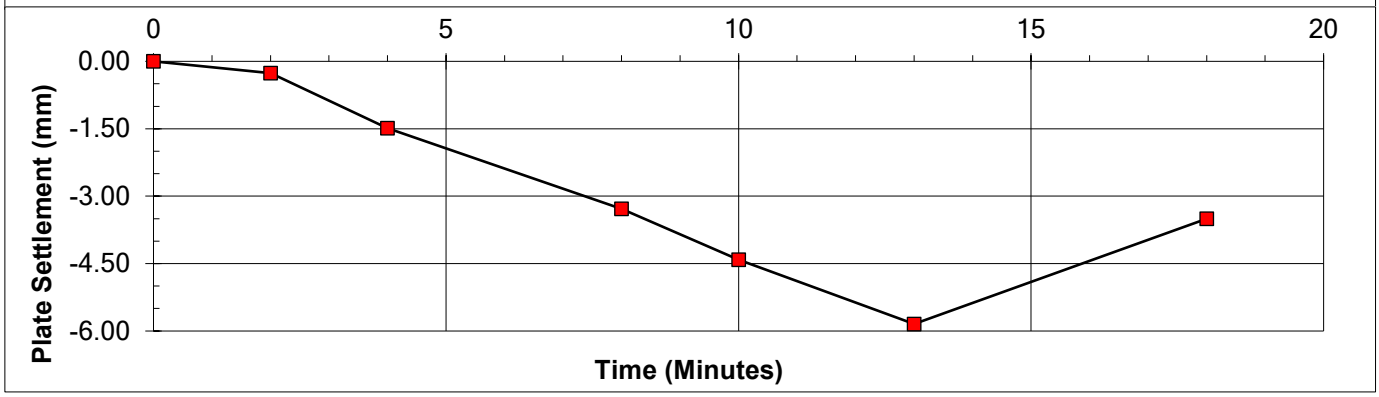
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd				
SITE	Don Street, Middleton M24 2GG				
JOB NUMBER	MRN 24078/2				
TEST LOCATION	P4	LOADING DEVICE	20 Tonne Enerpac Jack		
TEST DATE	25-Jan-14	PLATE SIZE (mm)	300 diameter		
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant		
MATERIAL UNDER TEST	Clay	MOISTURE CONTENT	Not Required		

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
4045	4388	4084	4172	0.00	0.00	0.0
4009	4356	4074	4146	-0.26	2.00	28.3
3847	4199	4025	4024	-1.49	4.00	56.6
3656	4107	3769	3844	-3.28	6.00	84.9
3576	4030	3586	3731	-4.42	8.00	113.2
3424	3883	3457	3588	-5.84	10.00	141.5
3582	4191	3693	3822	-3.50	0.00	0.0





Pressure at 1.25 mm deflexion =	51	kPa
Modulus of subgrade reaction (k) =	41	MPa/m
Equivalent 762 mm plate reaction =	18	MPa/m
Equivalent CBR =	1.5	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 26-Jan-24

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DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

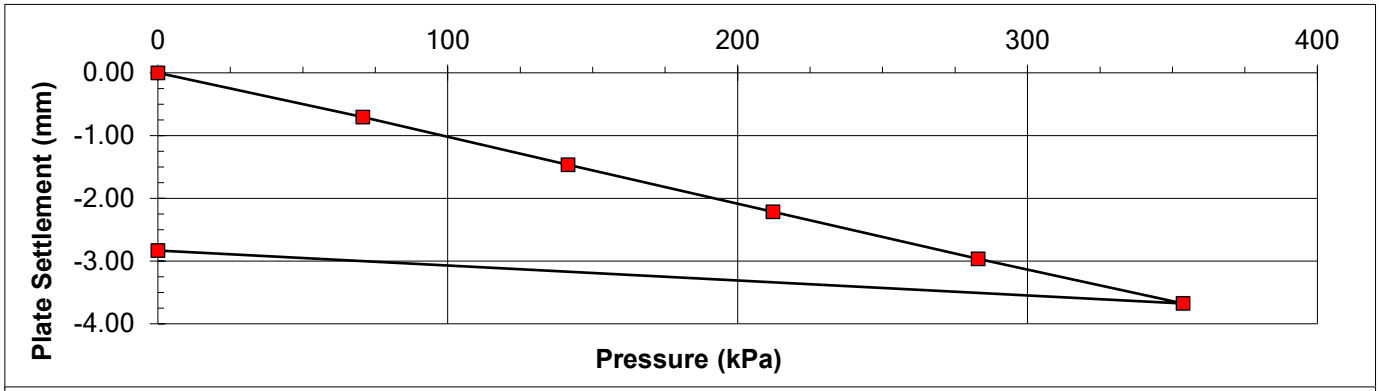
TEST CERTIFICATE

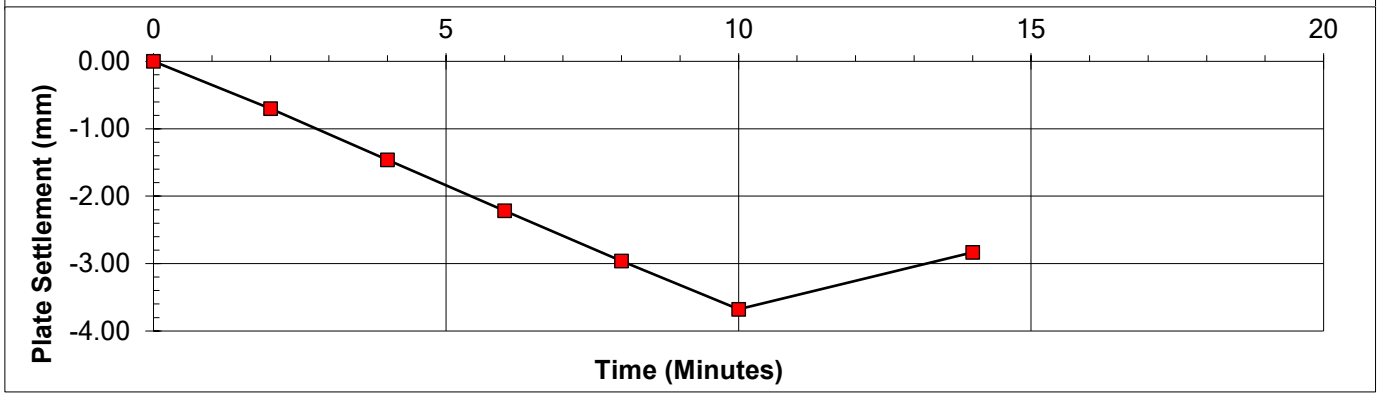
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd				
SITE	Don Street, Middleton M24 2GG				
JOB NUMBER	MRN 24078/2				
TEST LOCATION	P4 - Re-Test	LOADING DEVICE	20 Tonne Enerpac Jack		
TEST DATE	25-Jan-14	PLATE SIZE (mm)	300 diameter		
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant		
MATERIAL UNDER TEST	Clay	MOISTURE CONTENT	Not Required		

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
4355	4573	4316	4415	0.00	0.00	0.0
4283	4502	4248	4344	-0.70	5.00	70.7
4205	4425	4175	4268	-1.46	10.00	141.5
4131	4350	4098	4193	-2.22	15.00	212.2
4055	4276	4024	4118	-2.96	20.00	282.9
3982	4205	3954	4047	-3.68	25.00	353.7
4073	4280	4041	4131	-2.83	0.00	0.0





Pressure at 1.25 mm deflexion =	122	kPa
Modulus of subgrade reaction (k) =	97	MPa/m
Equivalent 762 mm plate reaction =	43	MPa/m
Equivalent CBR =	6.5	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

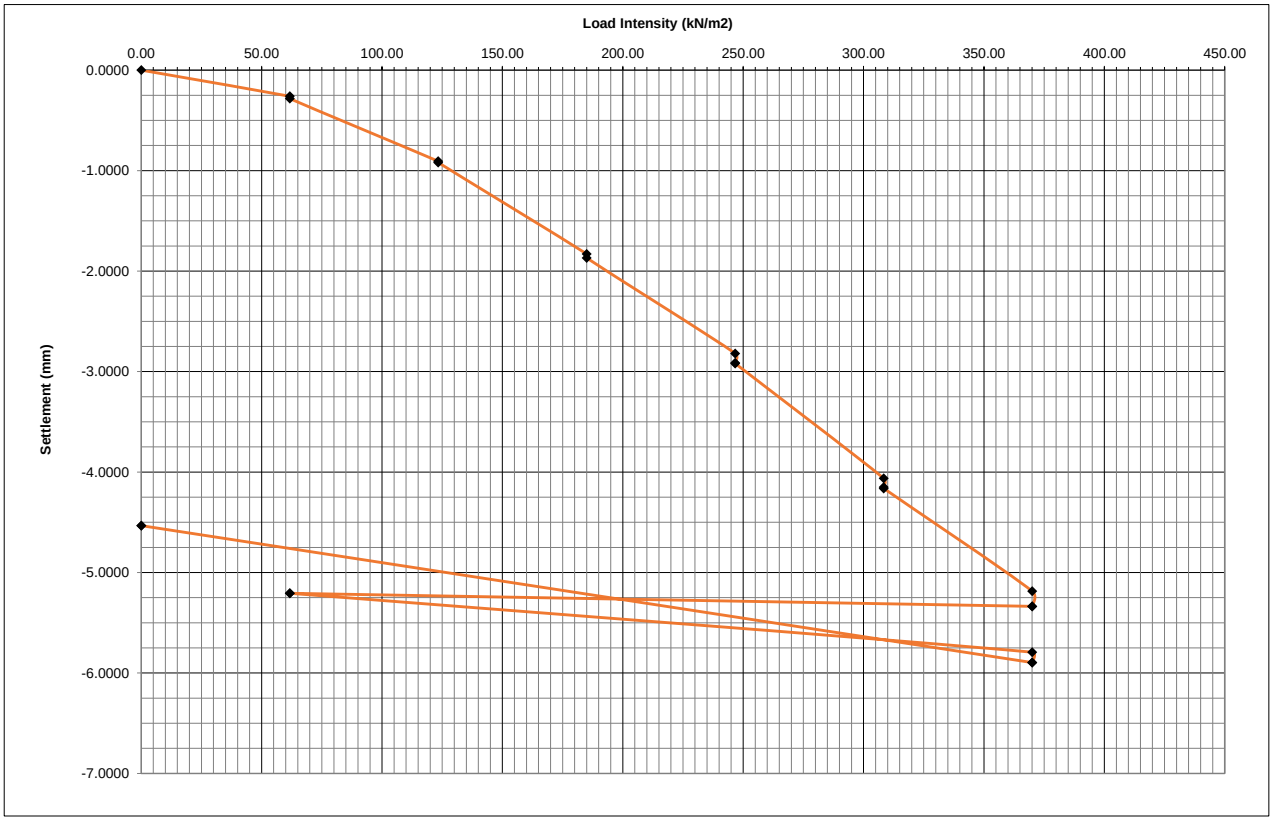
DATE 26-Jan-24

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Don Street*		**Test No.:**	*CBR 101*	
Site Ref:	*14-554*		**Test Date:**	*23/09/2024*	
Type of Kentledge:	*20Tonne Roller*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*388516*	
Max Applied Pressure:	*370.09*	*kN/m2*	**Northing:**	*406278*	
Max Deformation:	*-5.90*	*mm*	**W3W:**	*///strict.water.voted*	
Strata Description:	*Recycled Aggregate*		**Weather:**	*Rain*	

Comments:



Equivalent CBR Value of 17%

Max Deformation of 5.90 mm

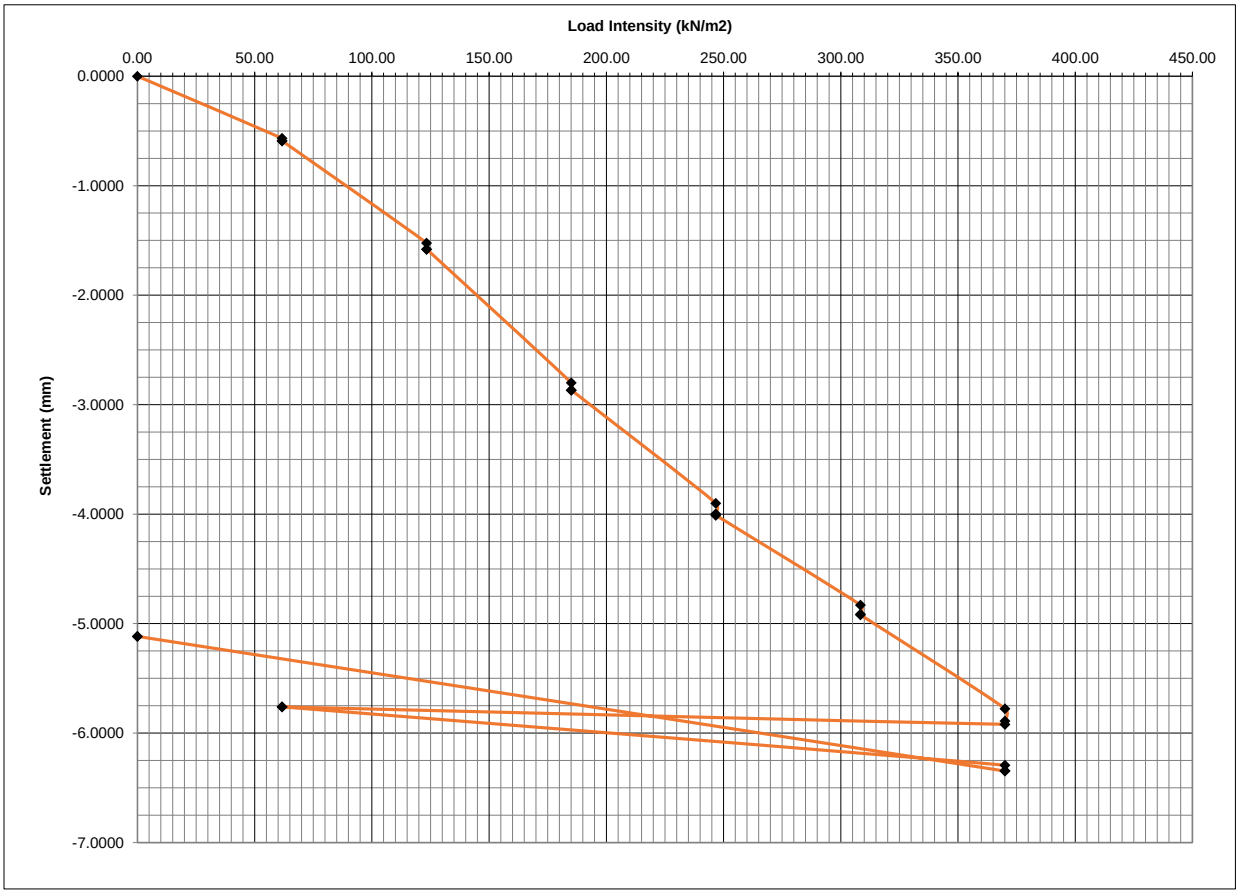
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	23/09/2024	R. Walker	23/09/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Don Street*		**Test No.:**	*CBR102*	
Site Ref:	*14-554*		**Test Date:**	*23/09/2024*	
Type of Kentledge:	*20Tonne Roller*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*388537*	
Max Applied Pressure:	*370.09*	*kN/m2*	**Northing:**	*406272*	
Max Deformation:	*-6.35*	*mm*	**W3W:**	*/pest.gums.outfit*	
Strata Description:	*Recycled Aggregate*		**Weather:**	*Rain*	

Comments:



Equivalent CBR Value of 10%

Max Deformation of 6.35 mm

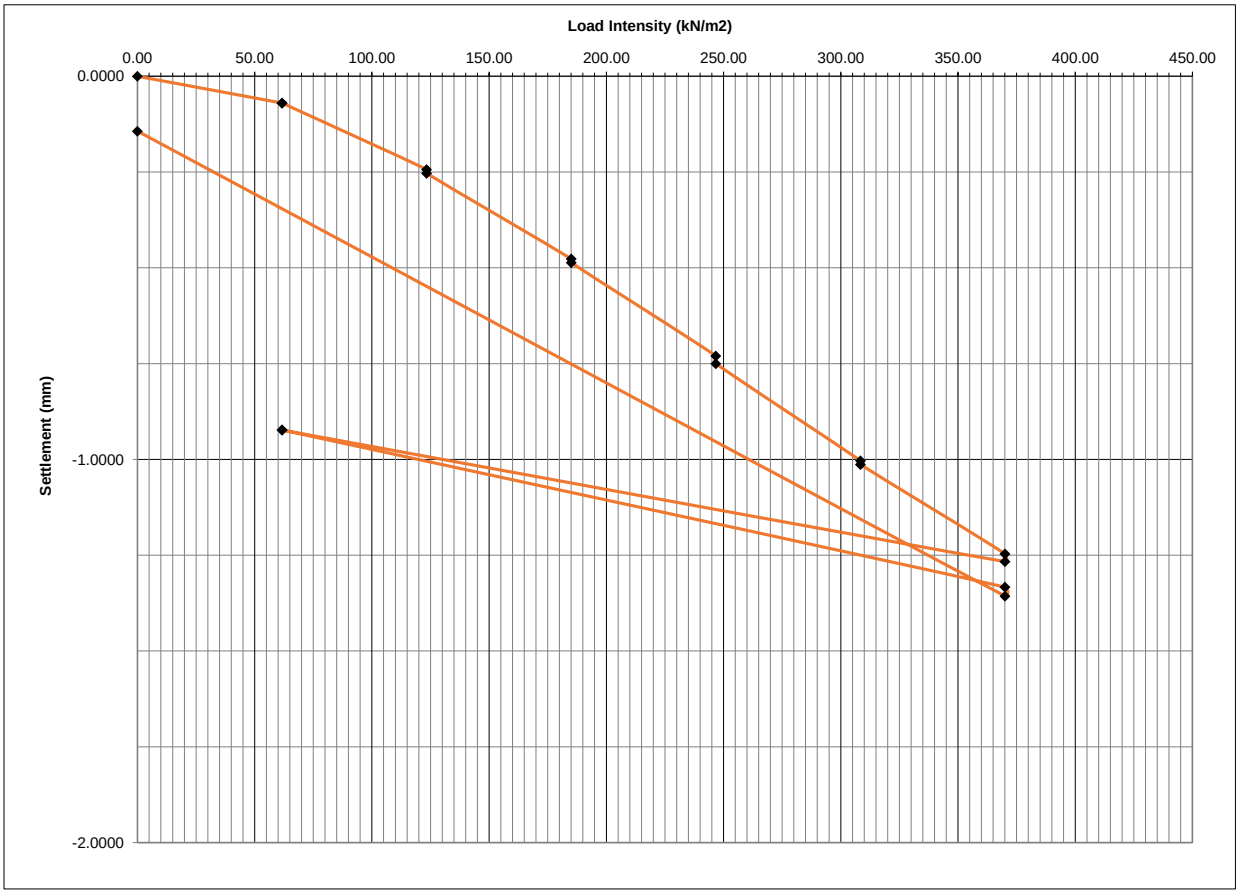
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	23/09/2024	R. Walker	23/09/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Don Street*		**Test No.:**	*CBR103*	
Site Ref:	*14-554*		**Test Date:**	*23/09/2024*	
Type of Kentledge:	*20Tonne Roller*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*388555*	
Max Applied Pressure:	*370.09*	*kN/m2*	**Northing:**	*406266*	
Max Deformation:	*-1.36*	*mm*	**W3W:**	*/ritual.bright.wells*	
Strata Description:	*Recycled Aggregate*		**Weather:**	*Rain*	

Comments:



Equivalent CBR Value of >85%

Max Deformation of 1.36 mm

Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	23/09/2024	R. Walker	23/09/2024

MURRAY RIX
CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client Urban Regen Ltd

Address Langley Road
Pendlebury
Salford
M6 6FG

Contract Don Street,
Middleton M24 2GG

Job Number MRN 4623/35
Date of Issue 14 July 2023

Approved Signatories

S J Hutchings, O P Davies

Notes

1 All remaining samples and remnants from this contract will be disposed 28 days from the date of this report unless you notify us to the contrary.

2 Result certificates, in this report, not bearing a UKAS mark, are not included in our UKAS accreditation schedule.

3 Opinions and interpretations expressed herein are outside the scope of our UKAS accreditation.

4 Certified that the samples have been examined and tested in accordance with the terms of the contract/order and unless otherwise stated conform to the standards/specifications quoted.

5 The results included within the report are representative of the samples submitted for analysis.

6 This certificate should not be reproduced, except in full, without the express permission of the laboratory.

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MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

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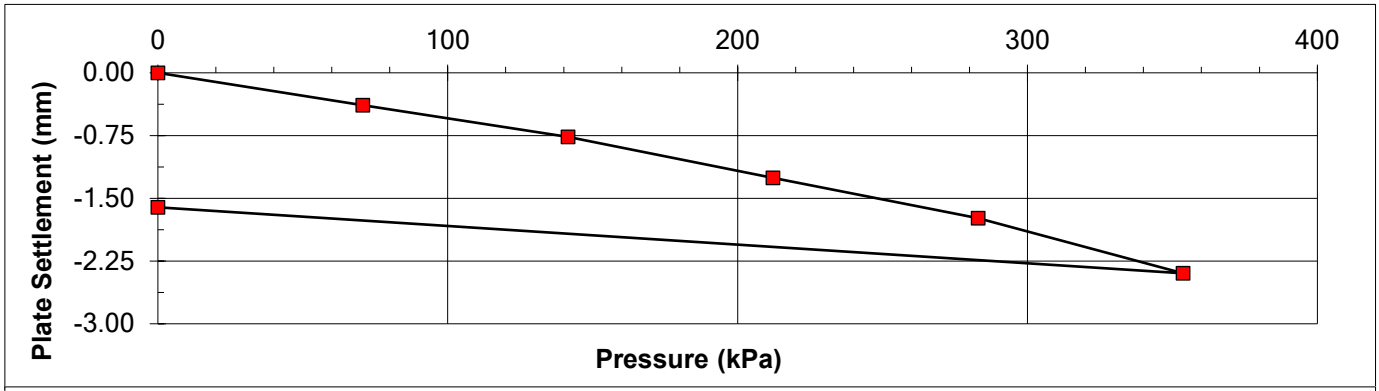
TEST CERTIFICATE

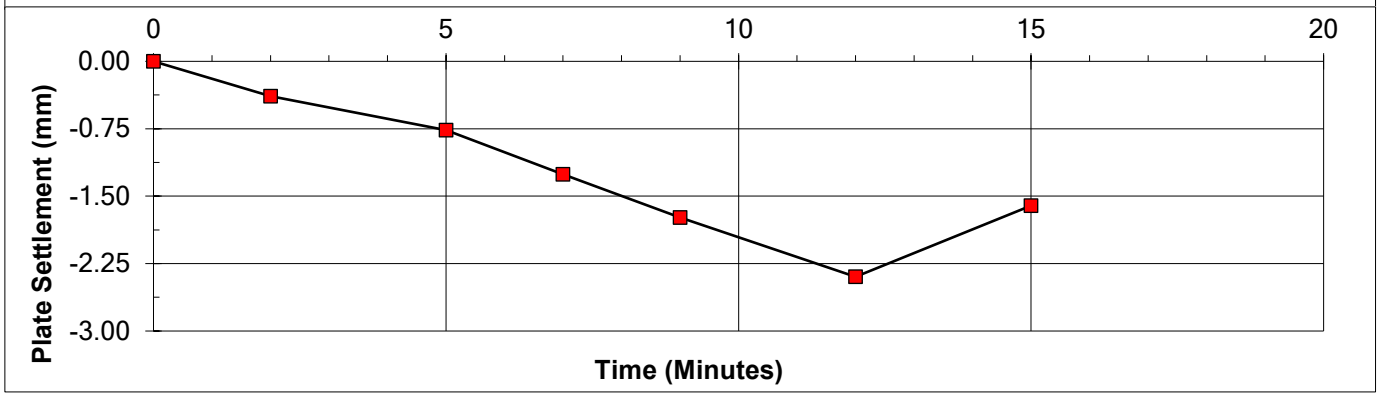
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 4GG		
JOB NUMBER	MRN 4623/35		
TEST LOCATION	R1	LOADING DEVICE	10 Tonne Enerpac Jack
TEST DATE	13-Jul-23	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
3461	4623	3183	3756	0.00	0.00	0.0
3411	4592	3148	3717	-0.39	5.00	70.7
3381	4541	3115	3679	-0.77	10.00	141.5
3340	4489	3061	3630	-1.26	15.00	212.2
3291	4445	3010	3582	-1.74	20.00	282.9
3218	4392	2938	3516	-2.40	25.00	353.7
3312	4461	3012	3595	-1.61	0.00	0.0





Pressure at 1.25 mm deflexion =	211	kPa
Modulus of subgrade reaction (k) =	169	MPa/m
Equivalent 762 mm plate reaction =	75	MPa/m
Equivalent CBR =	17.0	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 14-Jul-23

MURRAY RIX

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UKAS TESTING 1580

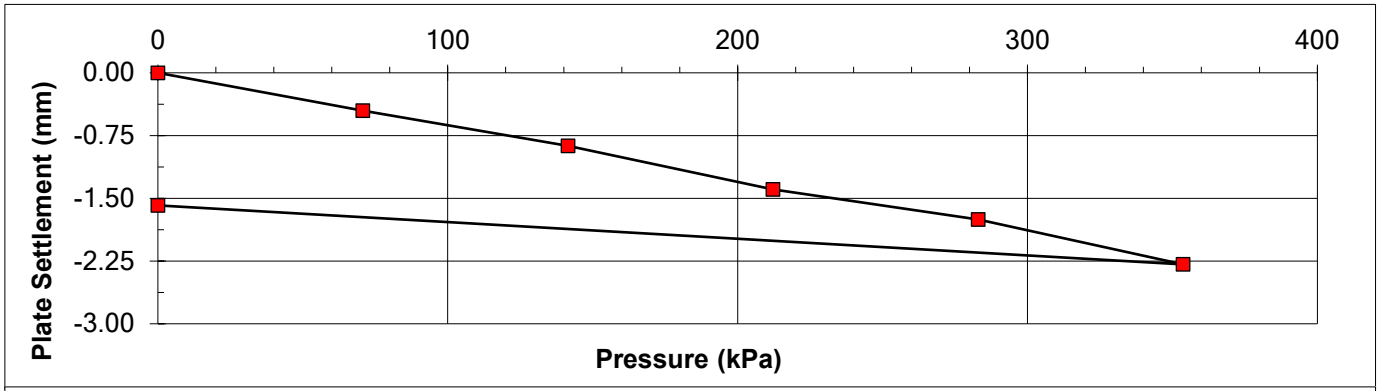
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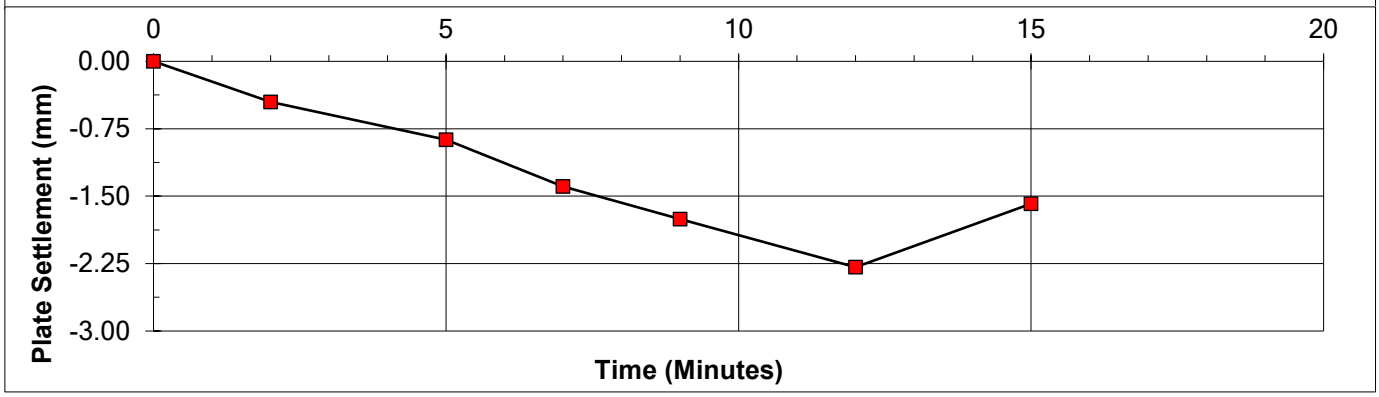
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 4GG		
JOB NUMBER	MRN 4623/35		
TEST LOCATION	R2	LOADING DEVICE	10 Tonne Enerpac Jack
TEST DATE	13-Jul-23	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
3158	4473	3542	3724	0.00	0.00	0.0
3118	4438	3481	3679	-0.45	5.00	70.7
3071	4392	3448	3637	-0.87	10.00	141.5
3012	4342	3401	3585	-1.39	15.00	212.2
2981	4308	3358	3549	-1.75	20.00	282.9
2928	4248	3310	3495	-2.29	25.00	353.7
3015	4318	3365	3566	-1.58	0.00	0.0





Pressure at 1.25 mm deflexion =	193	kPa
Modulus of subgrade reaction (k) =	154	MPa/m
Equivalent 762 mm plate reaction =	68	MPa/m
Equivalent CBR =	14.5	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 14-Jul-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

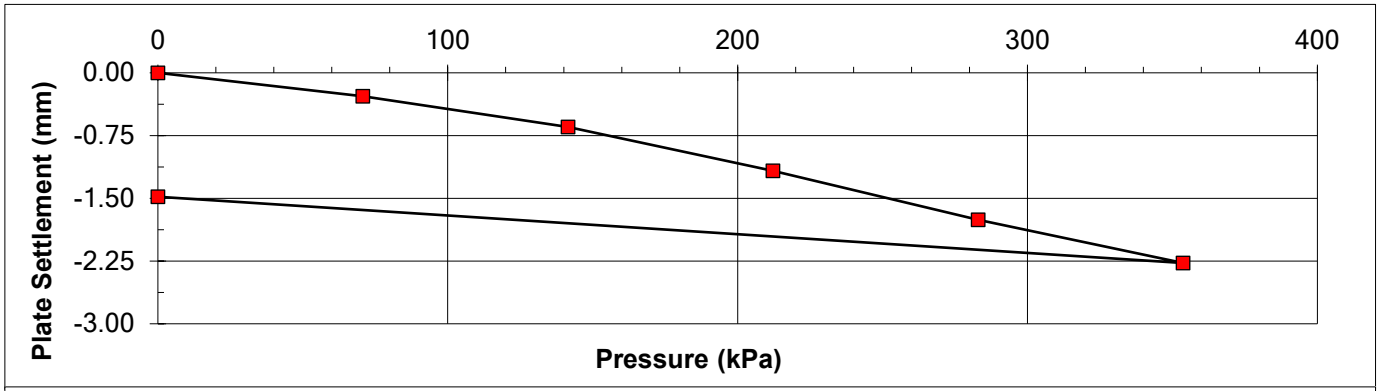
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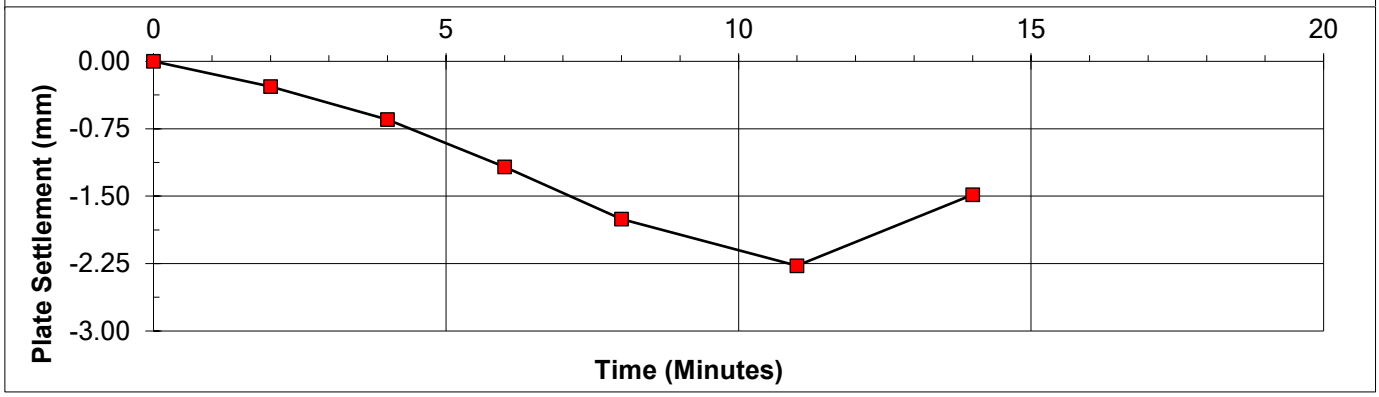
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd				
SITE	Don Street, Middleton M24 4GG				
JOB NUMBER	MRN 4623/35				
TEST LOCATION	R3	LOADING DEVICE	10 Tonne Enerpac Jack		
TEST DATE	13-Jul-23	PLATE SIZE (mm)	300 diameter		
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant		
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required		

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
2633	3023	3538	3065	0.00	0.00	0.0
2608	2992	3510	3037	-0.28	5.00	70.7
2581	2958	3461	3000	-0.65	10.00	141.5
2520	2911	3411	2947	-1.17	15.00	212.2
2458	2851	3358	2889	-1.76	20.00	282.9
2401	2801	3310	2837	-2.27	25.00	353.7
2492	2865	3392	2916	-1.48	0.00	0.0





Pressure at 1.25 mm deflexion =	222	kPa
Modulus of subgrade reaction (k) =	177	MPa/m
Equivalent 762 mm plate reaction =	78	MPa/m
Equivalent CBR =	18.4	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

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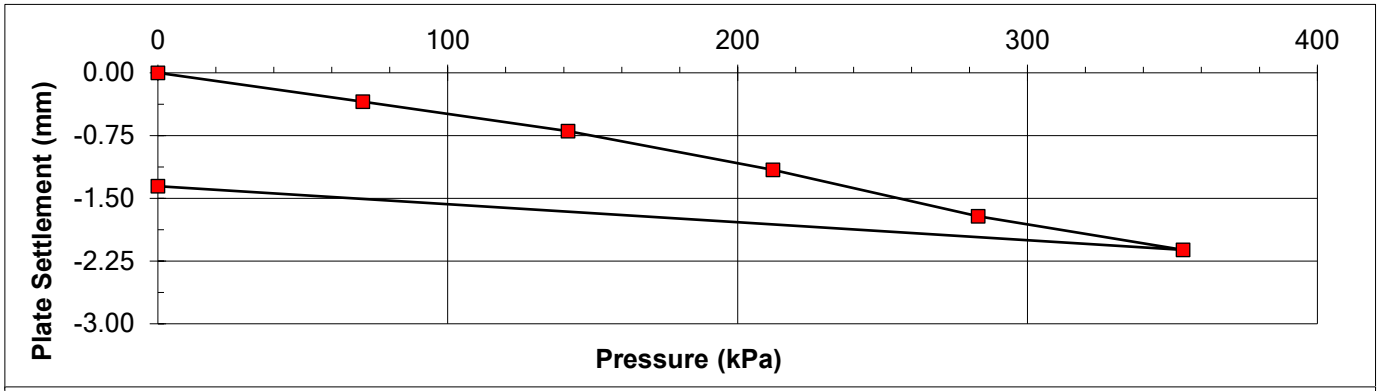
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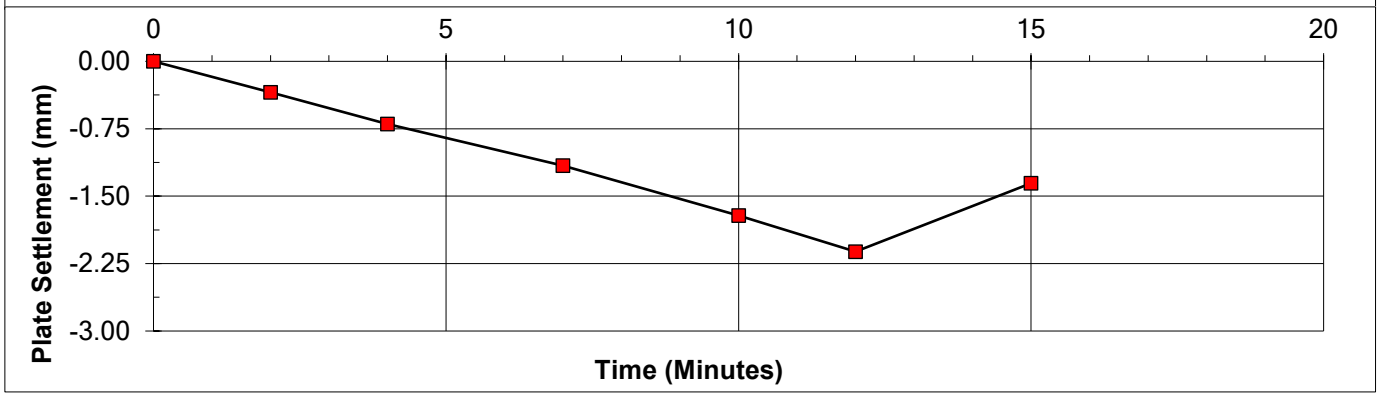
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 4GG		
JOB NUMBER	MRN 4623/35		
TEST LOCATION	R4	LOADING DEVICE	10 Tonne Enerpac Jack
TEST DATE	13-Jul-23	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
2273	2623	3632	2843	0.00	0.00	0.0
2241	2591	3592	2808	-0.35	5.00	70.7
2210	2558	3551	2773	-0.70	10.00	141.5
2161	2511	3508	2727	-1.16	15.00	212.2
2101	2451	3461	2671	-1.72	20.00	282.9
2071	2411	3411	2631	-2.12	25.00	353.7
2161	2492	3468	2707	-1.36	0.00	0.0





Pressure at 1.25 mm deflexion =	224	kPa
Modulus of subgrade reaction (k) =	179	MPa/m
Equivalent 762 mm plate reaction =	79	MPa/m
Equivalent CBR =	18.8	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 14-Jul-23

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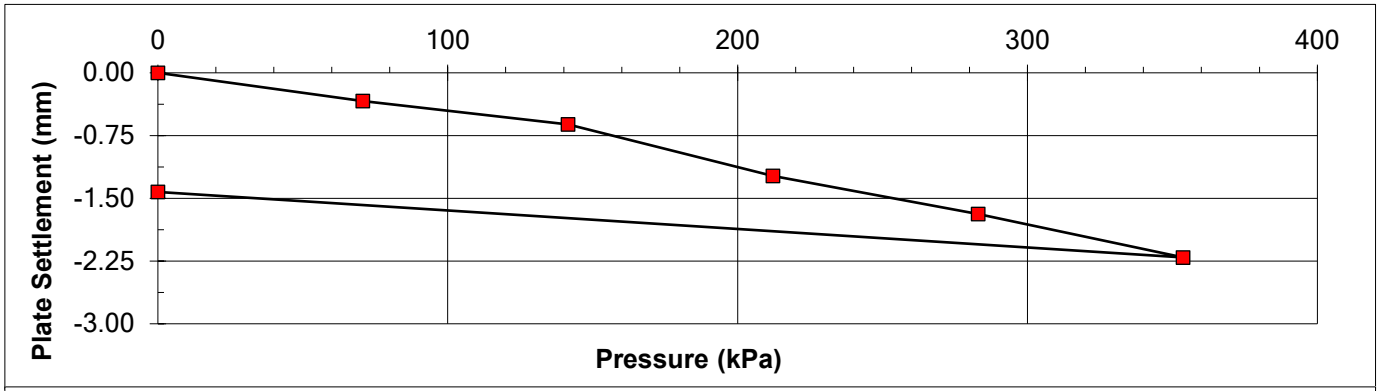
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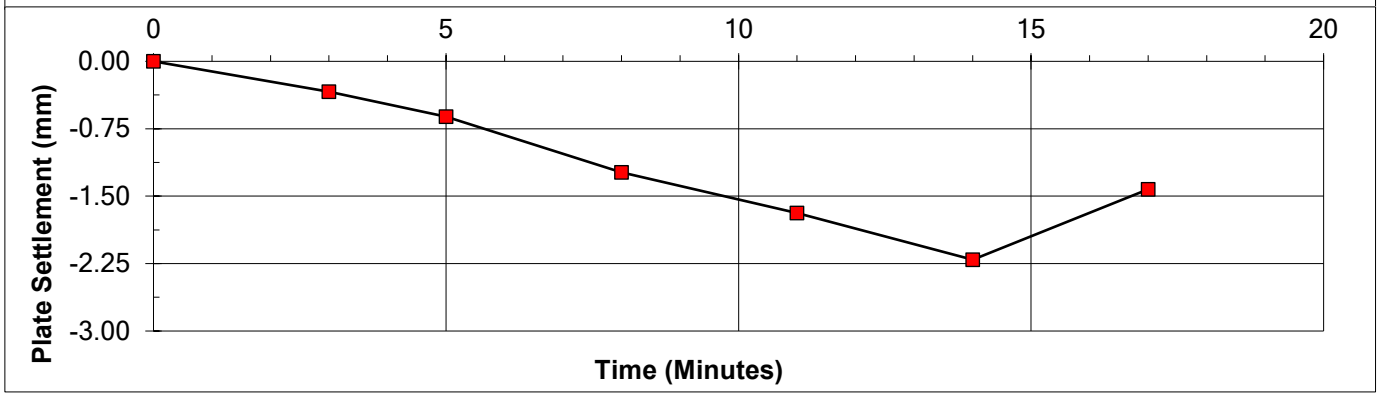
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd				
SITE	Don Street, Middleton M24 4GG				
JOB NUMBER	MRN 4623/35				
TEST LOCATION	R5	LOADING DEVICE	10 Tonne Enerpac Jack		
TEST DATE	13-Jul-23	PLATE SIZE (mm)	300 diameter		
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant		
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required		

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
2142	3132	4265	3180	0.00	0.00	0.0
2110	3110	4218	3146	-0.34	5.00	70.7
2081	3081	4192	3118	-0.62	10.00	141.5
2020	3011	4138	3056	-1.23	15.00	212.2
1981	2951	4101	3011	-1.69	20.00	282.9
1918	2901	4058	2959	-2.21	25.00	353.7
1998	2983	4131	3037	-1.42	0.00	0.0





Pressure at 1.25 mm deflexion =	215	kPa
Modulus of subgrade reaction (k) =	172	MPa/m
Equivalent 762 mm plate reaction =	76	MPa/m
Equivalent CBR =	17.5	%

REMARKS

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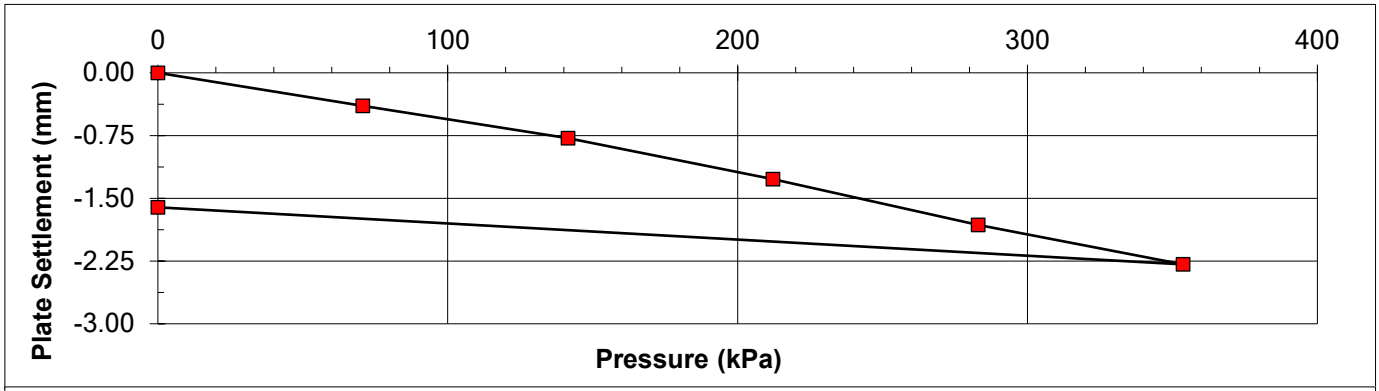
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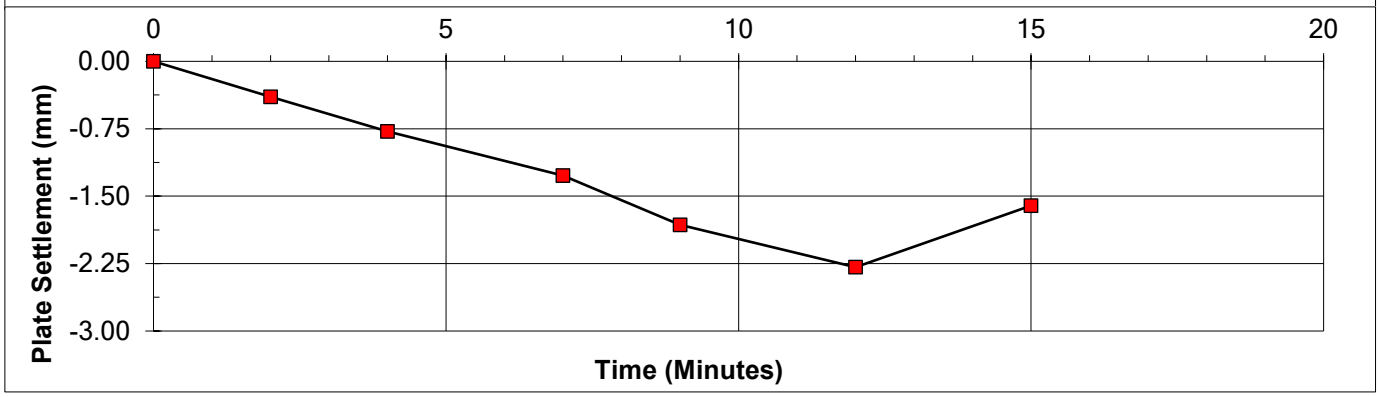
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 4GG		
JOB NUMBER	MRN 4623/35		
TEST LOCATION	R6	LOADING DEVICE	10 Tonne Enerpac Jack
TEST DATE	13-Jul-23	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
2831	2965	4483	3426	0.00	0.00	0.0
2783	2928	4450	3387	-0.39	5.00	70.7
2751	2883	4411	3348	-0.78	10.00	141.5
2691	2845	4362	3299	-1.27	15.00	212.2
2611	2801	4321	3244	-1.82	20.00	282.9
2551	2758	4283	3197	-2.29	25.00	353.7
2615	2821	4361	3266	-1.61	0.00	0.0





Pressure at 1.25 mm deflexion =	209	kPa
Modulus of subgrade reaction (k) =	167	MPa/m
Equivalent 762 mm plate reaction =	74	MPa/m
Equivalent CBR =	16.7	%

REMARKS

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NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 14-Jul-23

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UKAS TESTING 1580

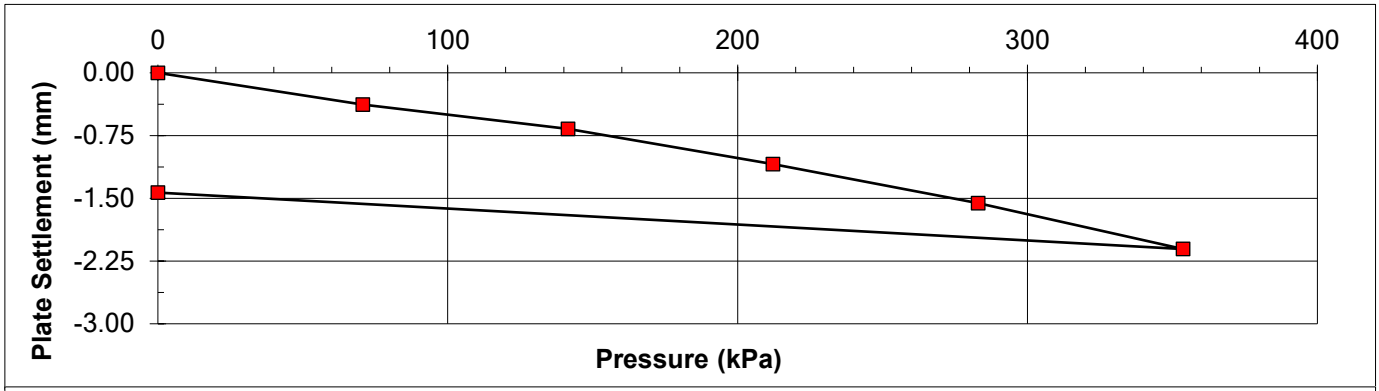
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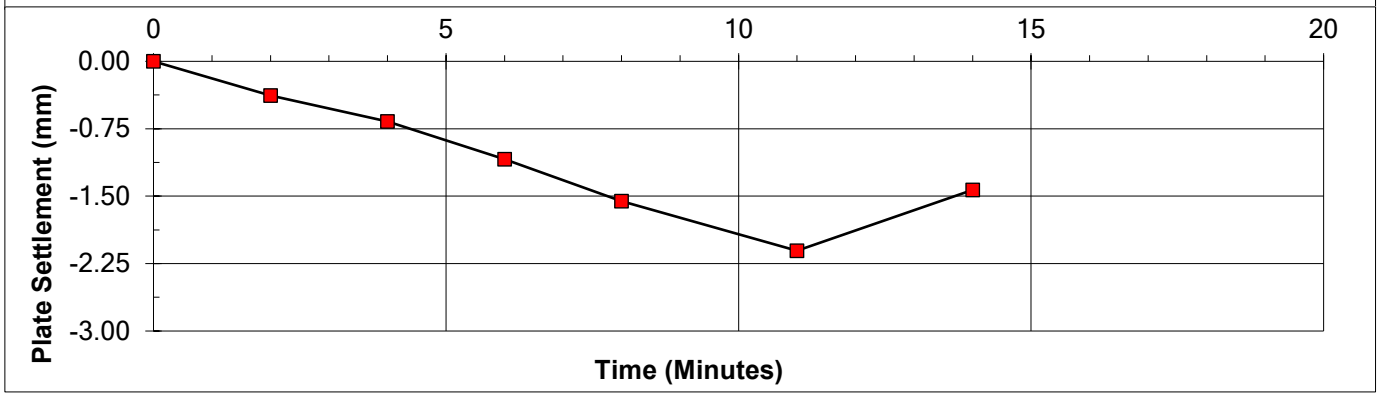
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 4GG		
JOB NUMBER	MRN 4623/35		
TEST LOCATION	R7	LOADING DEVICE	10 Tonne Enerpac Jack
TEST DATE	13-Jul-23	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
3473	2332	4623	3476	0.00	0.00	0.0
3441	2292	4581	3438	-0.38	5.00	70.7
3411	2258	4558	3409	-0.67	10.00	141.5
3362	2211	4528	3367	-1.09	15.00	212.2
3311	2158	4492	3320	-1.56	20.00	282.9
3258	2110	4428	3265	-2.11	25.00	353.7
3315	2169	4515	3333	-1.43	0.00	0.0





Pressure at 1.25 mm deflexion =	236	kPa
Modulus of subgrade reaction (k) =	189	MPa/m
Equivalent 762 mm plate reaction =	84	MPa/m
Equivalent CBR =	20.7	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 14-Jul-23

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DUKINFIELD, CHESHIRE SK16 4QX
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UKAS TESTING 1580

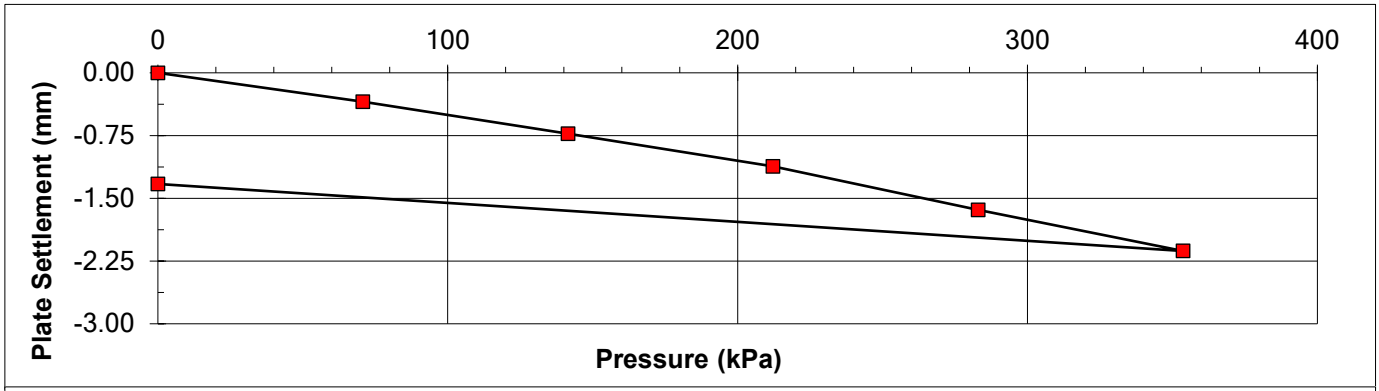
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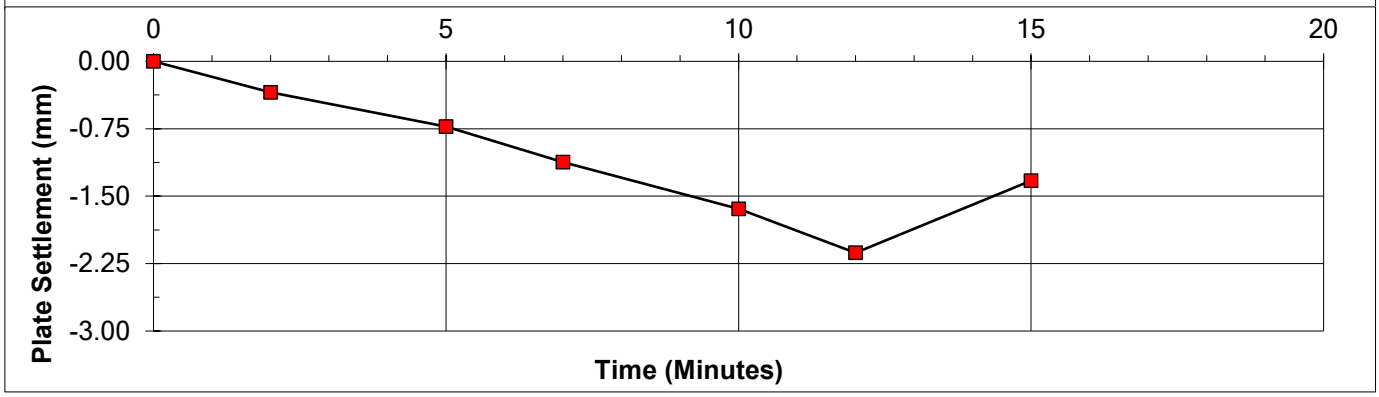
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 4GG		
JOB NUMBER	MRN 4623/35		
TEST LOCATION	R8	LOADING DEVICE	10 Tonne Enerpac Jack
TEST DATE	13-Jul-23	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
3132	2292	3465	2963	0.00	0.00	0.0
3110	2258	3418	2929	-0.34	5.00	70.7
3061	2218	3392	2890	-0.73	10.00	141.5
3021	2181	3351	2851	-1.12	15.00	212.2
2958	2128	3311	2799	-1.64	20.00	282.9
2912	2080	3258	2750	-2.13	25.00	353.7
3015	2161	3315	2830	-1.33	0.00	0.0





Pressure at 1.25 mm deflexion =	230	kPa
Modulus of subgrade reaction (k) =	184	MPa/m
Equivalent 762 mm plate reaction =	81	MPa/m
Equivalent CBR =	19.7	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 14-Jul-23

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UKAS TESTING 1580

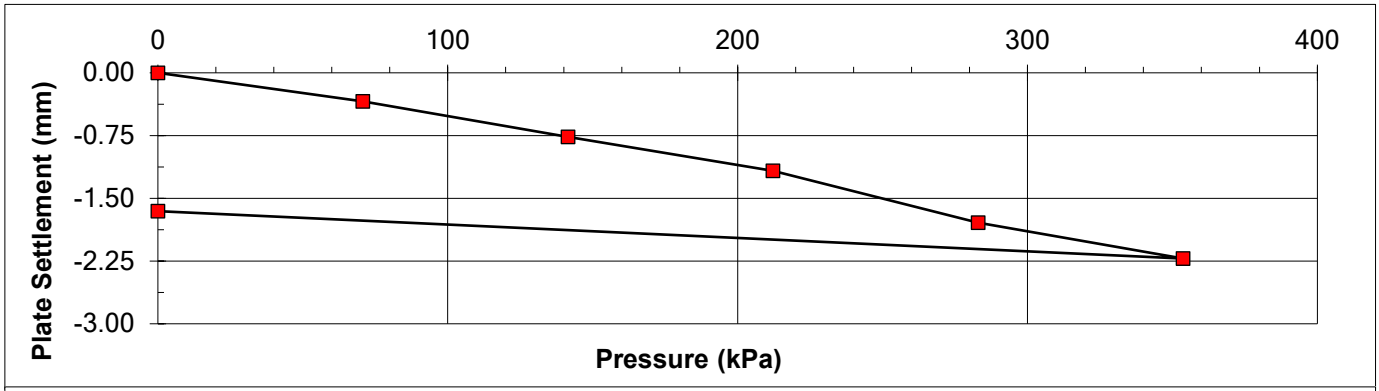
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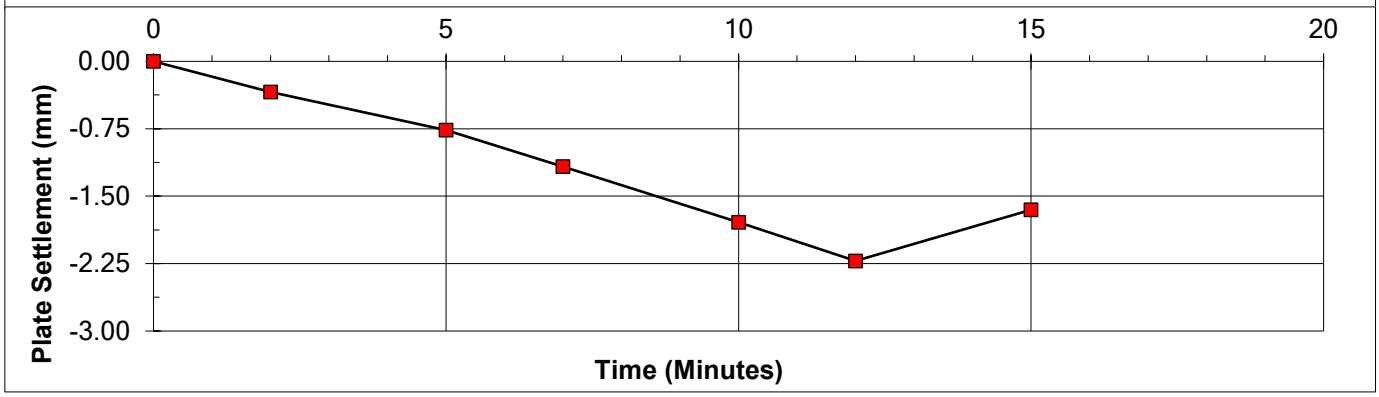
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 4GG		
JOB NUMBER	MRN 4623/35		
TEST LOCATION	R9	LOADING DEVICE	10 Tonne Enerpac Jack
TEST DATE	13-Jul-23	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
2485	3032	3533	3017	0.00	0.00	0.0
2445	3001	3502	2983	-0.34	5.00	70.7
2411	2958	3451	2940	-0.77	10.00	141.5
2360	2918	3421	2900	-1.17	15.00	212.2
2301	2851	3361	2838	-1.79	20.00	282.9
2258	2815	3311	2795	-2.22	25.00	353.7
2315	2871	3368	2851	-1.65	0.00	0.0





Pressure at 1.25 mm deflexion =	221	kPa
Modulus of subgrade reaction (k) =	177	MPa/m
Equivalent 762 mm plate reaction =	78	MPa/m
Equivalent CBR =	18.4	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
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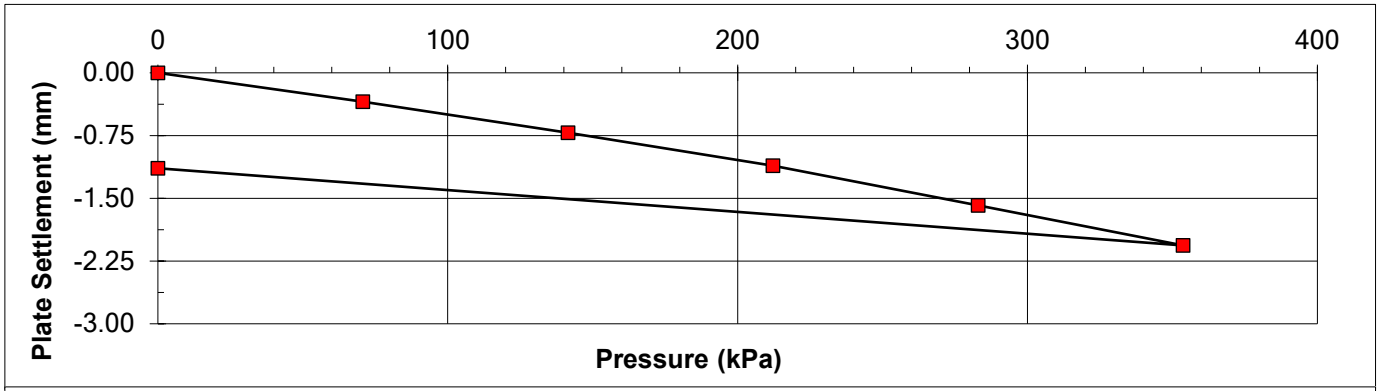
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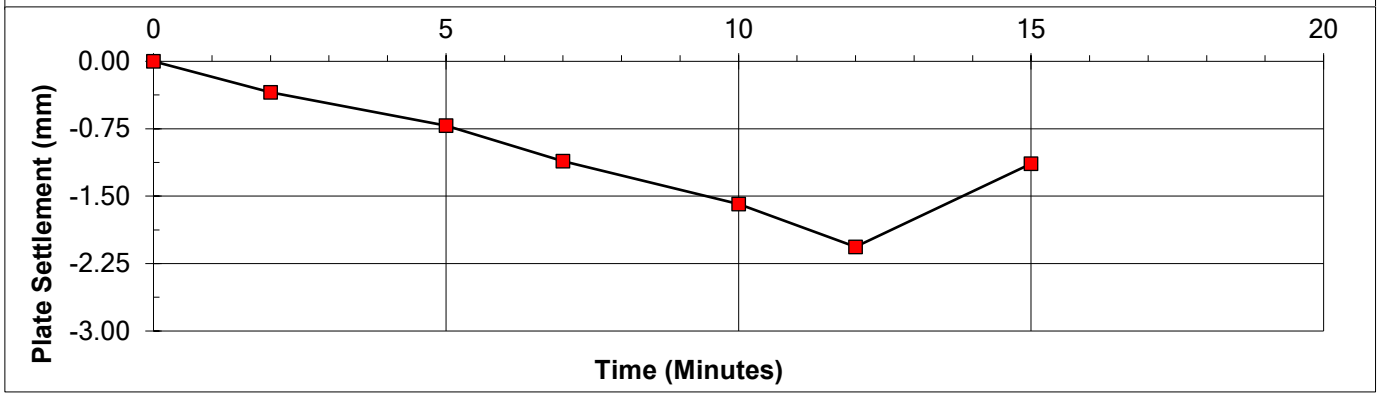
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd				
SITE	Don Street, Middleton M24 4GG				
JOB NUMBER	MRN 4623/35				
TEST LOCATION	R10	LOADING DEVICE	10 Tonne Enerpac Jack		
TEST DATE	13-Jul-23	PLATE SIZE (mm)	300 diameter		
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant		
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required		

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
2023	3223	3623	2956	0.00	0.00	0.0
1992	3181	3592	2922	-0.35	5.00	70.7
1958	3138	3558	2885	-0.72	10.00	141.5
1912	3112	3512	2845	-1.11	15.00	212.2
1851	3062	3480	2798	-1.59	20.00	282.9
1812	3028	3410	2750	-2.06	25.00	353.7
1903	3112	3512	2842	-1.14	0.00	0.0





Pressure at 1.25 mm deflexion =	233	kPa
Modulus of subgrade reaction (k) =	186	MPa/m
Equivalent 762 mm plate reaction =	82	MPa/m
Equivalent CBR =	20.1	%

REMARKS

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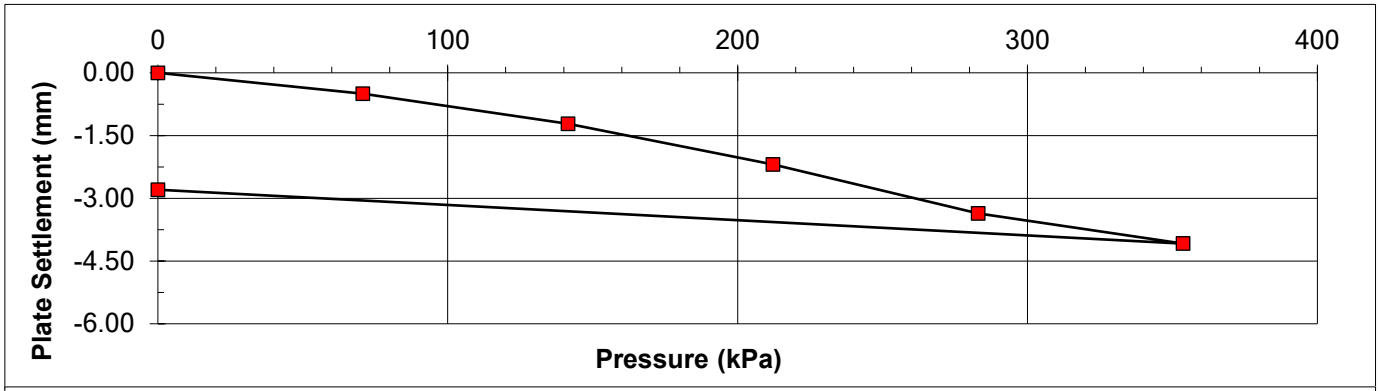
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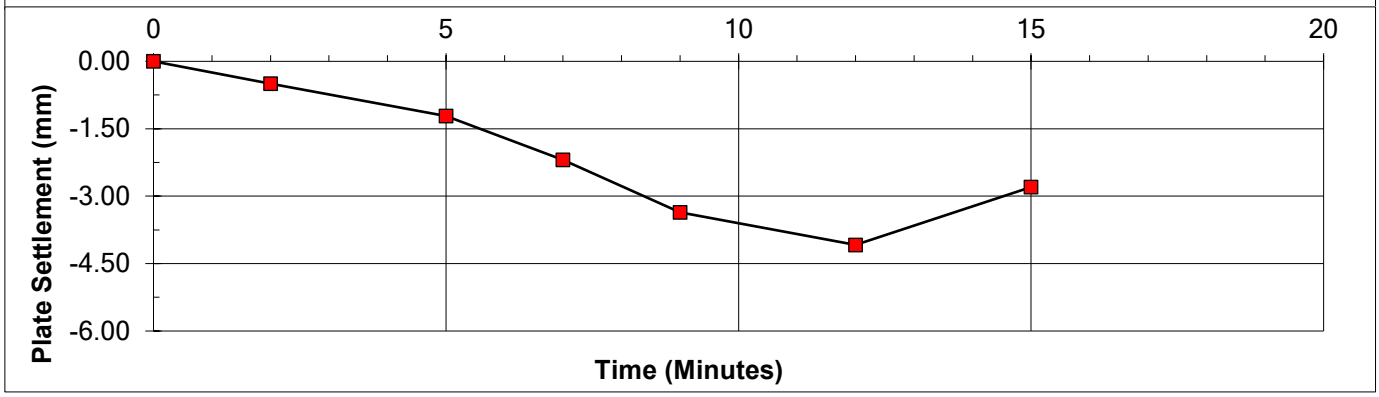
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 4GG		
JOB NUMBER	MRN 4623/35		
TEST LOCATION	P1	LOADING DEVICE	10 Tonne Enerpac Jack
TEST DATE	13-Jul-23	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
2261	3115	3523	2966	0.00	0.00	0.0
2208	3061	3481	2917	-0.50	5.00	70.7
2141	2992	3401	2845	-1.22	10.00	141.5
2058	2882	3301	2747	-2.19	15.00	212.2
1931	2758	3201	2630	-3.36	20.00	282.9
1861	2692	3121	2558	-4.08	25.00	353.7
2002	2815	3243	2687	-2.80	0.00	0.0





Pressure at 1.25 mm deflexion =	144	kPa
Modulus of subgrade reaction (k) =	115	MPa/m
Equivalent 762 mm plate reaction =	51	MPa/m
Equivalent CBR =	8.7	%

REMARKS

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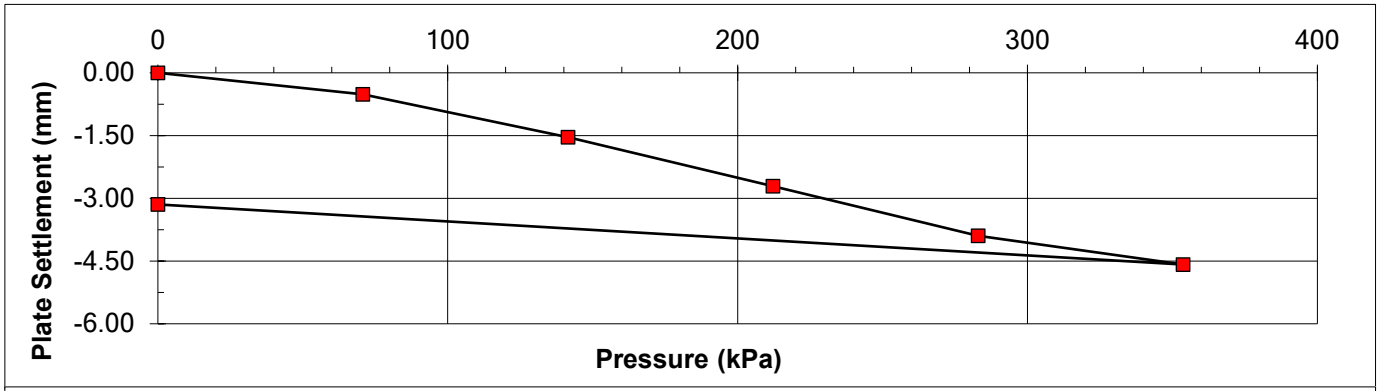
TEST CERTIFICATE

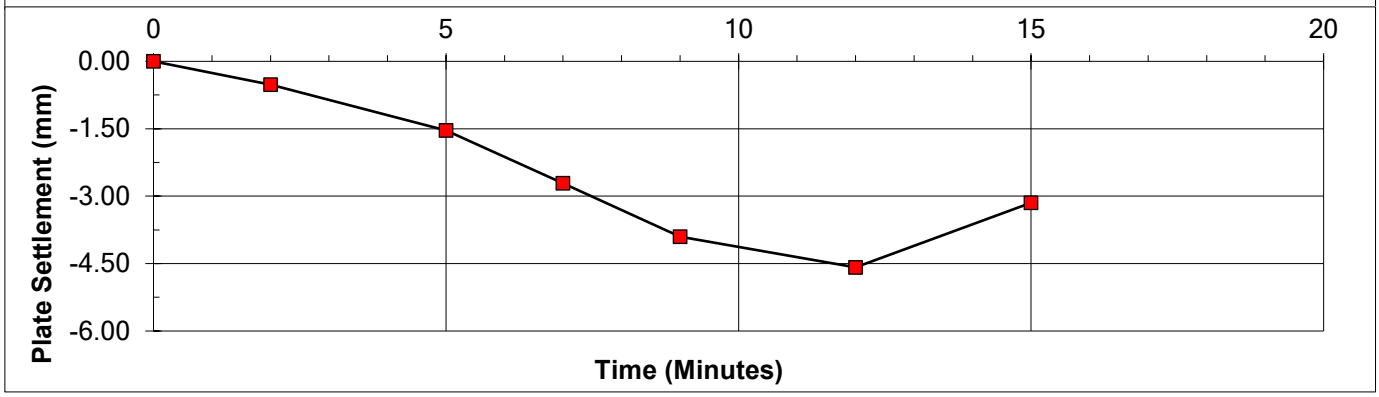
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 4GG		
JOB NUMBER	MRN 4623/35		
TEST LOCATION	P2	LOADING DEVICE	10 Tonne Enerpac Jack
TEST DATE	13-Jul-23	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
2461	4161	3115	3246	0.00	0.00	0.0
2411	4110	3061	3194	-0.52	5.00	70.7
2312	4012	2951	3092	-1.54	10.00	141.5
2201	3901	2821	2974	-2.71	15.00	212.2
2083	3783	2701	2856	-3.90	20.00	282.9
2012	3712	2638	2787	-4.58	25.00	353.7
2168	3831	2795	2931	-3.14	0.00	0.0





Pressure at 1.25 mm deflexion =	121	kPa
Modulus of subgrade reaction (k) =	97	MPa/m
Equivalent 762 mm plate reaction =	43	MPa/m
Equivalent CBR =	6.5	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 14-Jul-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

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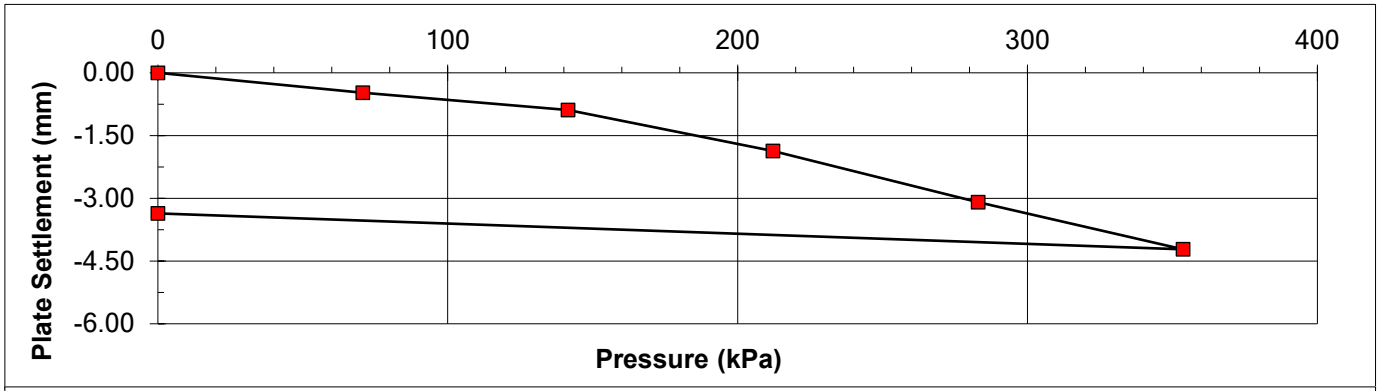
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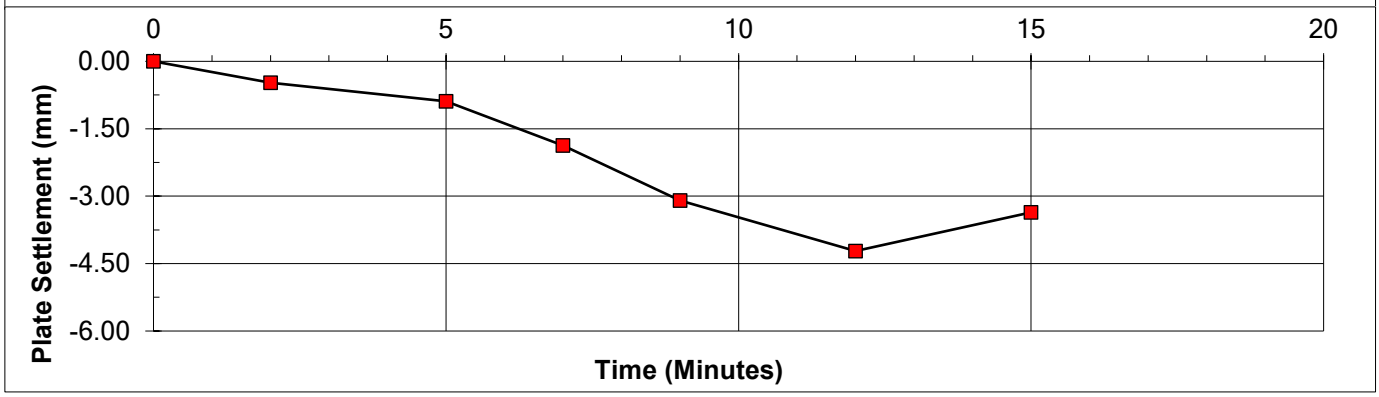
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 4GG		
JOB NUMBER	MRN 4623/35		
TEST LOCATION	P3	LOADING DEVICE	10 Tonne Enerpac Jack
TEST DATE	13-Jul-23	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
3132	4132	2632	3299	0.00	0.00	0.0
3081	4081	2591	3251	-0.48	5.00	70.7
3041	4031	2558	3210	-0.89	10.00	141.5
2951	3943	2441	3112	-1.87	15.00	212.2
2828	3821	2318	2989	-3.10	20.00	282.9
2701	3711	2218	2877	-4.22	25.00	353.7
2798	3792	2298	2963	-3.36	0.00	0.0





Pressure at 1.25 mm deflexion =	168	kPa
Modulus of subgrade reaction (k) =	134	MPa/m
Equivalent 762 mm plate reaction =	59	MPa/m
Equivalent CBR =	11.4	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 14-Jul-23

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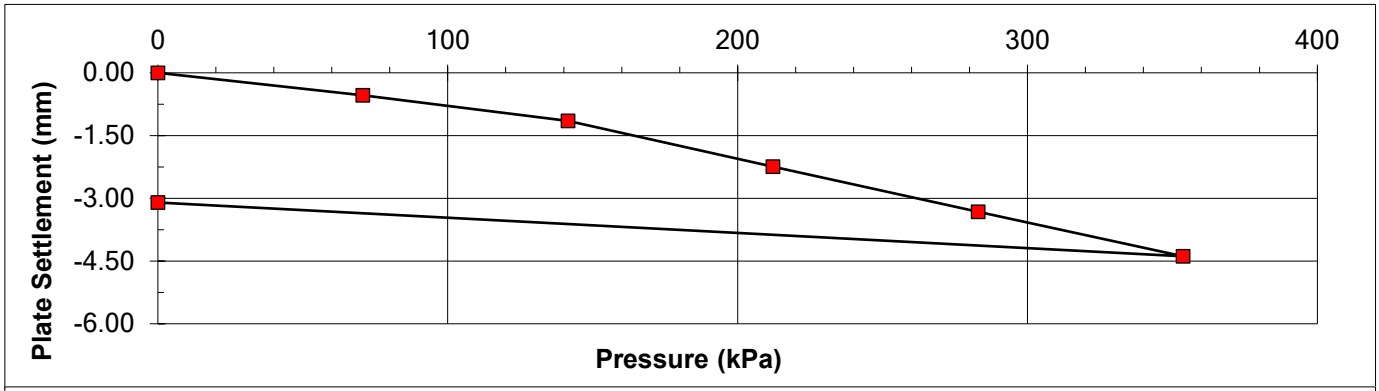
UKAS TESTING 1580

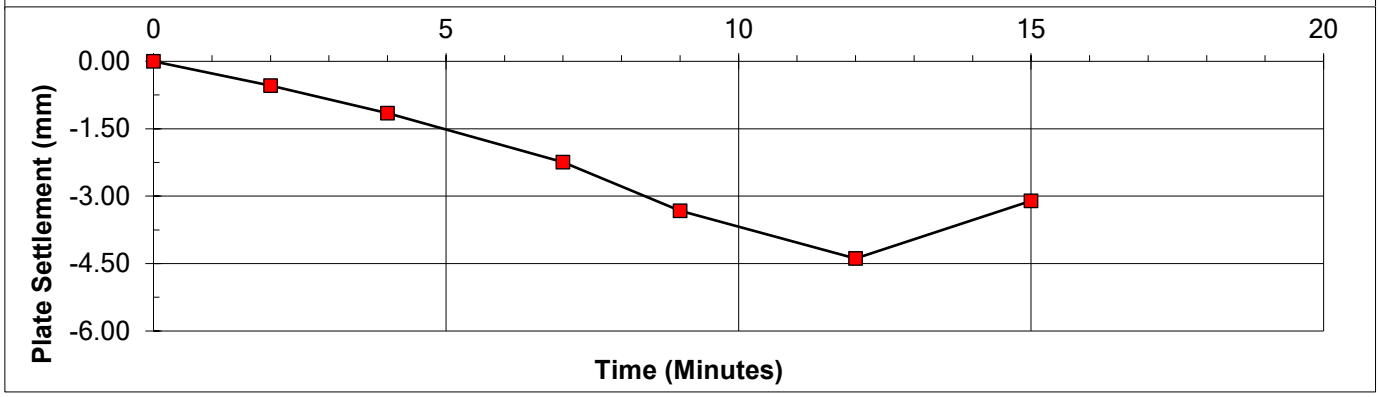
TEST CERTIFICATE

PLATE INCREMENTAL LOAD TEST
BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 4GG		
JOB NUMBER	MRN 4623/35		
TEST LOCATION	P4	LOADING DEVICE	10 Tonne Enerpac Jack
TEST DATE	13-Jul-23	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
2145	3341	3773	3086	0.00	0.00	0.0
2098	3271	3728	3032	-0.54	5.00	70.7
2051	3210	3652	2971	-1.15	10.00	141.5
1931	3112	3543	2862	-2.24	15.00	212.2
1823	3011	3428	2754	-3.32	20.00	282.9
1712	2921	3310	2648	-4.39	25.00	353.7
1805	3061	3462	2776	-3.10	0.00	0.0





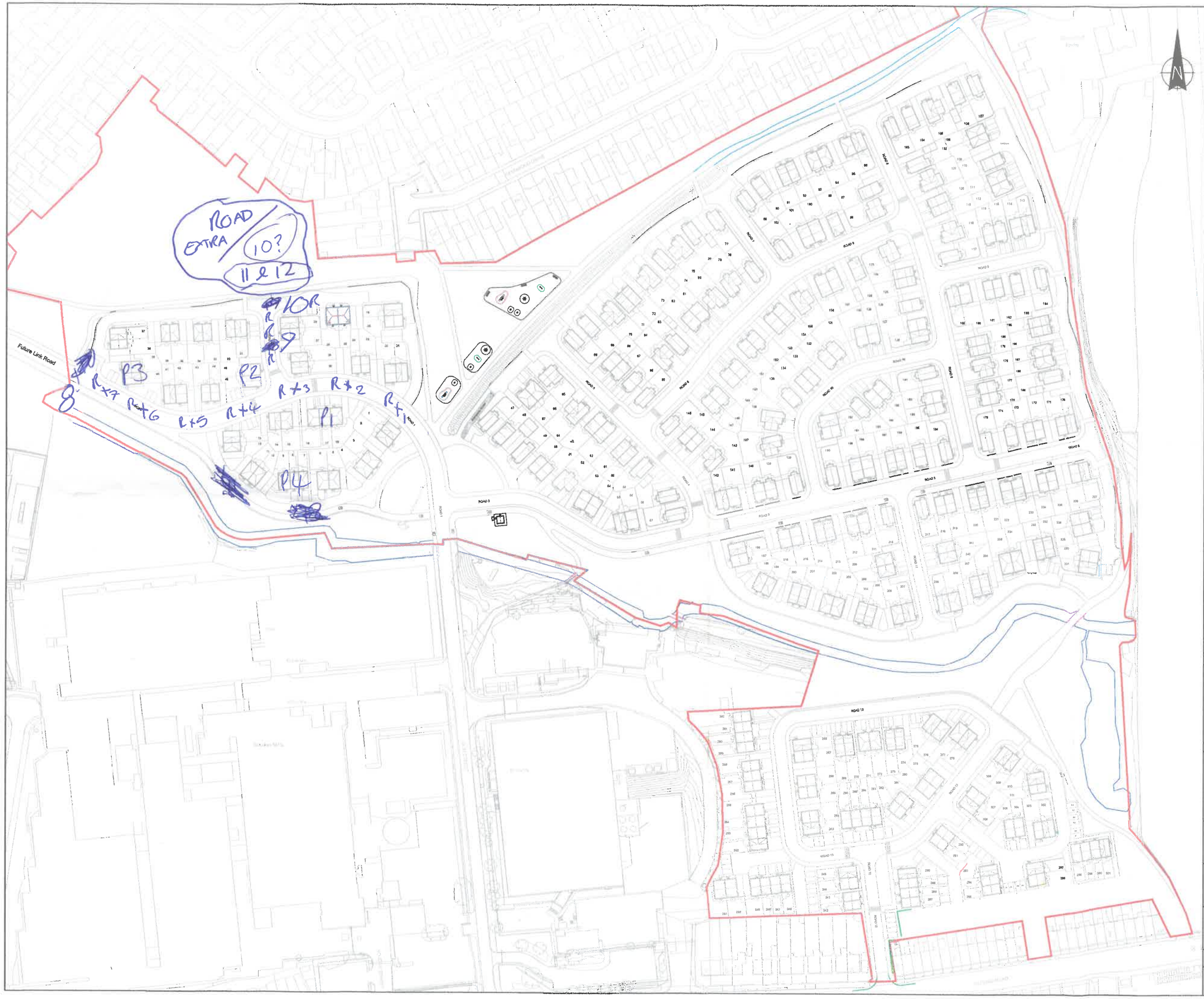
Pressure at 1.25 mm deflexion =	148	kPa
Modulus of subgrade reaction (k) =	118	MPa/m
Equivalent 762 mm plate reaction =	52	MPa/m
Equivalent CBR =	9.1	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 14-Jul-23





Sheet Plan Scale:NTS

Notes:

Site boundary	
Major contour	
Minor contour (1m)	
Spot level	x 33.48
Bottom / top of bank	

1ST RD CBRS
R1-12

PLOTS P1-4

Survey Information:

Coord System	Grid/Tape	Primary Survey Control	Secondary Survey Control
OSGB36(15)	Grid	Leica SmartNet	Site

Rev	Date	Amendment	Drawn	Checked

Urban Regen
ESTABLISHED 2001

Client: Kellen Homes

Project: Don Street

Title: 367 - Material Management Plan

Scale:	First issue:	Drawn:	Checked:
NTS @ A1			

Drawing No: 367 - 22 - 01 Revision:

14-Jul-23

MURRAY RIX
CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client Urban Regen Ltd

Address Langley Road
Pendlebury
Salford
M6 6FG

Contract Don Street,
Middleton M24 2GG

Job Number MRN 4623/15
Date of Issue 02 May 2023

Approved Signatories

S J Hutchings, O P Davies

Notes

1 All remaining samples and remnants from this contract will be disposed 28 days from the date of this report unless you notify us to the contrary.

2 Result certificates, in this report, not bearing a UKAS mark, are not included in our UKAS accreditation schedule.

3 Opinions and interpretations expressed herein are outside the scope of our UKAS accreditation.

4 Certified that the samples have been examined and tested in accordance with the terms of the contract/order and unless otherwise stated conform to the standards/specifications quoted.

5 The results included within the report are representative of the samples submitted for analysis.

6 This certificate should not be reproduced, except in full, without the express permission of the laboratory.

Andrew House, Hadfield Street, Dukinfield, Cheshire SK16 4QX Tel: 0161 475 0870
Email: enquiries@murrayrix.com Website: www.murrayrix.com

Also at: London: 020 8523 1999

UKAS TESTING 1580

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MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

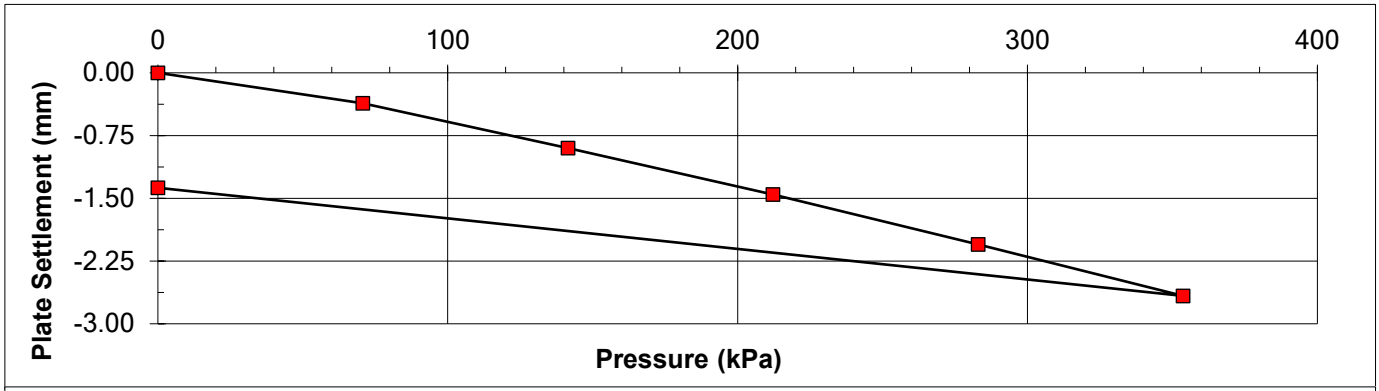
UKAS TESTING 1580

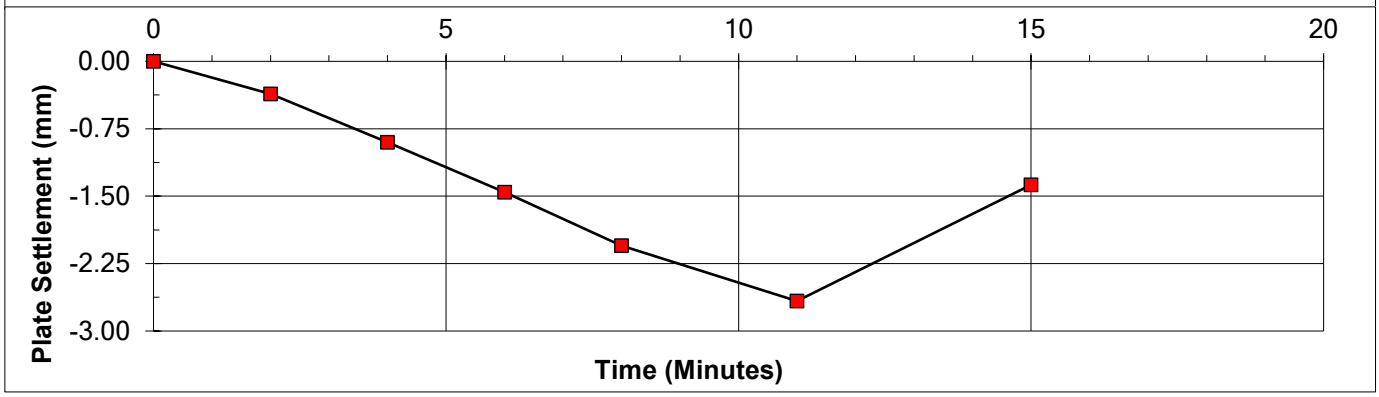
TEST CERTIFICATE

PLATE INCREMENTAL LOAD TEST
BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd				
SITE	Don Street, Middleton M24 4GG				
JOB NUMBER	MRN 4623/15				
TEST LOCATION	P9	LOADING DEVICE	10 Tonne Enerpac Jack		
TEST DATE	28-Apr-23	PLATE SIZE (mm)	300 diameter		
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant		
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required		

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
2999	2115	3543	2886	0.00	0.00	0.0
2958	2080	3510	2849	-0.36	5.00	70.7
2901	2028	3458	2796	-0.90	10.00	141.5
2861	1958	3401	2740	-1.46	15.00	212.2
2801	1901	3340	2681	-2.05	20.00	282.9
2741	1845	3271	2619	-2.67	25.00	353.7
2865	1982	3398	2748	-1.37	0.00	0.0





Pressure at 1.25 mm deflexion =	186	kPa
Modulus of subgrade reaction (k) =	149	MPa/m
Equivalent 762 mm plate reaction =	66	MPa/m
Equivalent CBR =	13.6	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 02-May-23

MURRAY RIX

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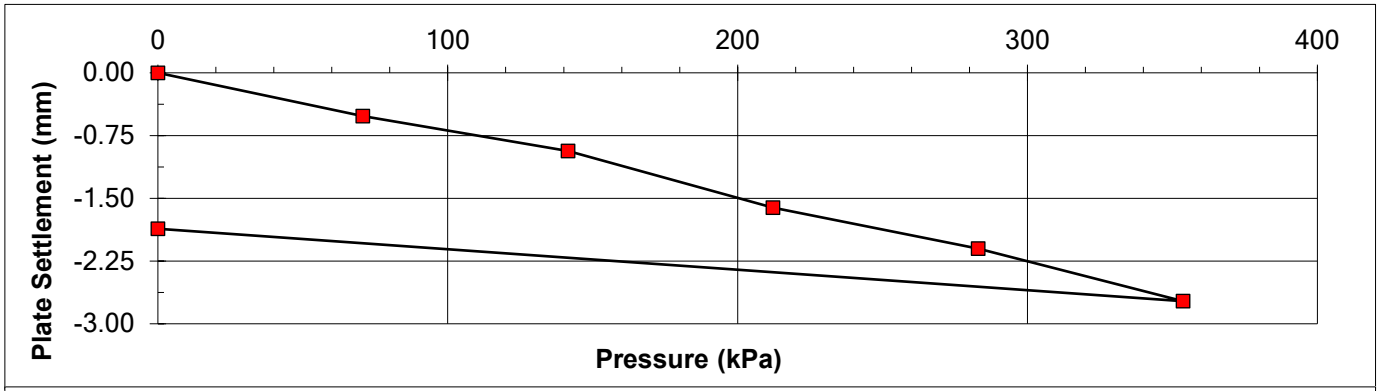
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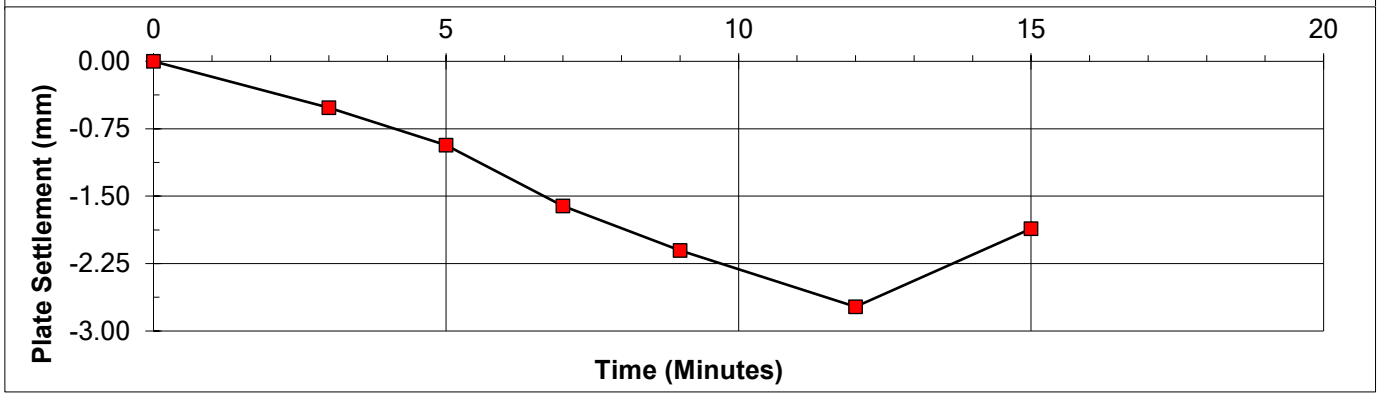
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 4GG		
JOB NUMBER	MRN 4623/15		
TEST LOCATION	P10	LOADING DEVICE	10 Tonne Enerpac Jack
TEST DATE	28-Apr-23	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
2581	3268	3538	3129	0.00	0.00	0.0
2543	3218	3471	3077	-0.52	5.00	70.7
2508	3171	3428	3036	-0.93	10.00	141.5
2442	3101	3361	2968	-1.61	15.00	212.2
2401	3045	3310	2919	-2.10	20.00	282.9
2340	3000	3228	2856	-2.73	25.00	353.7
2418	3095	3315	2943	-1.86	0.00	0.0





Pressure at 1.25 mm deflexion =	175	kPa
Modulus of subgrade reaction (k) =	140	MPa/m
Equivalent 762 mm plate reaction =	62	MPa/m
Equivalent CBR =	12.2	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 02-May-23

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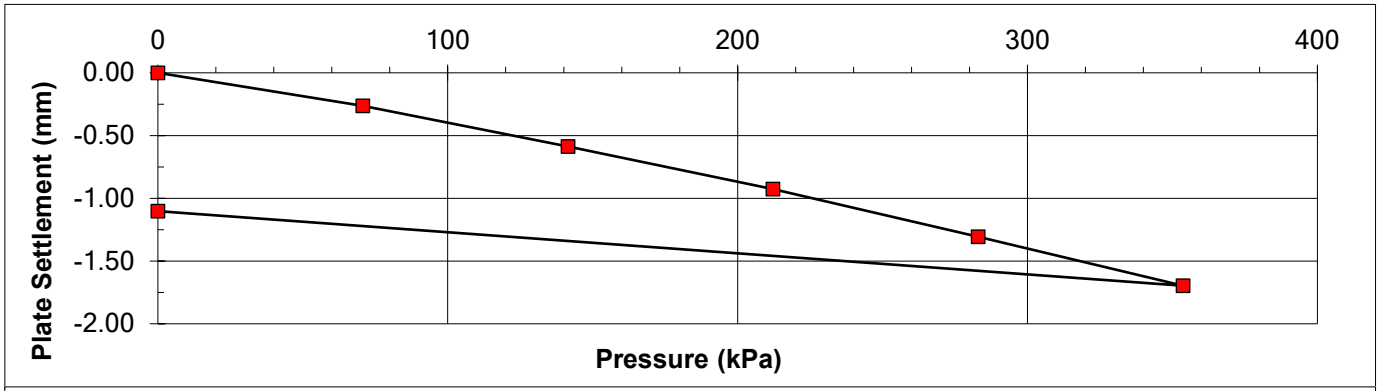
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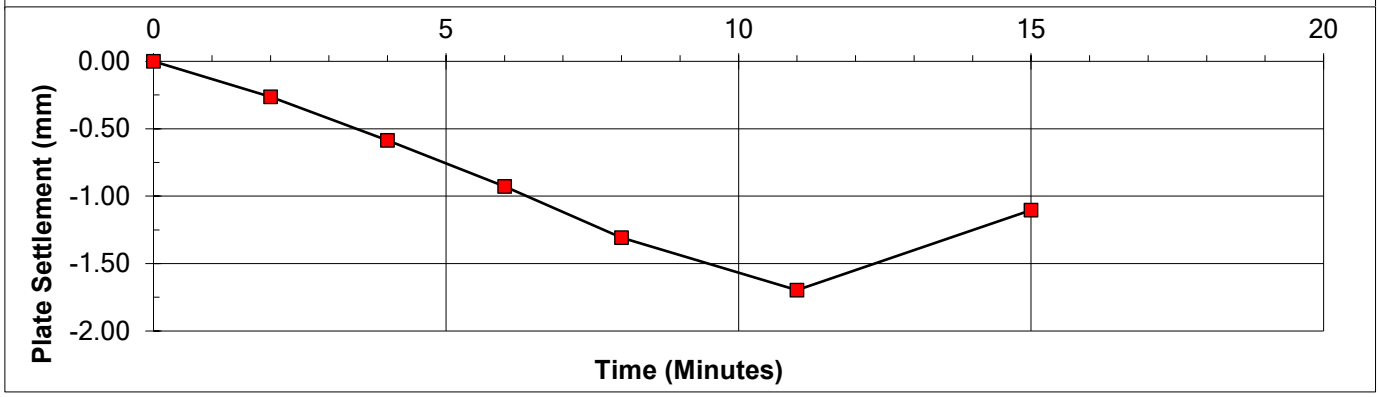
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd				
SITE	Don Street, Middleton M24 4GG				
JOB NUMBER	MRN 4623/15				
TEST LOCATION	R1	LOADING DEVICE	10 Tonne Enerpac Jack		
TEST DATE	28-Apr-23	PLATE SIZE (mm)	300 diameter		
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant		
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required		

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
3473	4483	3623	3860	0.00	0.00	0.0
3450	4458	3592	3833	-0.26	5.00	70.7
3420	4421	3562	3801	-0.59	10.00	141.5
3391	4381	3529	3767	-0.93	15.00	212.2
3358	4341	3488	3729	-1.31	20.00	282.9
3311	4308	3451	3690	-1.70	25.00	353.7
3365	4371	3512	3749	-1.10	0.00	0.0





Pressure at 1.25 mm deflexion =	272	kPa
Modulus of subgrade reaction (k) =	218	MPa/m
Equivalent 762 mm plate reaction =	96	MPa/m
Equivalent CBR =	26.4	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 02-May-23

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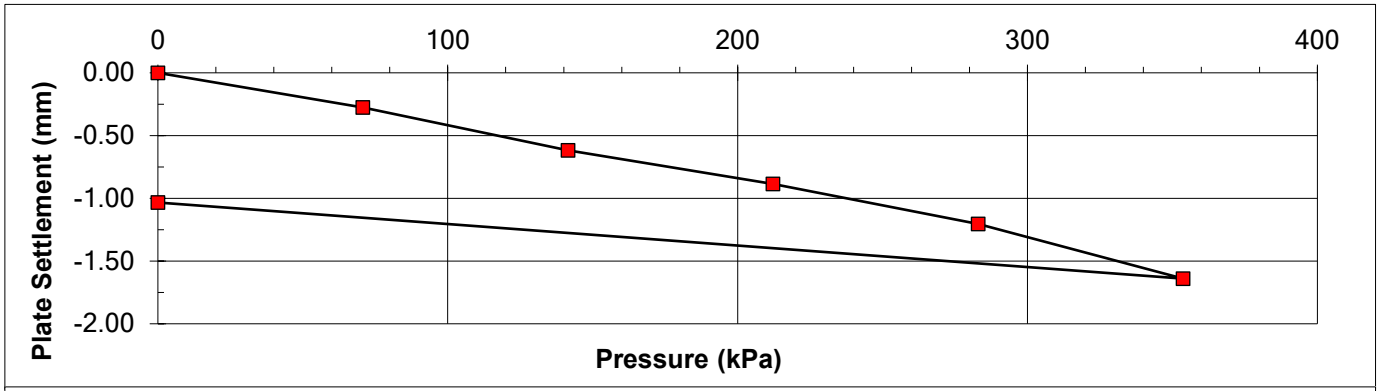
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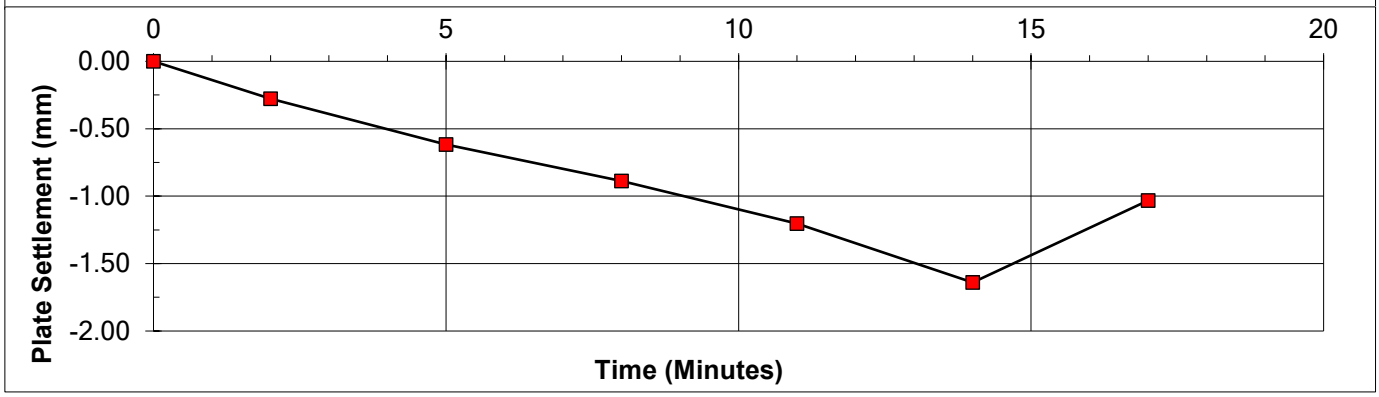
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 4GG		
JOB NUMBER	MRN 4623/15		
TEST LOCATION	R2	LOADING DEVICE	10 Tonne Enerpac Jack
TEST DATE	28-Apr-23	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
2132	4503	3142	3259	0.00	0.00	0.0
2108	4468	3118	3231	-0.28	5.00	70.7
2083	4428	3081	3197	-0.62	10.00	141.5
2051	4410	3050	3170	-0.89	15.00	212.2
2023	4381	3012	3139	-1.20	20.00	282.9
1989	4338	2958	3095	-1.64	25.00	353.7
2042	4412	3013	3156	-1.03	0.00	0.0





Pressure at 1.25 mm deflexion =	291	kPa
Modulus of subgrade reaction (k) =	232	MPa/m
Equivalent 762 mm plate reaction =	103	MPa/m
Equivalent CBR =	29.5	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 02-May-23

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UKAS TESTING 1580

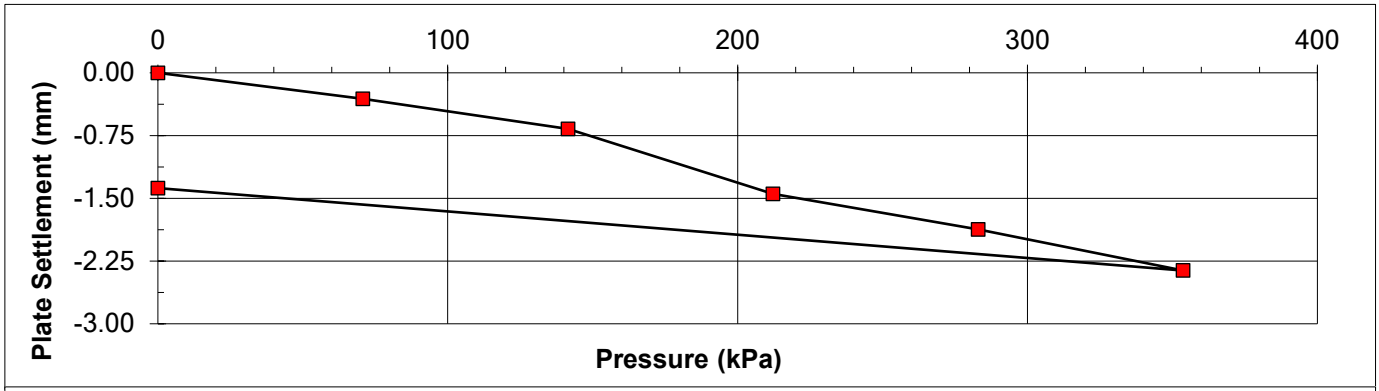
TEST CERTIFICATE

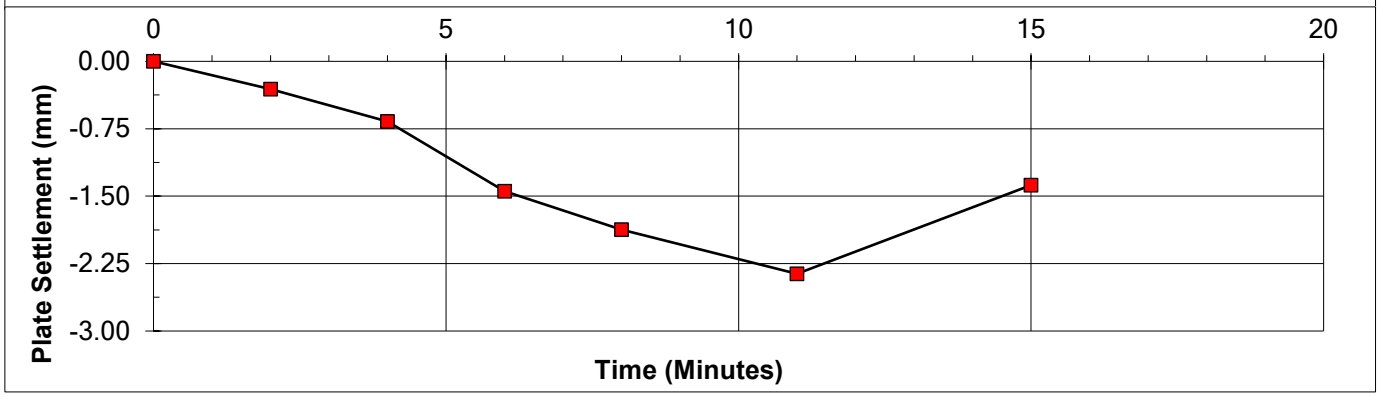
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd				
SITE	Don Street, Middleton M24 4GG				
JOB NUMBER	MRN 4623/15				
TEST LOCATION	P4	LOADING DEVICE	10 Tonne Enerpac Jack		
TEST DATE	28-Apr-23	PLATE SIZE (mm)	300 diameter		
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant		
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required		

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
3152	2123	3326	2867	0.00	0.00	0.0
3123	2092	3293	2836	-0.31	5.00	70.7
3091	2058	3251	2800	-0.67	10.00	141.5
3021	1981	3165	2722	-1.45	15.00	212.2
2981	1930	3128	2680	-1.87	20.00	282.9
2920	1891	3081	2631	-2.36	25.00	353.7
3038	1982	3168	2729	-1.38	0.00	0.0





Pressure at 1.25 mm deflexion =	194	kPa
Modulus of subgrade reaction (k) =	155	MPa/m
Equivalent 762 mm plate reaction =	69	MPa/m
Equivalent CBR =	14.7	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 02-May-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

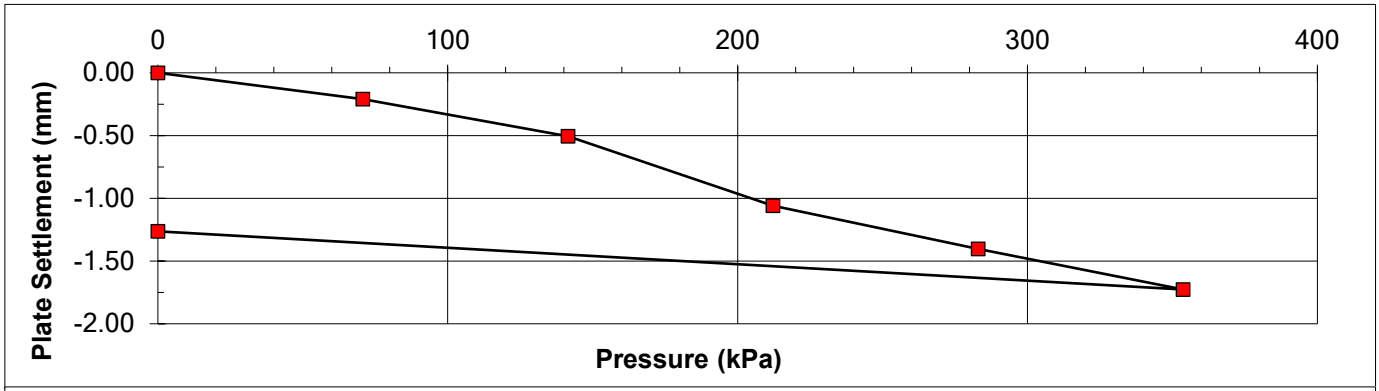
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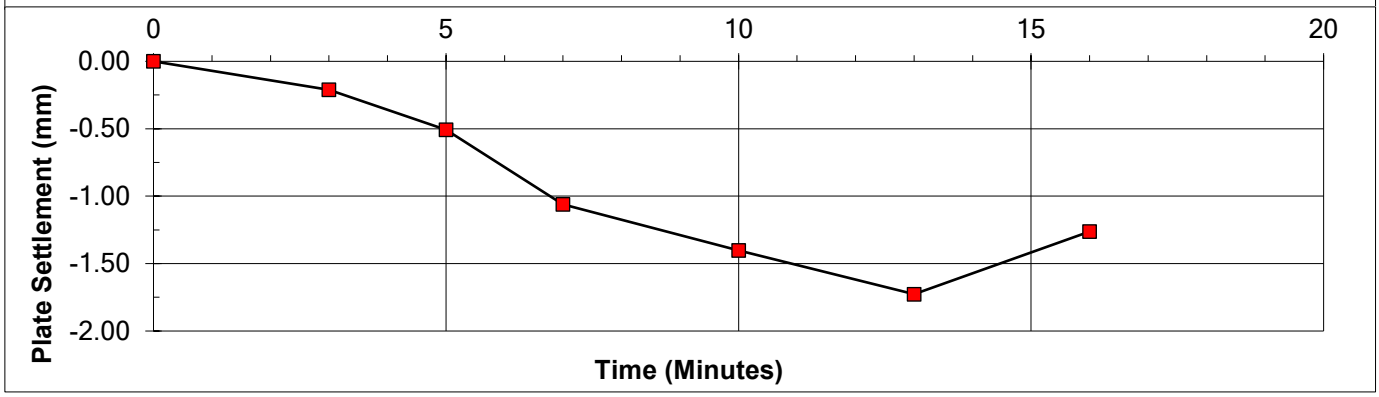
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 4GG		
JOB NUMBER	MRN 4623/15		
TEST LOCATION	R3	LOADING DEVICE	10 Tonne Enerpac Jack
TEST DATE	28-Apr-23	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
3498	4563	2632	3564	0.00	0.00	0.0
3478	4541	2611	3543	-0.21	5.00	70.7
3458	4511	2572	3514	-0.51	10.00	141.5
3382	4452	2541	3458	-1.06	15.00	212.2
3343	4418	2511	3424	-1.40	20.00	282.9
3311	4392	2472	3392	-1.73	25.00	353.7
3365	4431	2518	3438	-1.26	0.00	0.0





Pressure at 1.25 mm deflexion =	251	kPa
Modulus of subgrade reaction (k) =	201	MPa/m
Equivalent 762 mm plate reaction =	89	MPa/m
Equivalent CBR =	23.0	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 02-May-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

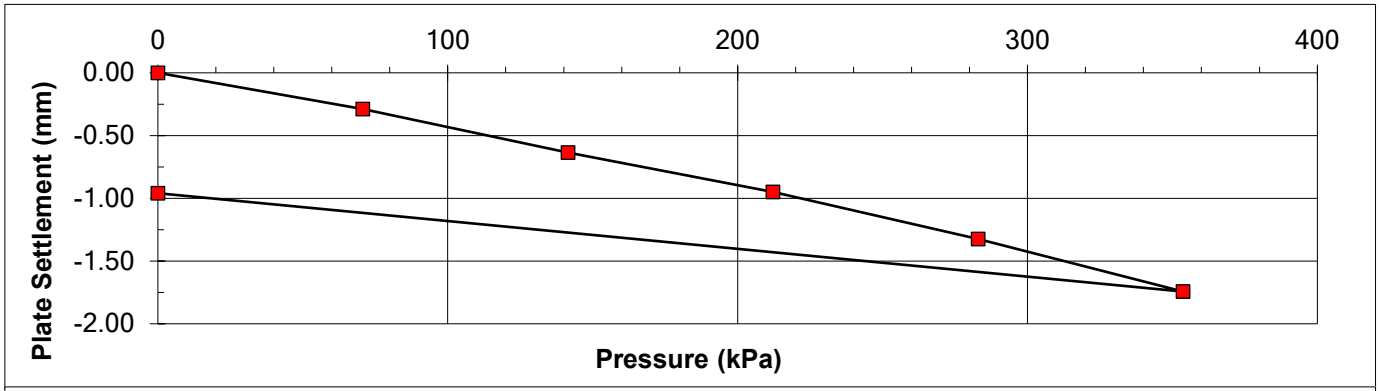
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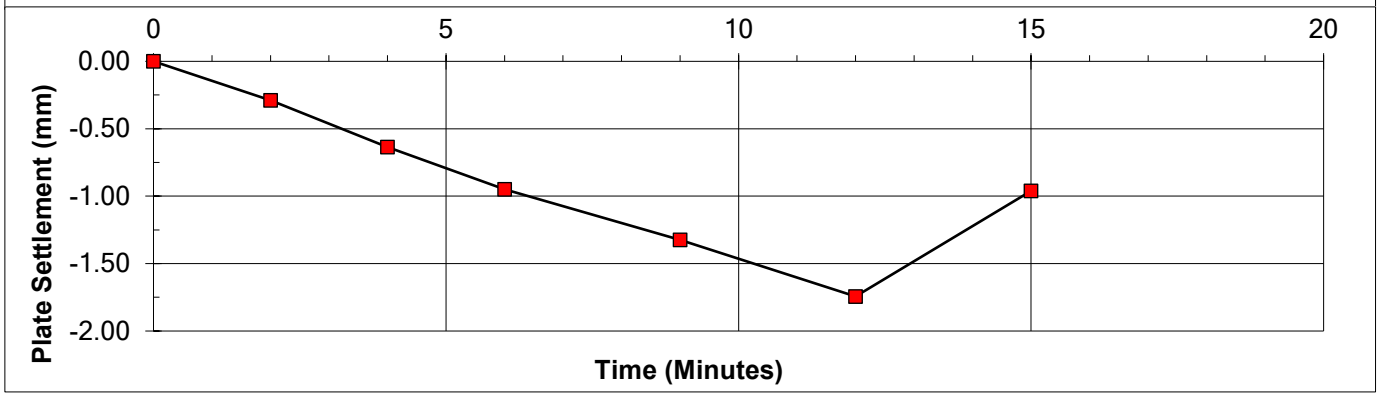
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd				
SITE	Don Street, Middleton M24 4GG				
JOB NUMBER	MRN 4623/15				
TEST LOCATION	R4	LOADING DEVICE	10 Tonne Enerpac Jack		
TEST DATE	28-Apr-23	PLATE SIZE (mm)	300 diameter		
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant		
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required		

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
3183	4158	2583	3308	0.00	0.00	0.0
3148	4128	2561	3279	-0.29	5.00	70.7
3123	4092	2518	3244	-0.64	10.00	141.5
3091	4058	2490	3213	-0.95	15.00	212.2
3058	4018	2451	3176	-1.32	20.00	282.9
3008	3981	2412	3134	-1.74	25.00	353.7
3082	4061	2493	3212	-0.96	0.00	0.0





Pressure at 1.25 mm deflexion =	269	kPa
Modulus of subgrade reaction (k) =	215	MPa/m
Equivalent 762 mm plate reaction =	95	MPa/m
Equivalent CBR =	25.8	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 02-May-23

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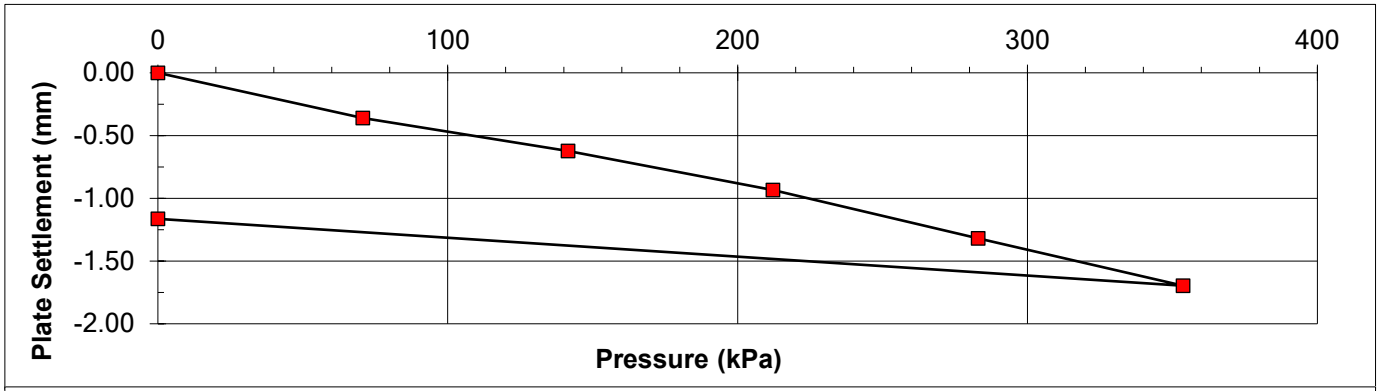
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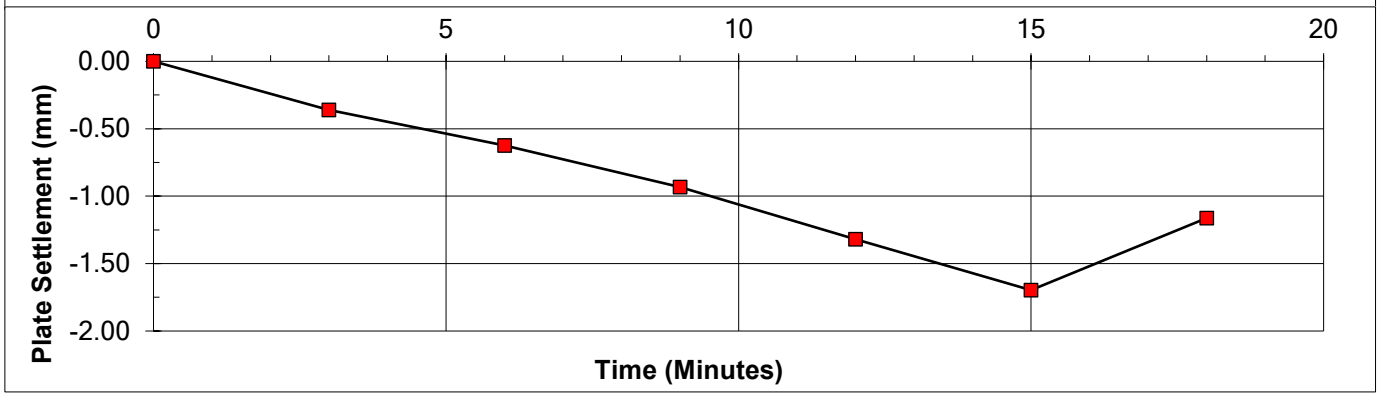
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 4GG		
JOB NUMBER	MRN 4623/15		
TEST LOCATION	R5	LOADING DEVICE	10 Tonne Enerpac Jack
TEST DATE	28-Apr-23	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
2265	3601	2198	2688	0.00	0.00	0.0
2240	3558	2158	2652	-0.36	5.00	70.7
2211	3538	2128	2626	-0.62	10.00	141.5
2181	3508	2095	2595	-0.93	15.00	212.2
2142	3468	2058	2556	-1.32	20.00	282.9
2101	3441	2013	2518	-1.70	25.00	353.7
2165	3499	2051	2572	-1.16	0.00	0.0





Pressure at 1.25 mm deflexion =	270	kPa
Modulus of subgrade reaction (k) =	216	MPa/m
Equivalent 762 mm plate reaction =	95	MPa/m
Equivalent CBR =	26.0	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 02-May-23

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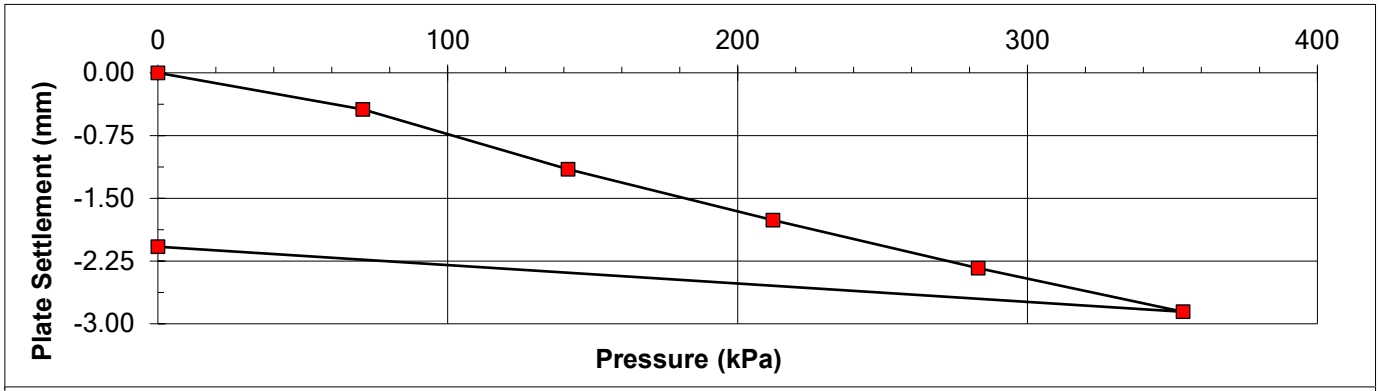
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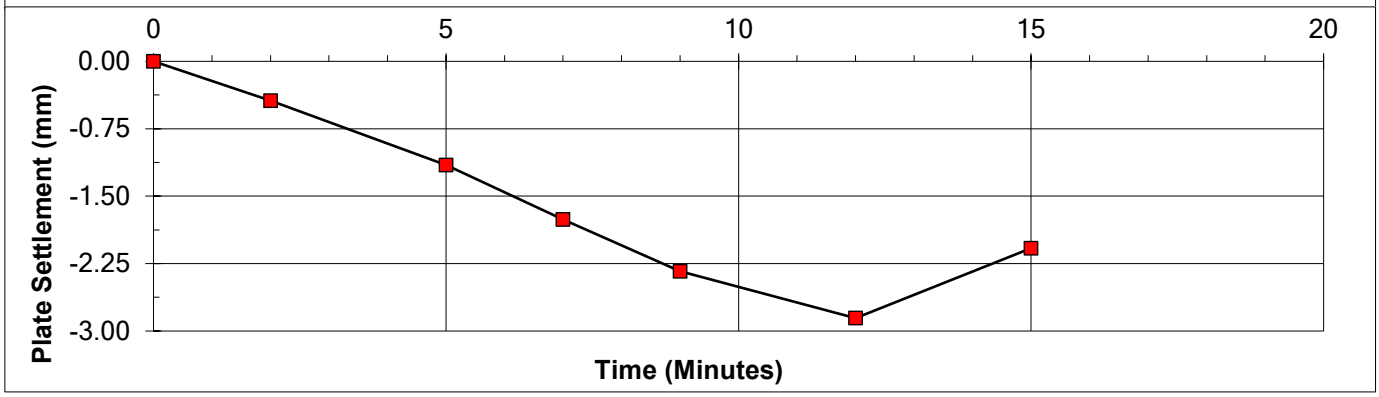
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 4GG		
JOB NUMBER	MRN 4623/15		
TEST LOCATION	P1	LOADING DEVICE	10 Tonne Enerpac Jack
TEST DATE	28-Apr-23	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
2481	3132	4468	3360	0.00	0.00	0.0
2441	3081	4428	3317	-0.44	5.00	70.7
2372	3018	4345	3245	-1.15	10.00	141.5
2311	2951	4291	3184	-1.76	15.00	212.2
2251	2901	4228	3127	-2.34	20.00	282.9
2210	2843	4171	3075	-2.86	25.00	353.7
2281	2915	4261	3152	-2.08	0.00	0.0





Pressure at 1.25 mm deflexion =	153	kPa
Modulus of subgrade reaction (k) =	122	MPa/m
Equivalent 762 mm plate reaction =	54	MPa/m
Equivalent CBR =	9.7	%

REMARKS

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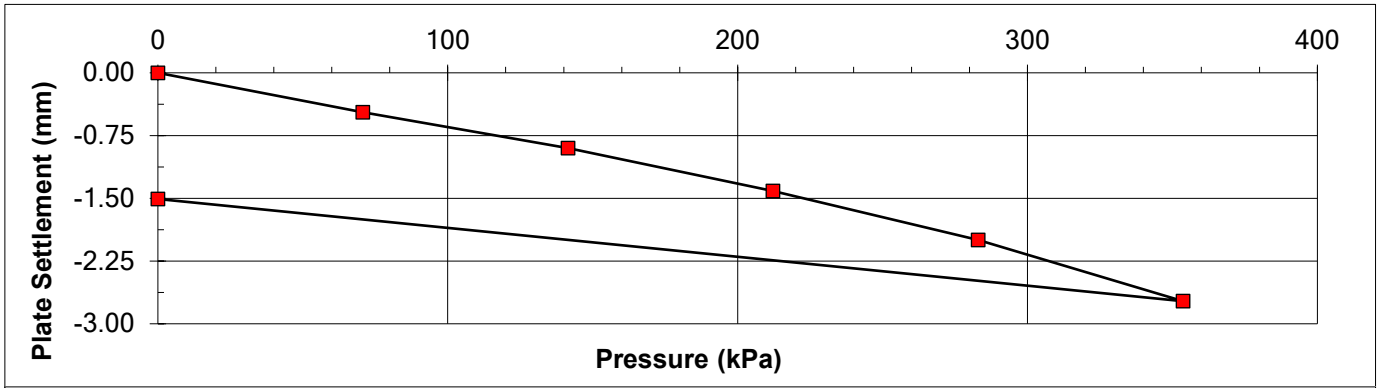
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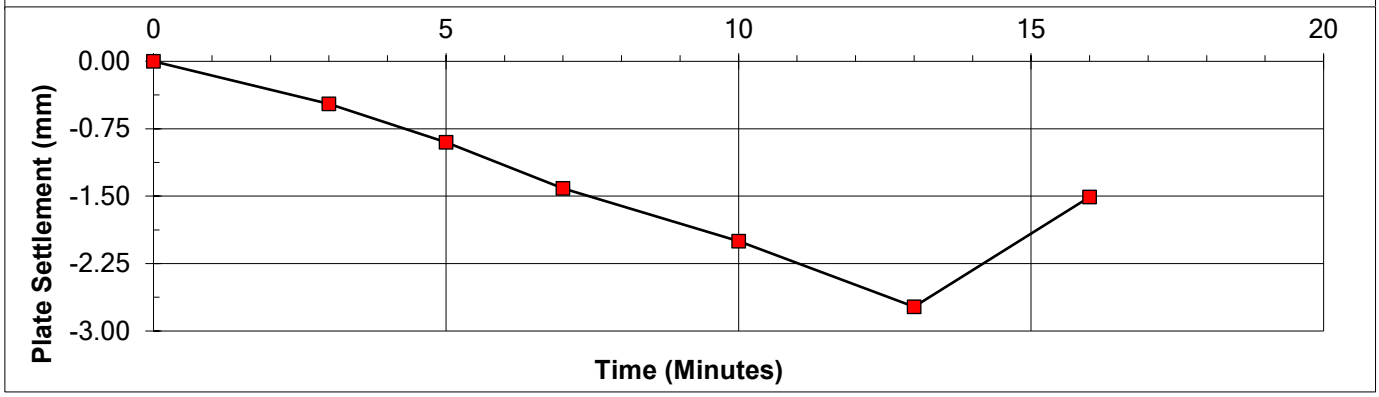
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 4GG		
JOB NUMBER	MRN 4623/15		
TEST LOCATION	P2	LOADING DEVICE	10 Tonne Enerpac Jack
TEST DATE	28-Apr-23	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
3603	2123	3158	2961	0.00	0.00	0.0
3571	2061	3110	2914	-0.47	5.00	70.7
3518	2031	3065	2871	-0.90	10.00	141.5
3461	1981	3018	2820	-1.41	15.00	212.2
3392	1920	2972	2761	-2.00	20.00	282.9
3321	1843	2901	2688	-2.73	25.00	353.7
3445	1963	3023	2810	-1.51	0.00	0.0





Pressure at 1.25 mm deflexion =	190	kPa
Modulus of subgrade reaction (k) =	152	MPa/m
Equivalent 762 mm plate reaction =	67	MPa/m
Equivalent CBR =	14.1	%

REMARKS

SIGNED

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(Laboratory Manager)

DATE 02-May-23

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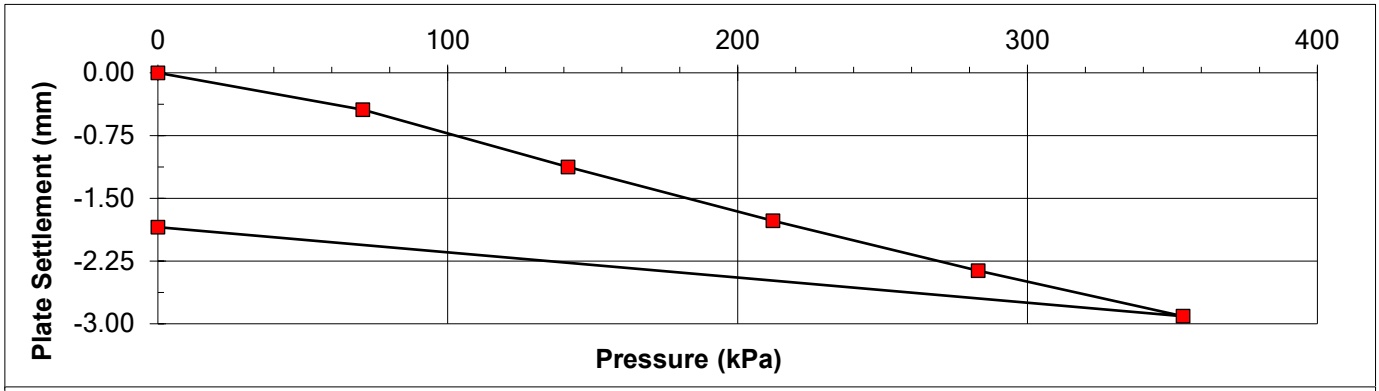
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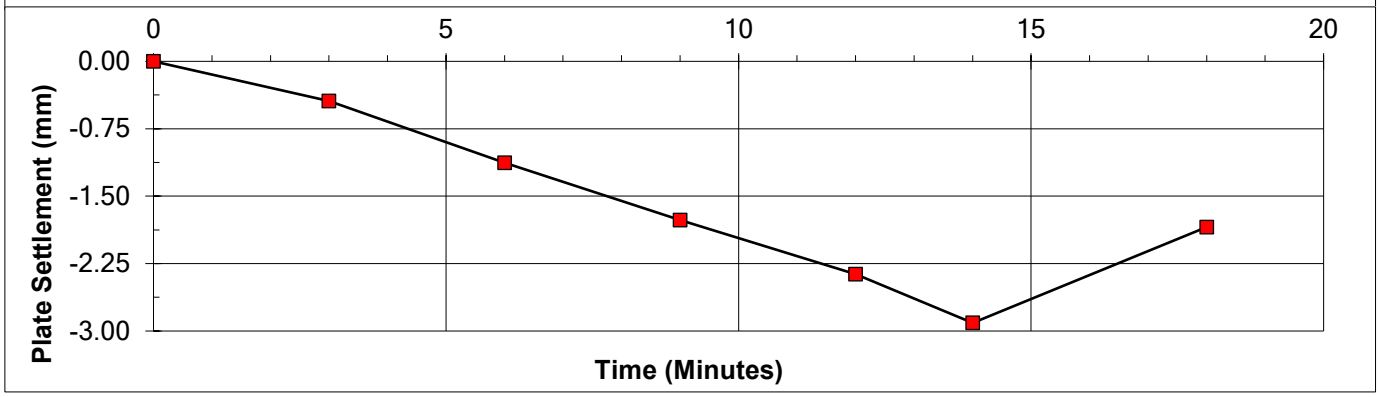
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 4GG		
JOB NUMBER	MRN 4623/15		
TEST LOCATION	P3	LOADING DEVICE	10 Tonne Enerpac Jack
TEST DATE	28-Apr-23	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
2461	3043	4523	3342	0.00	0.00	0.0
2412	3002	4481	3298	-0.44	5.00	70.7
2345	2932	4412	3230	-1.13	10.00	141.5
2261	2878	4358	3166	-1.77	15.00	212.2
2201	2815	4301	3106	-2.37	20.00	282.9
2161	2751	4242	3051	-2.91	25.00	353.7
2265	2851	4358	3158	-1.84	0.00	0.0





Pressure at 1.25 mm deflexion =	155	kPa
Modulus of subgrade reaction (k) =	124	MPa/m
Equivalent 762 mm plate reaction =	55	MPa/m
Equivalent CBR =	9.9	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 02-May-23

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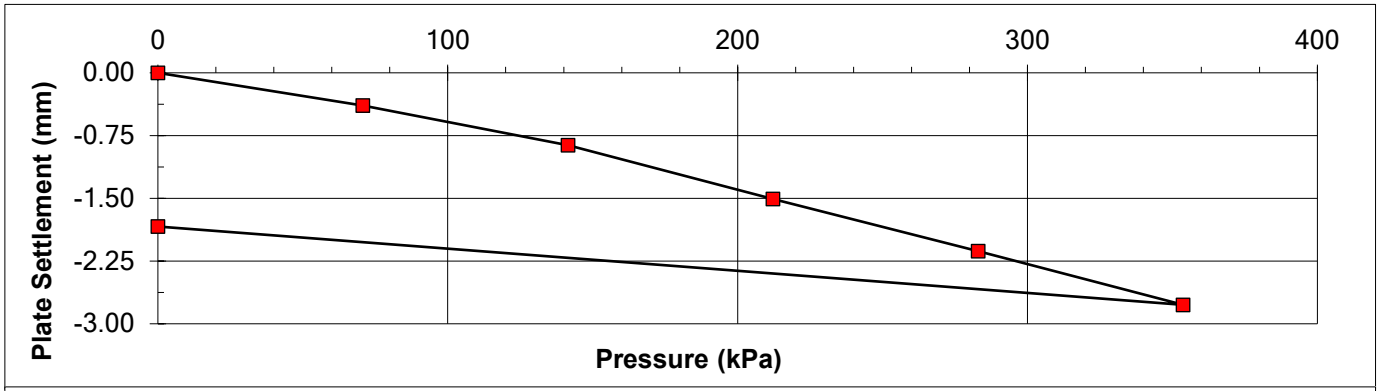
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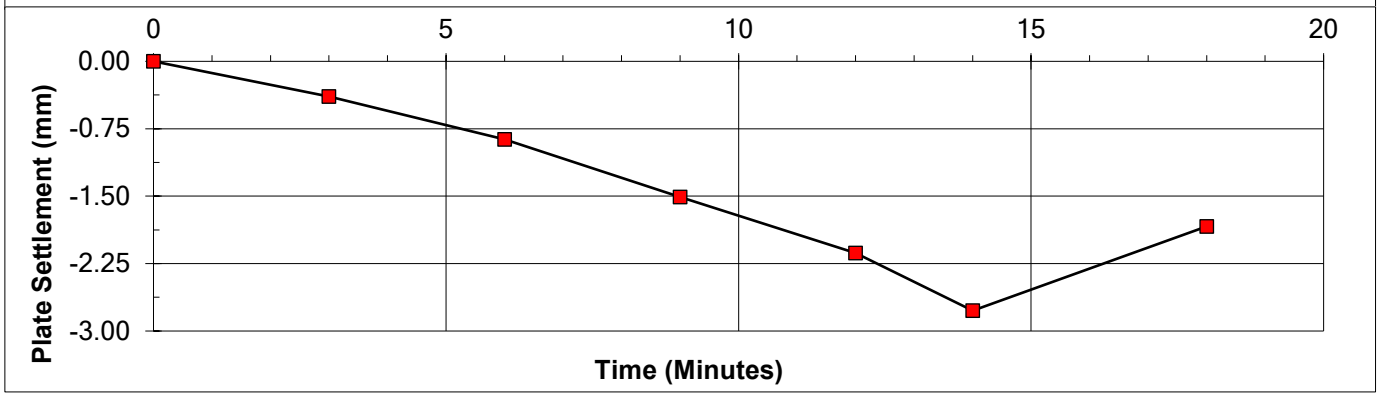
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd				
SITE	Don Street, Middleton M24 4GG				
JOB NUMBER	MRN 4623/15				
TEST LOCATION	P5	LOADING DEVICE	10 Tonne Enerpac Jack		
TEST DATE	28-Apr-23	PLATE SIZE (mm)	300 diameter		
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant		
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required		

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
3173	4623	2131	3309	0.00	0.00	0.0
3138	4592	2080	3270	-0.39	5.00	70.7
3098	4541	2028	3222	-0.87	10.00	141.5
3031	4471	1972	3158	-1.51	15.00	212.2
2958	4411	1918	3096	-2.13	20.00	282.9
2900	4352	1843	3032	-2.77	25.00	353.7
2992	4442	1942	3125	-1.84	0.00	0.0





Pressure at 1.25 mm deflexion =	184	kPa
Modulus of subgrade reaction (k) =	147	MPa/m
Equivalent 762 mm plate reaction =	65	MPa/m
Equivalent CBR =	13.3	%

REMARKS

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NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 02-May-23

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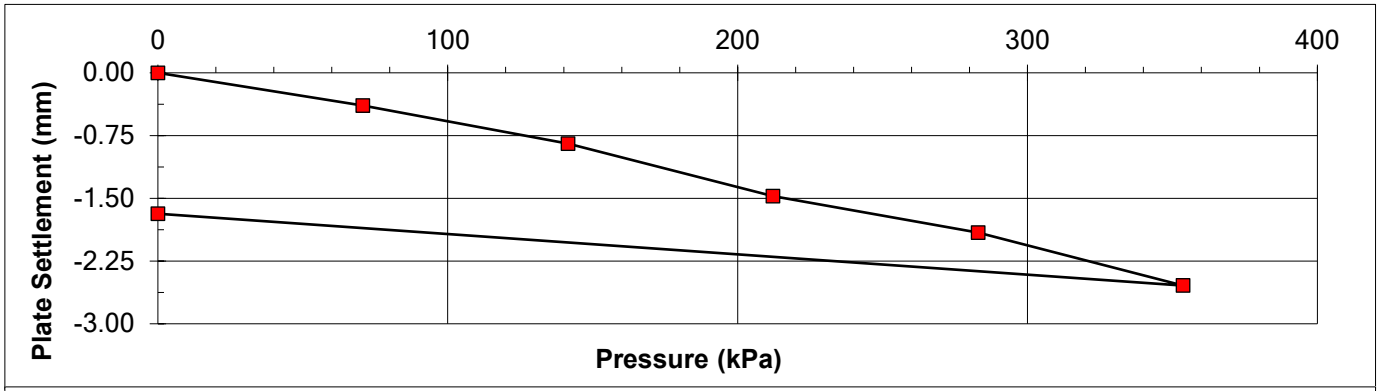
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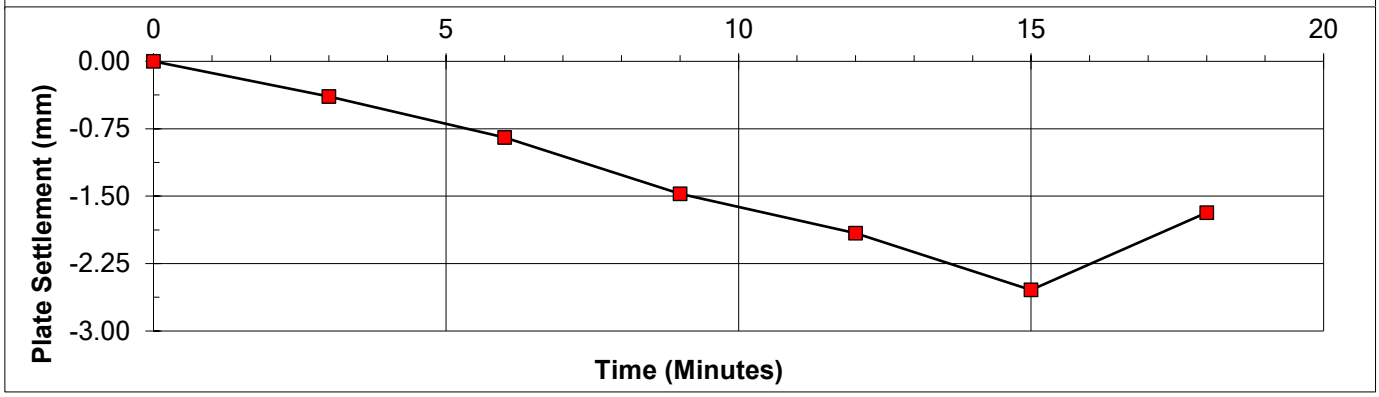
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BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 4GG		
JOB NUMBER	MRN 4623/15		
TEST LOCATION	P6	LOADING DEVICE	10 Tonne Enerpac Jack
TEST DATE	28-Apr-23	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
3198	4273	3145	3539	0.00	0.00	0.0
3158	4240	3101	3500	-0.39	5.00	70.7
3118	4183	3061	3454	-0.85	10.00	141.5
3051	4122	3001	3391	-1.47	15.00	212.2
3001	4081	2961	3348	-1.91	20.00	282.9
2931	4021	2901	3284	-2.54	25.00	353.7
3018	4121	2972	3370	-1.68	0.00	0.0





Pressure at 1.25 mm deflexion =	187	kPa
Modulus of subgrade reaction (k) =	150	MPa/m
Equivalent 762 mm plate reaction =	66	MPa/m
Equivalent CBR =	13.8	%

REMARKS

SIGNED

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(Laboratory Manager)

DATE 02-May-23

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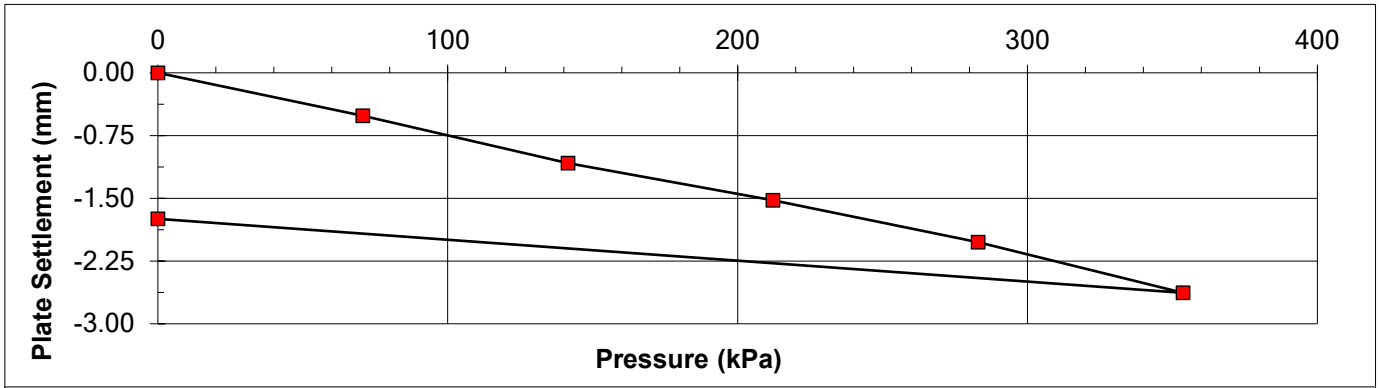
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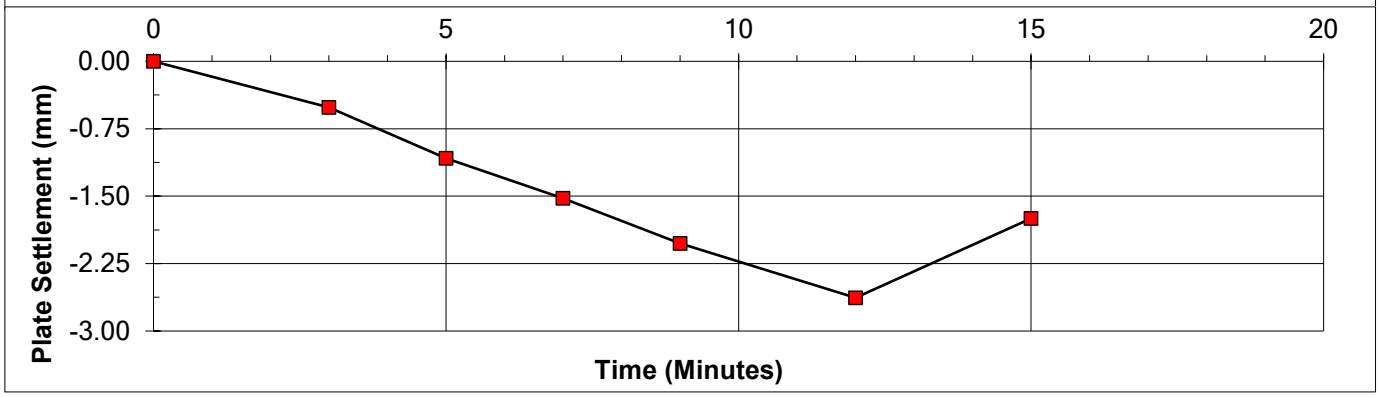
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 4GG		
JOB NUMBER	MRN 4623/15		
TEST LOCATION	P7	LOADING DEVICE	10 Tonne Enerpac Jack
TEST DATE	28-Apr-23	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
2261	3132	2465	2619	0.00	0.00	0.0
2211	3081	2412	2568	-0.51	5.00	70.7
2161	3022	2351	2511	-1.08	10.00	141.5
2110	2981	2310	2467	-1.52	15.00	212.2
2081	2928	2241	2417	-2.03	20.00	282.9
2028	2861	2180	2356	-2.63	25.00	353.7
2121	2968	2245	2445	-1.75	0.00	0.0





Pressure at 1.25 mm deflexion =	169	kPa
Modulus of subgrade reaction (k) =	135	MPa/m
Equivalent 762 mm plate reaction =	60	MPa/m
Equivalent CBR =	11.5	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 02-May-23

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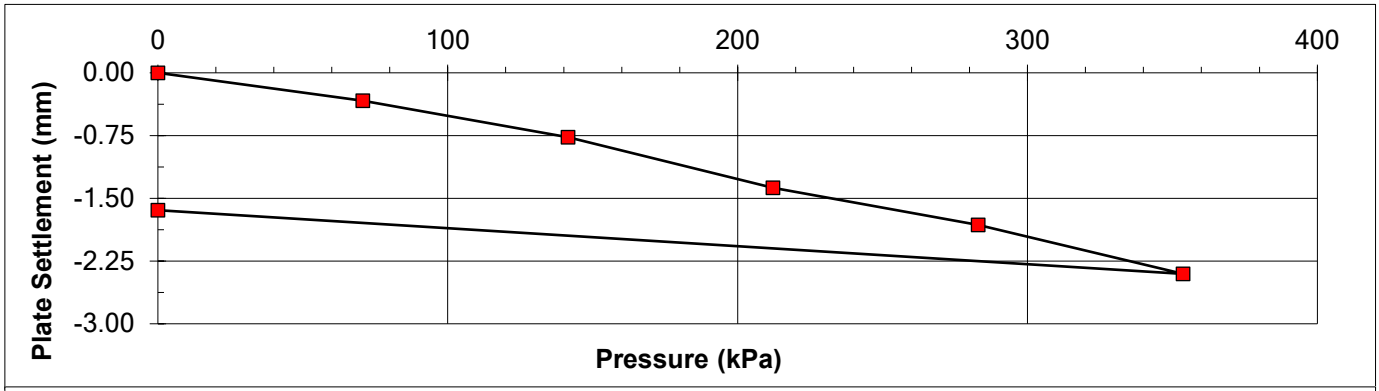
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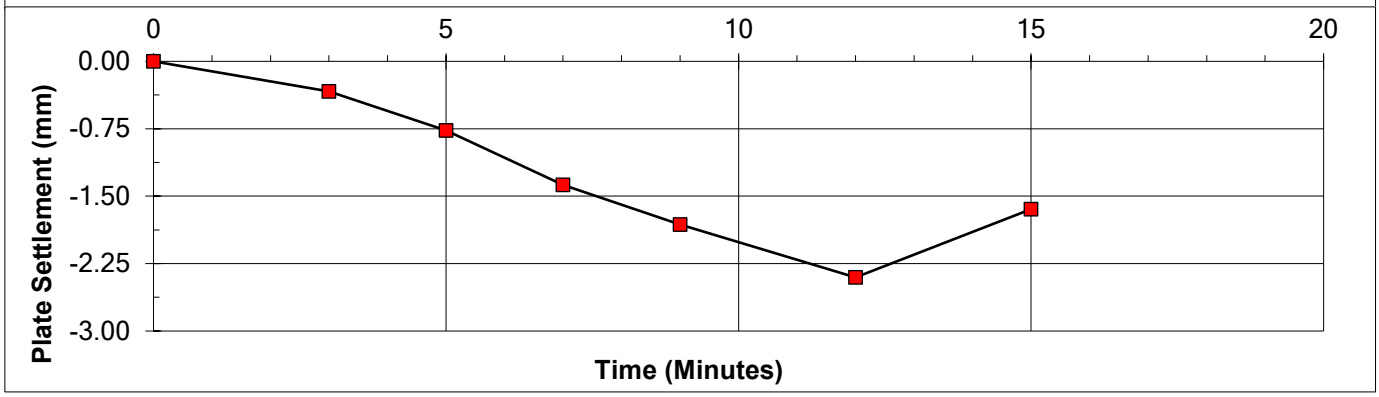
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 4GG		
JOB NUMBER	MRN 4623/15		
TEST LOCATION	P8	LOADING DEVICE	10 Tonne Enerpac Jack
TEST DATE	28-Apr-23	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
3123	4331	3523	3659	0.00	0.00	0.0
3095	4291	3491	3626	-0.33	5.00	70.7
3052	4251	3443	3582	-0.77	10.00	141.5
2992	4192	3381	3522	-1.37	15.00	212.2
2951	4171	3310	3477	-1.82	20.00	282.9
2883	4115	3258	3419	-2.40	25.00	353.7
2968	4198	3318	3495	-1.64	0.00	0.0





Pressure at 1.25 mm deflexion =	198	kPa
Modulus of subgrade reaction (k) =	158	MPa/m
Equivalent 762 mm plate reaction =	70	MPa/m
Equivalent CBR =	15.2	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 02-May-23





Sheet Plan Scale:NTS

Notes:

Site boundary

Major contour

Minor contour (1m)

Spot level

Bottom / top of bank

Survey Information:

Coordinate System	Datum Type	Primary Survey Control	Secondary Survey Control
OSGB36(15)	Grid	Leica SmartNet	Site

Rev	Date	Amendment	Drawn	Checked

Urban Regen

Client: Kellen Homes

Project: Don Street

Title: 367 - Material Management Plan

Scale	First Issue	Drawn	Checked
NTS @ A1			

Drawing No: 367 - 22 - 01

Revision:

02-May-23

MURRAY RIX
CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client Urban Regen Ltd

Address Langley Road
Pendlebury
Salford
M6 6FG

Contract Don Street,
Middleton M24 2GG

Job Number MRN 4623/35
Date of Issue 14 July 2023

Approved Signatories

S J Hutchings, O P Davies

Notes

1 All remaining samples and remnants from this contract will be disposed 28 days from the date of this report unless you notify us to the contrary.

2 Result certificates, in this report, not bearing a UKAS mark, are not included in our UKAS accreditation schedule.

3 Opinions and interpretations expressed herein are outside the scope of our UKAS accreditation.

4 Certified that the samples have been examined and tested in accordance with the terms of the contract/order and unless otherwise stated conform to the standards/specifications quoted.

5 The results included within the report are representative of the samples submitted for analysis.

6 This certificate should not be reproduced, except in full, without the express permission of the laboratory.

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MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

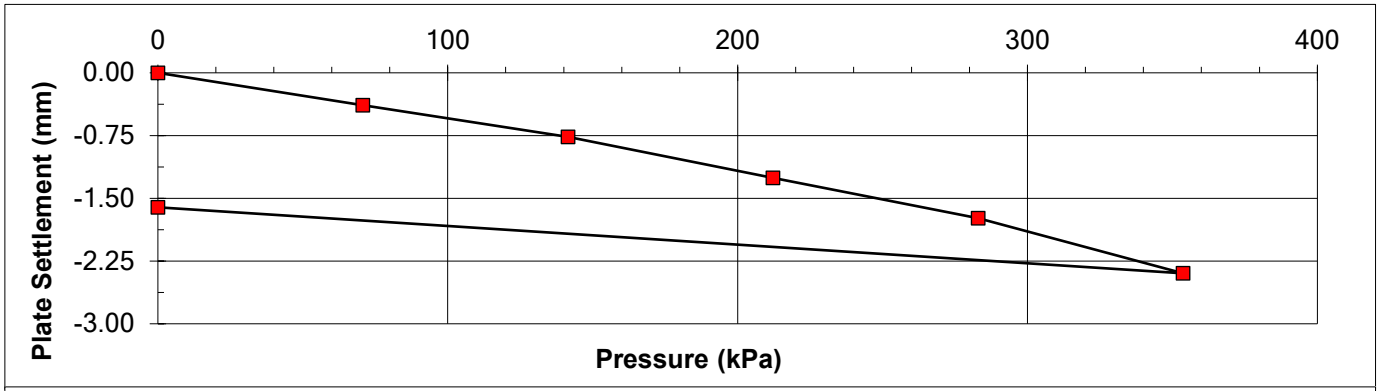
TEST CERTIFICATE

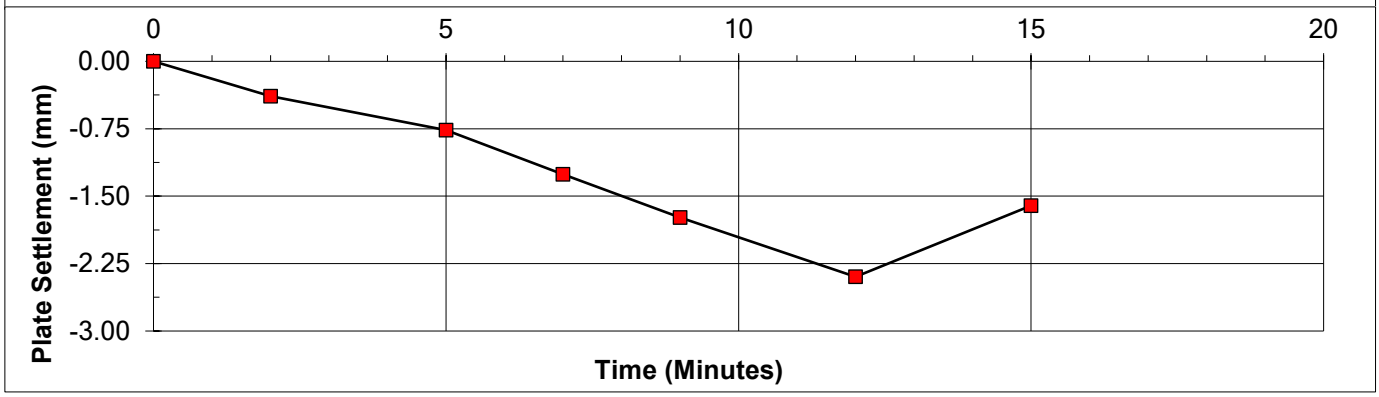
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 4GG		
JOB NUMBER	MRN 4623/35		
TEST LOCATION	R1	LOADING DEVICE	10 Tonne Enerpac Jack
TEST DATE	13-Jul-23	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
3461	4623	3183	3756	0.00	0.00	0.0
3411	4592	3148	3717	-0.39	5.00	70.7
3381	4541	3115	3679	-0.77	10.00	141.5
3340	4489	3061	3630	-1.26	15.00	212.2
3291	4445	3010	3582	-1.74	20.00	282.9
3218	4392	2938	3516	-2.40	25.00	353.7
3312	4461	3012	3595	-1.61	0.00	0.0





Pressure at 1.25 mm deflexion =	211	kPa
Modulus of subgrade reaction (k) =	169	MPa/m
Equivalent 762 mm plate reaction =	75	MPa/m
Equivalent CBR =	17.0	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 14-Jul-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

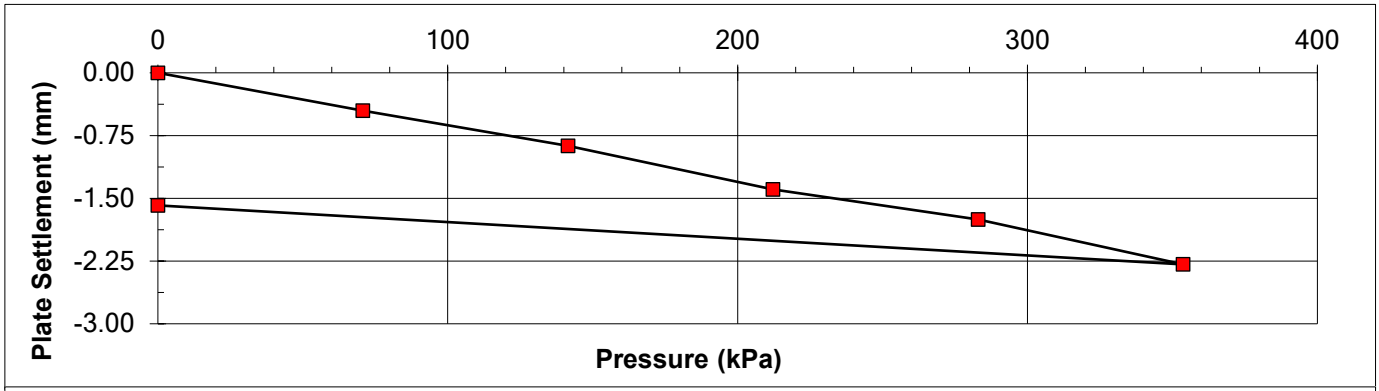
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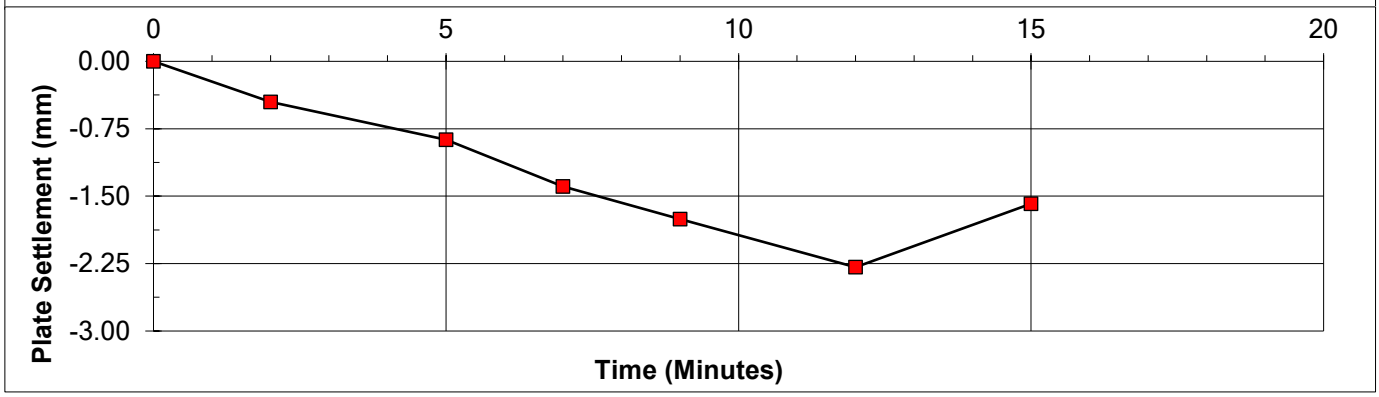
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 4GG		
JOB NUMBER	MRN 4623/35		
TEST LOCATION	R2	LOADING DEVICE	10 Tonne Enerpac Jack
TEST DATE	13-Jul-23	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
3158	4473	3542	3724	0.00	0.00	0.0
3118	4438	3481	3679	-0.45	5.00	70.7
3071	4392	3448	3637	-0.87	10.00	141.5
3012	4342	3401	3585	-1.39	15.00	212.2
2981	4308	3358	3549	-1.75	20.00	282.9
2928	4248	3310	3495	-2.29	25.00	353.7
3015	4318	3365	3566	-1.58	0.00	0.0





Pressure at 1.25 mm deflexion =	193	kPa
Modulus of subgrade reaction (k) =	154	MPa/m
Equivalent 762 mm plate reaction =	68	MPa/m
Equivalent CBR =	14.5	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 14-Jul-23

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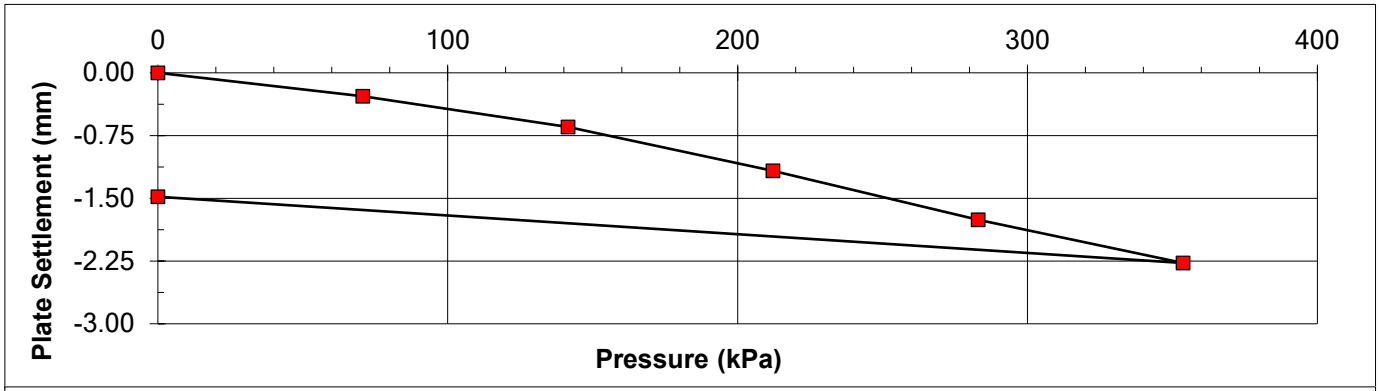
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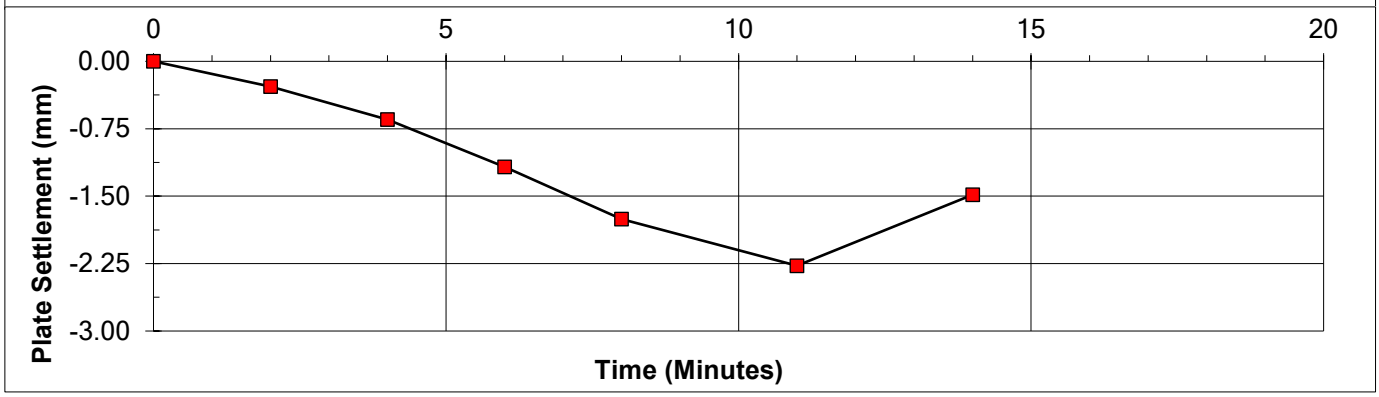
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd				
SITE	Don Street, Middleton M24 4GG				
JOB NUMBER	MRN 4623/35				
TEST LOCATION	R3	LOADING DEVICE	10 Tonne Enerpac Jack		
TEST DATE	13-Jul-23	PLATE SIZE (mm)	300 diameter		
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant		
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required		

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
2633	3023	3538	3065	0.00	0.00	0.0
2608	2992	3510	3037	-0.28	5.00	70.7
2581	2958	3461	3000	-0.65	10.00	141.5
2520	2911	3411	2947	-1.17	15.00	212.2
2458	2851	3358	2889	-1.76	20.00	282.9
2401	2801	3310	2837	-2.27	25.00	353.7
2492	2865	3392	2916	-1.48	0.00	0.0





Pressure at 1.25 mm deflexion =	222	kPa
Modulus of subgrade reaction (k) =	177	MPa/m
Equivalent 762 mm plate reaction =	78	MPa/m
Equivalent CBR =	18.4	%

REMARKS

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(Laboratory Manager)

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UKAS TESTING 1580

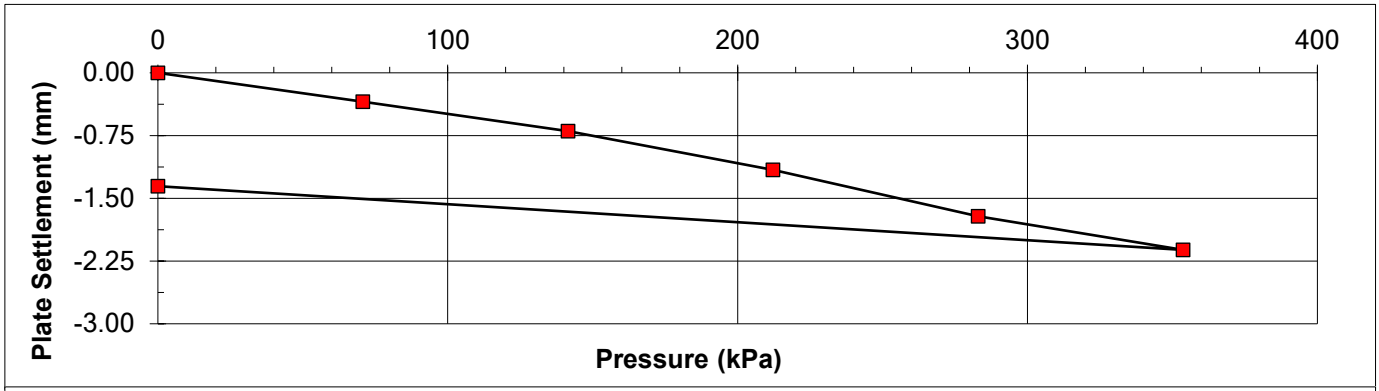
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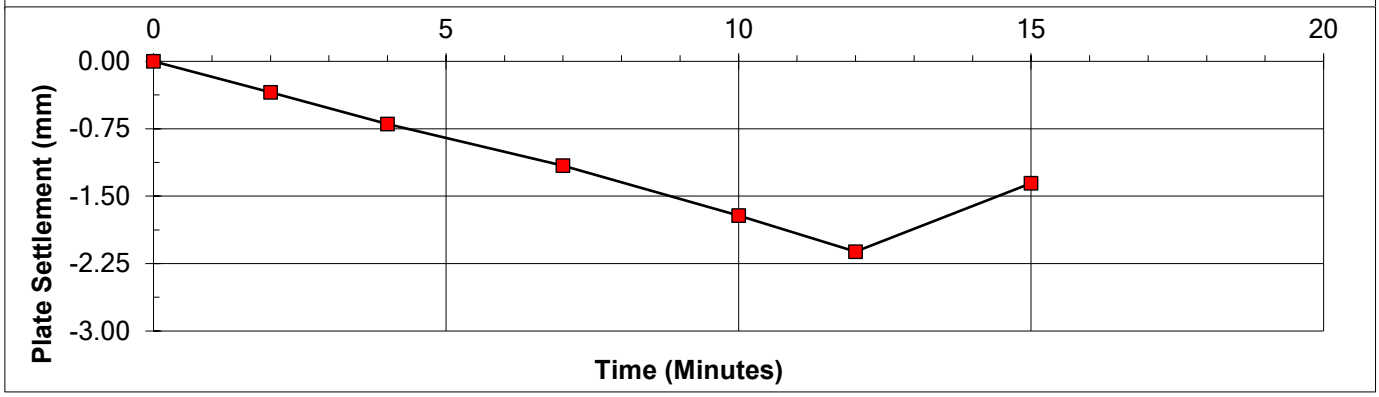
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 4GG		
JOB NUMBER	MRN 4623/35		
TEST LOCATION	R4	LOADING DEVICE	10 Tonne Enerpac Jack
TEST DATE	13-Jul-23	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
2273	2623	3632	2843	0.00	0.00	0.0
2241	2591	3592	2808	-0.35	5.00	70.7
2210	2558	3551	2773	-0.70	10.00	141.5
2161	2511	3508	2727	-1.16	15.00	212.2
2101	2451	3461	2671	-1.72	20.00	282.9
2071	2411	3411	2631	-2.12	25.00	353.7
2161	2492	3468	2707	-1.36	0.00	0.0





Pressure at 1.25 mm deflexion =	224	kPa
Modulus of subgrade reaction (k) =	179	MPa/m
Equivalent 762 mm plate reaction =	79	MPa/m
Equivalent CBR =	18.8	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 14-Jul-23

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UKAS TESTING 1580

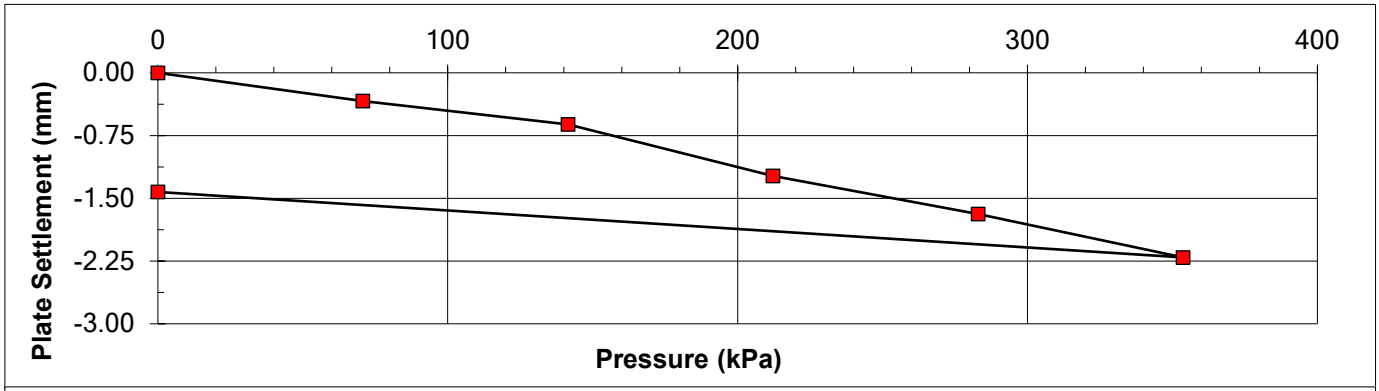
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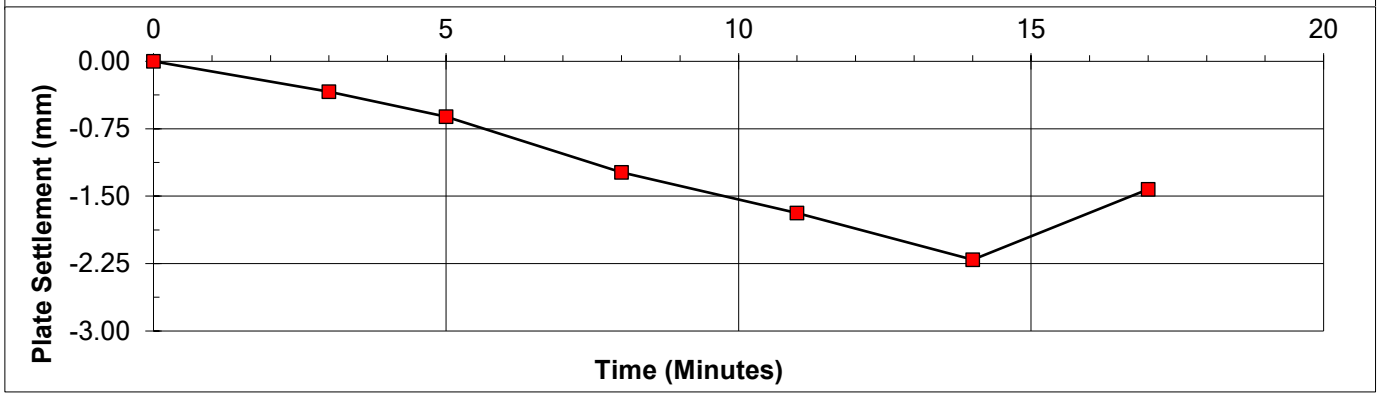
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd				
SITE	Don Street, Middleton M24 4GG				
JOB NUMBER	MRN 4623/35				
TEST LOCATION	R5	LOADING DEVICE	10 Tonne Enerpac Jack		
TEST DATE	13-Jul-23	PLATE SIZE (mm)	300 diameter		
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant		
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required		

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
2142	3132	4265	3180	0.00	0.00	0.0
2110	3110	4218	3146	-0.34	5.00	70.7
2081	3081	4192	3118	-0.62	10.00	141.5
2020	3011	4138	3056	-1.23	15.00	212.2
1981	2951	4101	3011	-1.69	20.00	282.9
1918	2901	4058	2959	-2.21	25.00	353.7
1998	2983	4131	3037	-1.42	0.00	0.0





Pressure at 1.25 mm deflexion =	215	kPa
Modulus of subgrade reaction (k) =	172	MPa/m
Equivalent 762 mm plate reaction =	76	MPa/m
Equivalent CBR =	17.5	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 14-Jul-23

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UKAS TESTING 1580

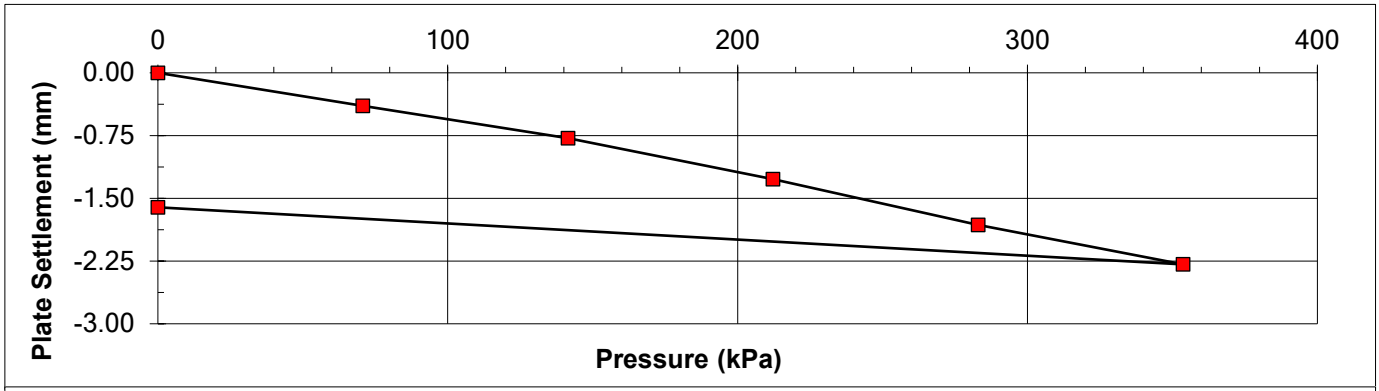
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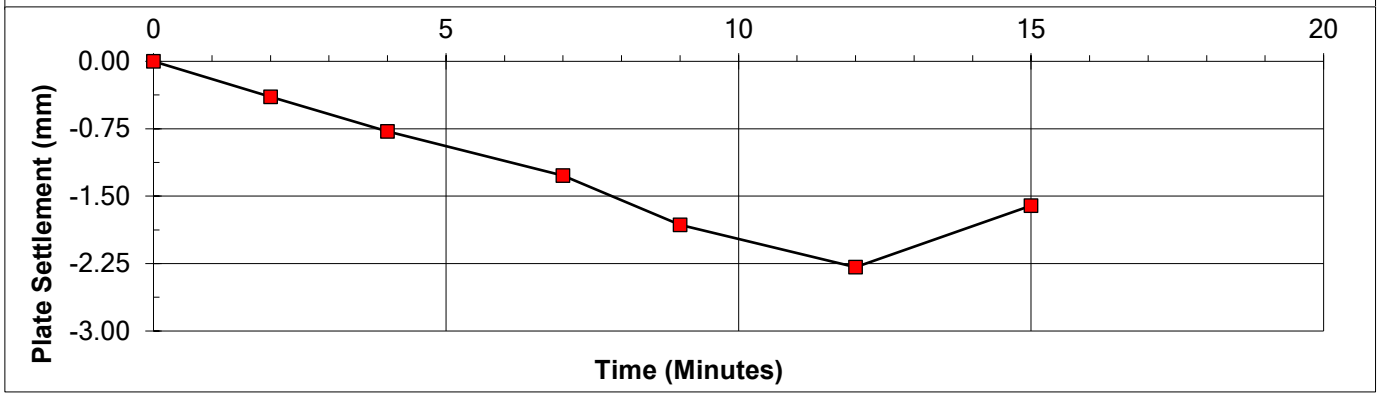
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 4GG		
JOB NUMBER	MRN 4623/35		
TEST LOCATION	R6	LOADING DEVICE	10 Tonne Enerpac Jack
TEST DATE	13-Jul-23	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
2831	2965	4483	3426	0.00	0.00	0.0
2783	2928	4450	3387	-0.39	5.00	70.7
2751	2883	4411	3348	-0.78	10.00	141.5
2691	2845	4362	3299	-1.27	15.00	212.2
2611	2801	4321	3244	-1.82	20.00	282.9
2551	2758	4283	3197	-2.29	25.00	353.7
2615	2821	4361	3266	-1.61	0.00	0.0





Pressure at 1.25 mm deflexion =	209	kPa
Modulus of subgrade reaction (k) =	167	MPa/m
Equivalent 762 mm plate reaction =	74	MPa/m
Equivalent CBR =	16.7	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 14-Jul-23

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DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

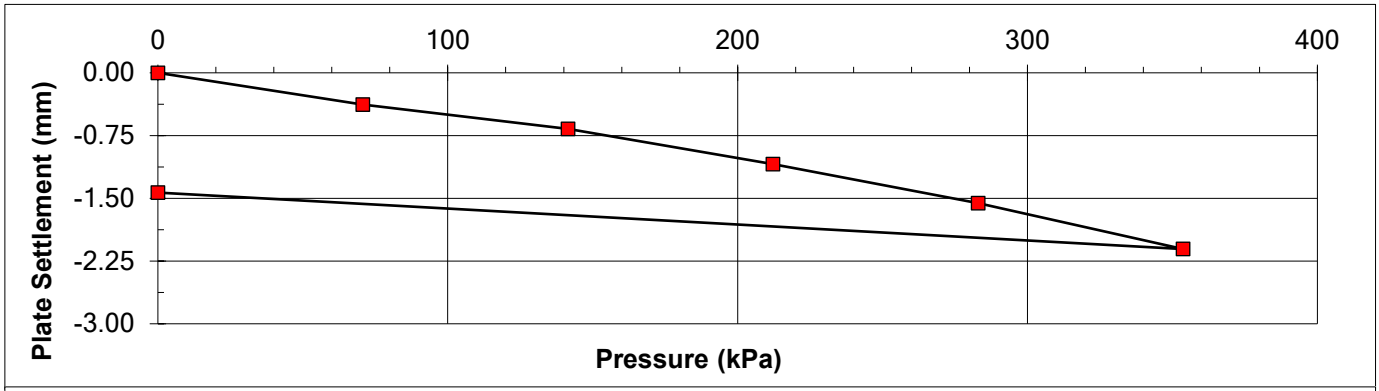
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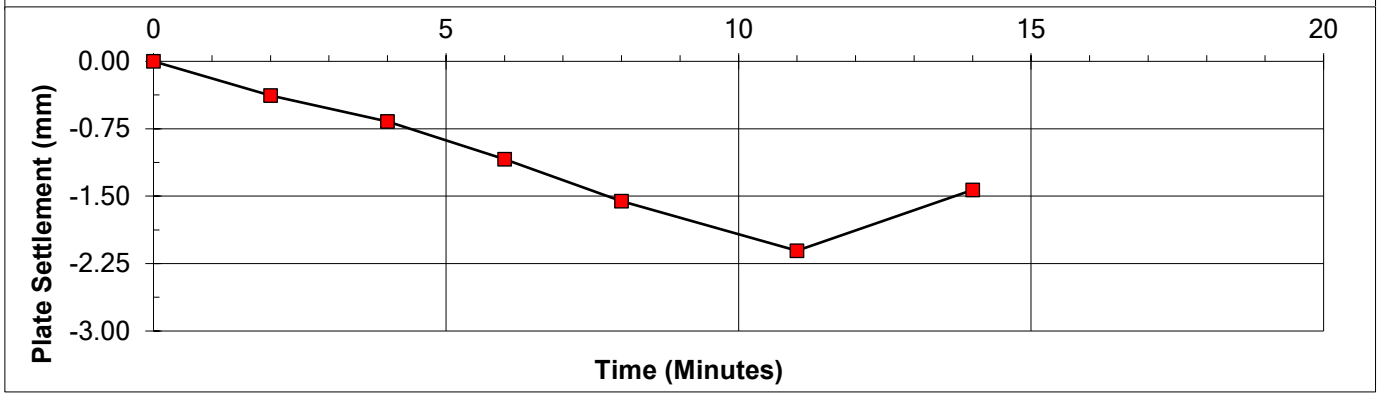
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 4GG		
JOB NUMBER	MRN 4623/35		
TEST LOCATION	R7	LOADING DEVICE	10 Tonne Enerpac Jack
TEST DATE	13-Jul-23	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
3473	2332	4623	3476	0.00	0.00	0.0
3441	2292	4581	3438	-0.38	5.00	70.7
3411	2258	4558	3409	-0.67	10.00	141.5
3362	2211	4528	3367	-1.09	15.00	212.2
3311	2158	4492	3320	-1.56	20.00	282.9
3258	2110	4428	3265	-2.11	25.00	353.7
3315	2169	4515	3333	-1.43	0.00	0.0





Pressure at 1.25 mm deflexion =	236	kPa
Modulus of subgrade reaction (k) =	189	MPa/m
Equivalent 762 mm plate reaction =	84	MPa/m
Equivalent CBR =	20.7	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 14-Jul-23

MURRAY RIX

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TEL 0161 475 0870

UKAS TESTING 1580

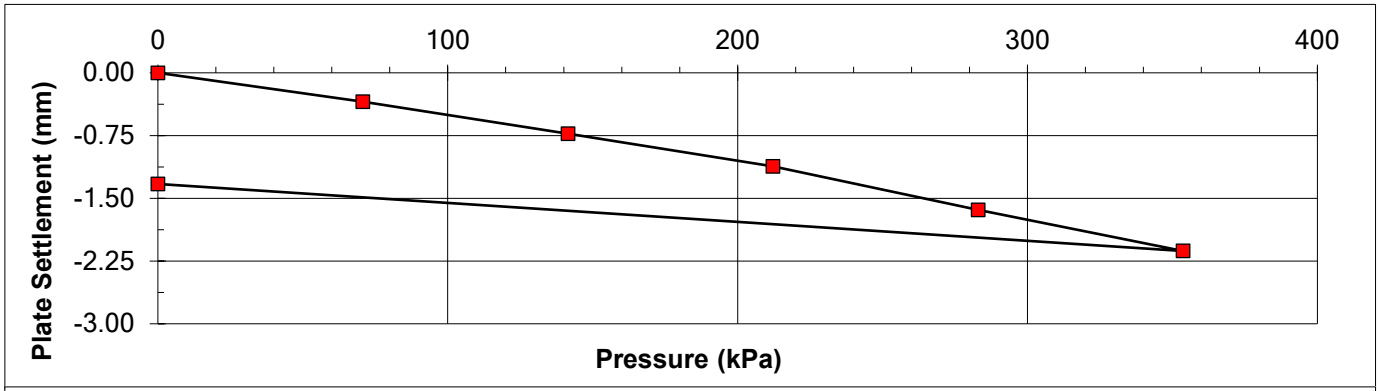
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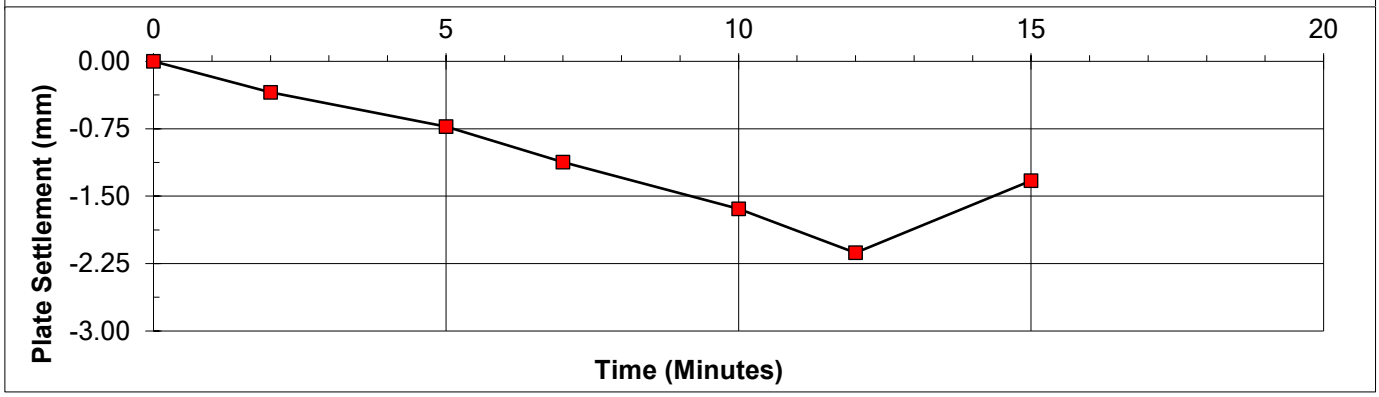
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 4GG		
JOB NUMBER	MRN 4623/35		
TEST LOCATION	R8	LOADING DEVICE	10 Tonne Enerpac Jack
TEST DATE	13-Jul-23	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
3132	2292	3465	2963	0.00	0.00	0.0
3110	2258	3418	2929	-0.34	5.00	70.7
3061	2218	3392	2890	-0.73	10.00	141.5
3021	2181	3351	2851	-1.12	15.00	212.2
2958	2128	3311	2799	-1.64	20.00	282.9
2912	2080	3258	2750	-2.13	25.00	353.7
3015	2161	3315	2830	-1.33	0.00	0.0





Pressure at 1.25 mm deflexion =	230	kPa
Modulus of subgrade reaction (k) =	184	MPa/m
Equivalent 762 mm plate reaction =	81	MPa/m
Equivalent CBR =	19.7	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 14-Jul-23

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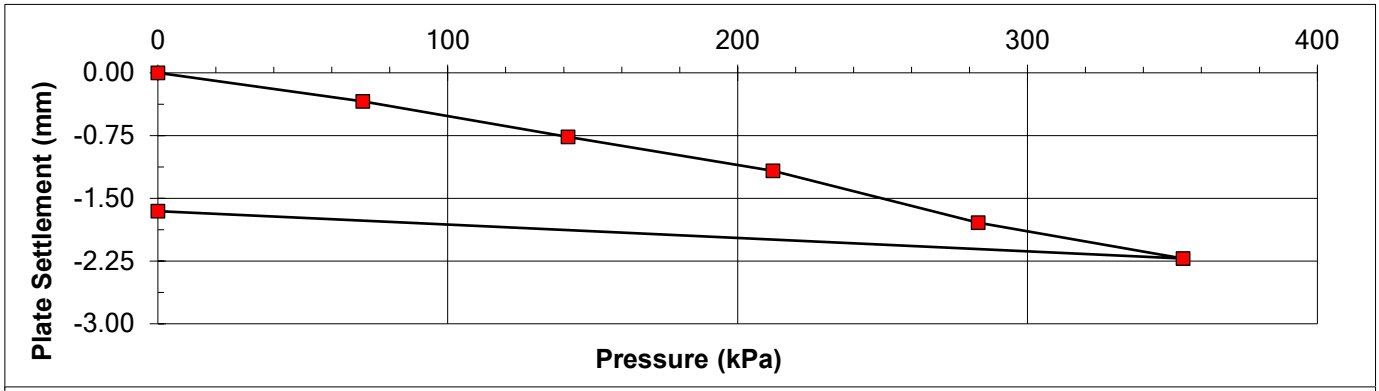
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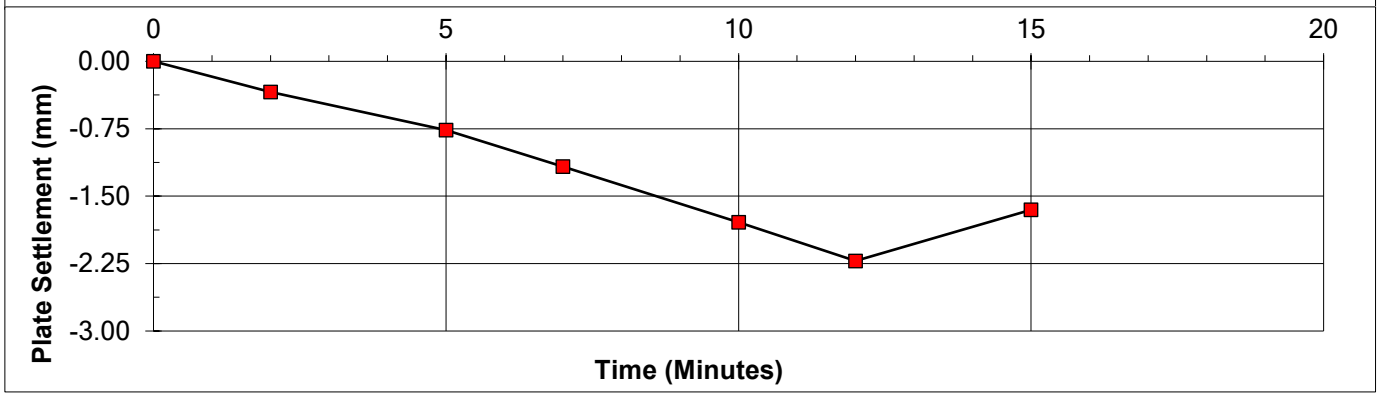
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 4GG		
JOB NUMBER	MRN 4623/35		
TEST LOCATION	R9	LOADING DEVICE	10 Tonne Enerpac Jack
TEST DATE	13-Jul-23	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
2485	3032	3533	3017	0.00	0.00	0.0
2445	3001	3502	2983	-0.34	5.00	70.7
2411	2958	3451	2940	-0.77	10.00	141.5
2360	2918	3421	2900	-1.17	15.00	212.2
2301	2851	3361	2838	-1.79	20.00	282.9
2258	2815	3311	2795	-2.22	25.00	353.7
2315	2871	3368	2851	-1.65	0.00	0.0





Pressure at 1.25 mm deflexion =	221	kPa
Modulus of subgrade reaction (k) =	177	MPa/m
Equivalent 762 mm plate reaction =	78	MPa/m
Equivalent CBR =	18.4	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 14-Jul-23

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UKAS TESTING 1580

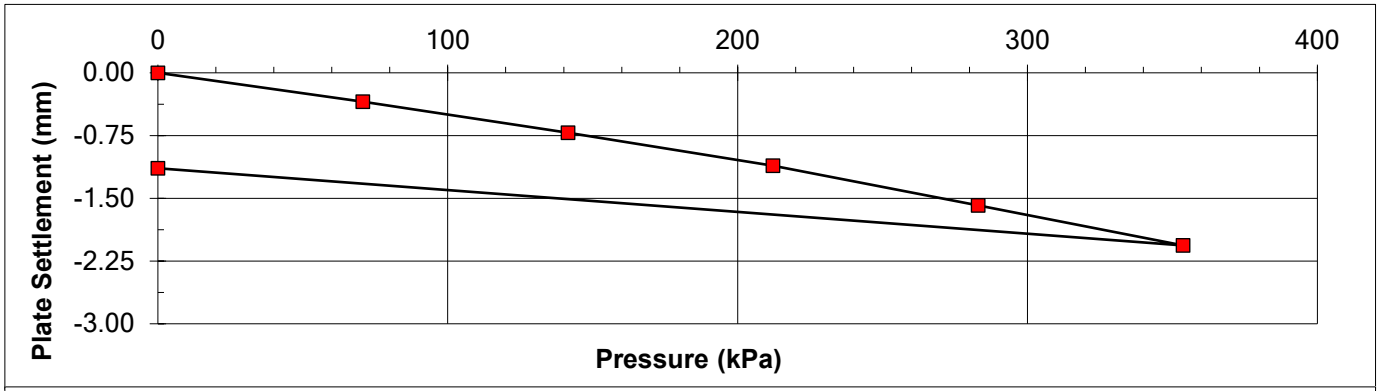
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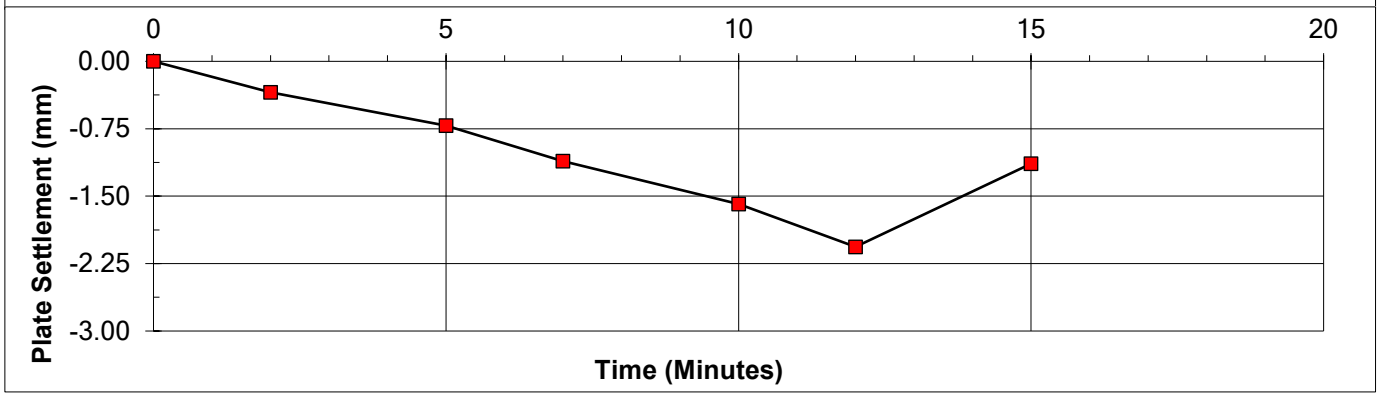
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd				
SITE	Don Street, Middleton M24 4GG				
JOB NUMBER	MRN 4623/35				
TEST LOCATION	R10	LOADING DEVICE	10 Tonne Enerpac Jack		
TEST DATE	13-Jul-23	PLATE SIZE (mm)	300 diameter		
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant		
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required		

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
2023	3223	3623	2956	0.00	0.00	0.0
1992	3181	3592	2922	-0.35	5.00	70.7
1958	3138	3558	2885	-0.72	10.00	141.5
1912	3112	3512	2845	-1.11	15.00	212.2
1851	3062	3480	2798	-1.59	20.00	282.9
1812	3028	3410	2750	-2.06	25.00	353.7
1903	3112	3512	2842	-1.14	0.00	0.0





Pressure at 1.25 mm deflexion =	233	kPa
Modulus of subgrade reaction (k) =	186	MPa/m
Equivalent 762 mm plate reaction =	82	MPa/m
Equivalent CBR =	20.1	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 14-Jul-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

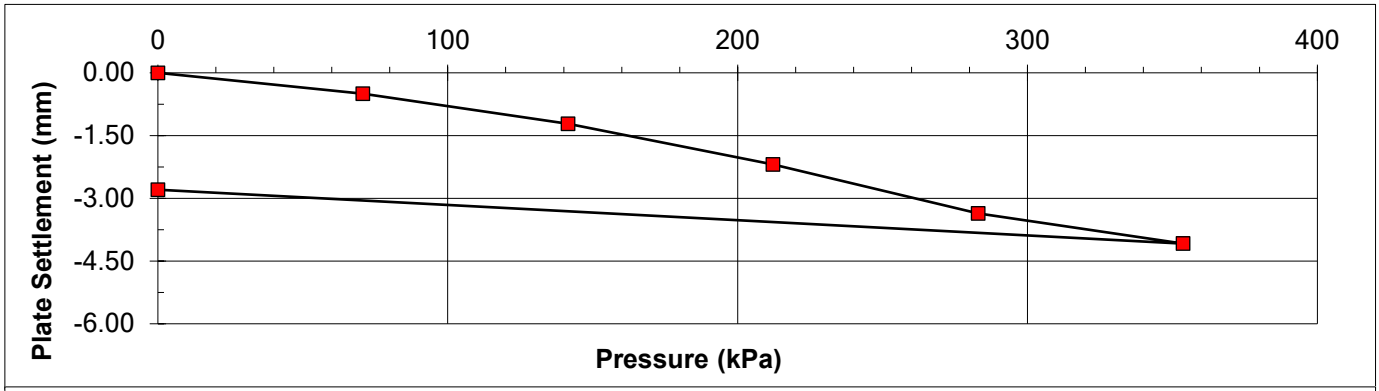
TEST CERTIFICATE

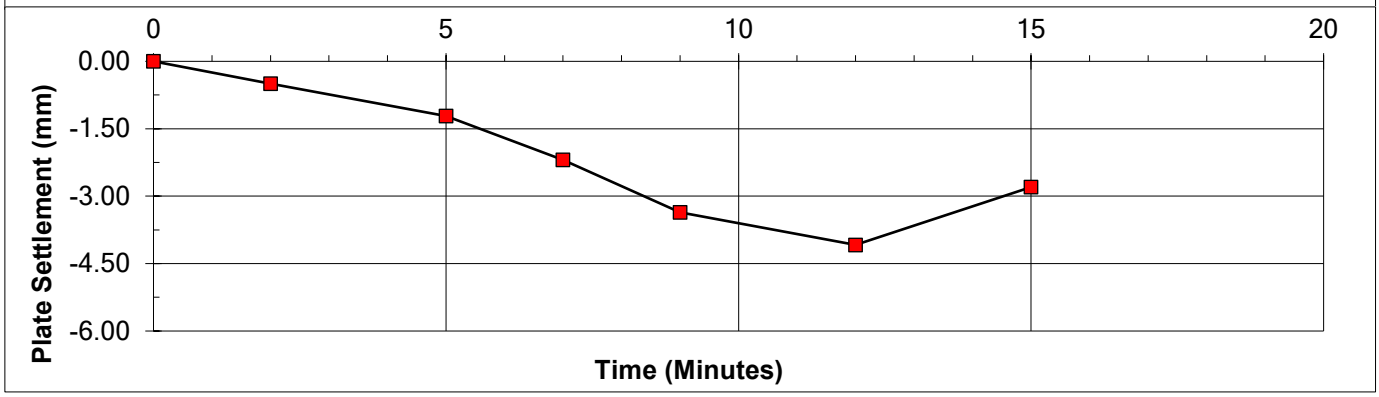
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 4GG		
JOB NUMBER	MRN 4623/35		
TEST LOCATION	P1	LOADING DEVICE	10 Tonne Enerpac Jack
TEST DATE	13-Jul-23	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
2261	3115	3523	2966	0.00	0.00	0.0
2208	3061	3481	2917	-0.50	5.00	70.7
2141	2992	3401	2845	-1.22	10.00	141.5
2058	2882	3301	2747	-2.19	15.00	212.2
1931	2758	3201	2630	-3.36	20.00	282.9
1861	2692	3121	2558	-4.08	25.00	353.7
2002	2815	3243	2687	-2.80	0.00	0.0





Pressure at 1.25 mm deflexion =	144	kPa
Modulus of subgrade reaction (k) =	115	MPa/m
Equivalent 762 mm plate reaction =	51	MPa/m
Equivalent CBR =	8.7	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 14-Jul-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
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UKAS TESTING 1580

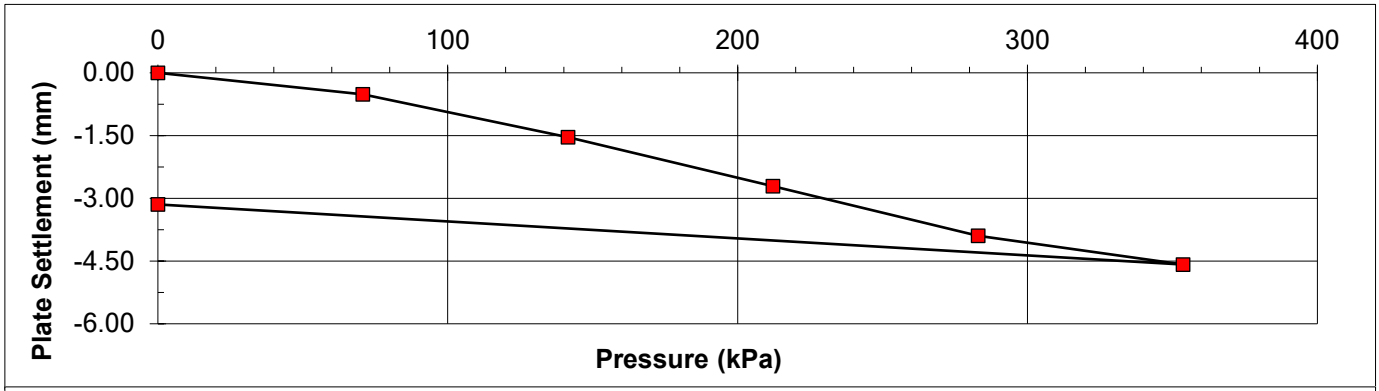
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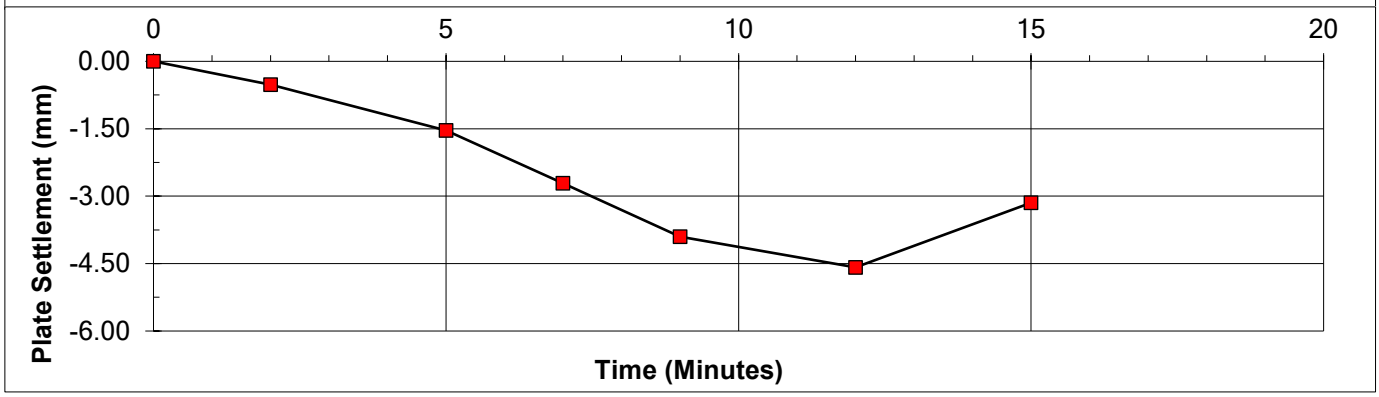
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 4GG		
JOB NUMBER	MRN 4623/35		
TEST LOCATION	P2	LOADING DEVICE	10 Tonne Enerpac Jack
TEST DATE	13-Jul-23	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
2461	4161	3115	3246	0.00	0.00	0.0
2411	4110	3061	3194	-0.52	5.00	70.7
2312	4012	2951	3092	-1.54	10.00	141.5
2201	3901	2821	2974	-2.71	15.00	212.2
2083	3783	2701	2856	-3.90	20.00	282.9
2012	3712	2638	2787	-4.58	25.00	353.7
2168	3831	2795	2931	-3.14	0.00	0.0





Pressure at 1.25 mm deflexion =	121	kPa
Modulus of subgrade reaction (k) =	97	MPa/m
Equivalent 762 mm plate reaction =	43	MPa/m
Equivalent CBR =	6.5	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 14-Jul-23

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UKAS TESTING 1580

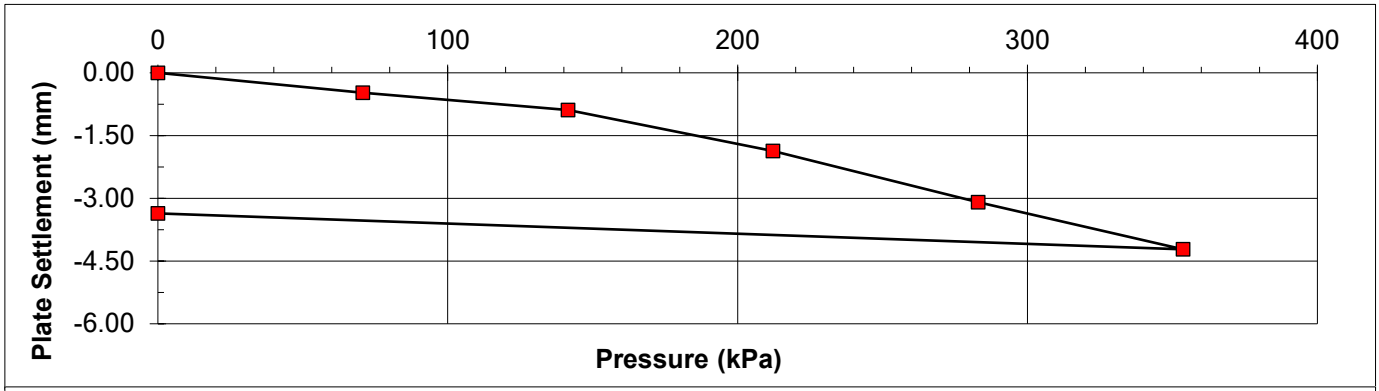
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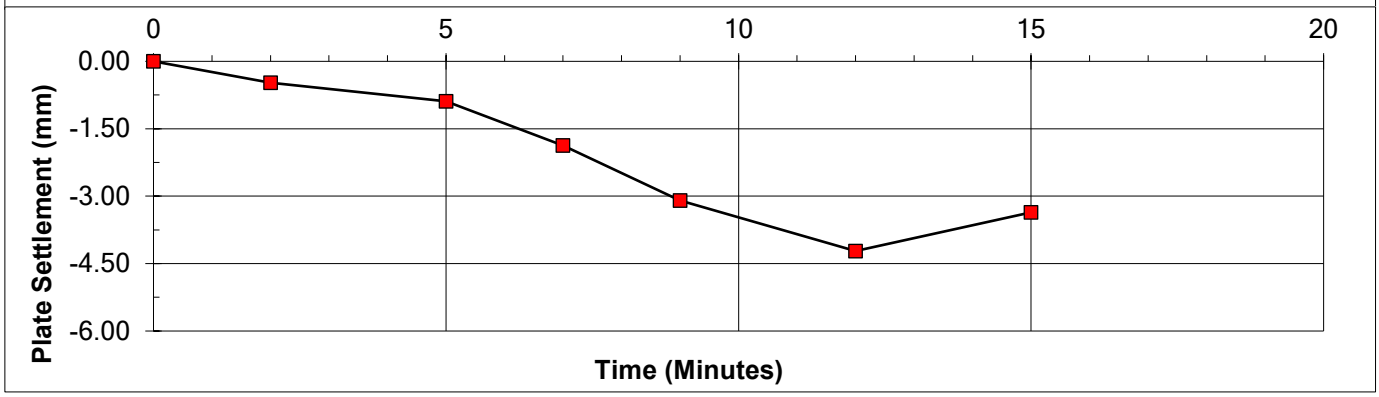
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 4GG		
JOB NUMBER	MRN 4623/35		
TEST LOCATION	P3	LOADING DEVICE	10 Tonne Enerpac Jack
TEST DATE	13-Jul-23	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
3132	4132	2632	3299	0.00	0.00	0.0
3081	4081	2591	3251	-0.48	5.00	70.7
3041	4031	2558	3210	-0.89	10.00	141.5
2951	3943	2441	3112	-1.87	15.00	212.2
2828	3821	2318	2989	-3.10	20.00	282.9
2701	3711	2218	2877	-4.22	25.00	353.7
2798	3792	2298	2963	-3.36	0.00	0.0





Pressure at 1.25 mm deflexion =	168	kPa
Modulus of subgrade reaction (k) =	134	MPa/m
Equivalent 762 mm plate reaction =	59	MPa/m
Equivalent CBR =	11.4	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 14-Jul-23

MURRAY RIX

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DUKINFIELD, CHESHIRE SK16 4QX
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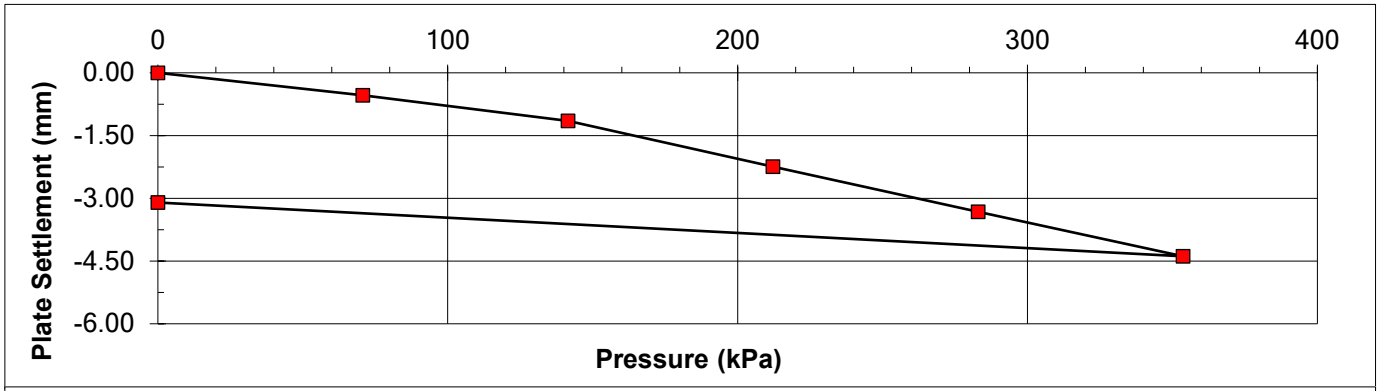
UKAS TESTING 1580

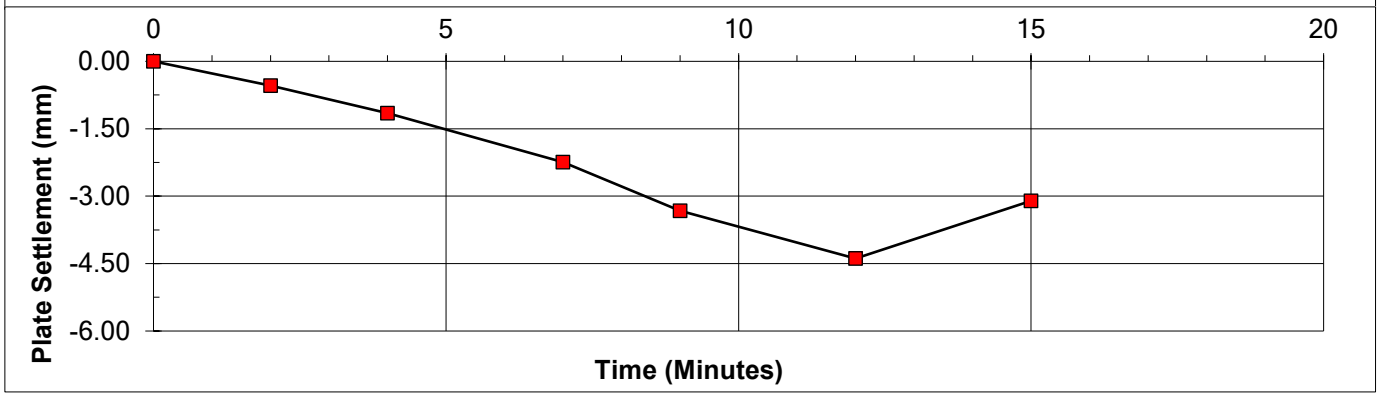
TEST CERTIFICATE

PLATE INCREMENTAL LOAD TEST
BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 4GG		
JOB NUMBER	MRN 4623/35		
TEST LOCATION	P4	LOADING DEVICE	10 Tonne Enerpac Jack
TEST DATE	13-Jul-23	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
2145	3341	3773	3086	0.00	0.00	0.0
2098	3271	3728	3032	-0.54	5.00	70.7
2051	3210	3652	2971	-1.15	10.00	141.5
1931	3112	3543	2862	-2.24	15.00	212.2
1823	3011	3428	2754	-3.32	20.00	282.9
1712	2921	3310	2648	-4.39	25.00	353.7
1805	3061	3462	2776	-3.10	0.00	0.0





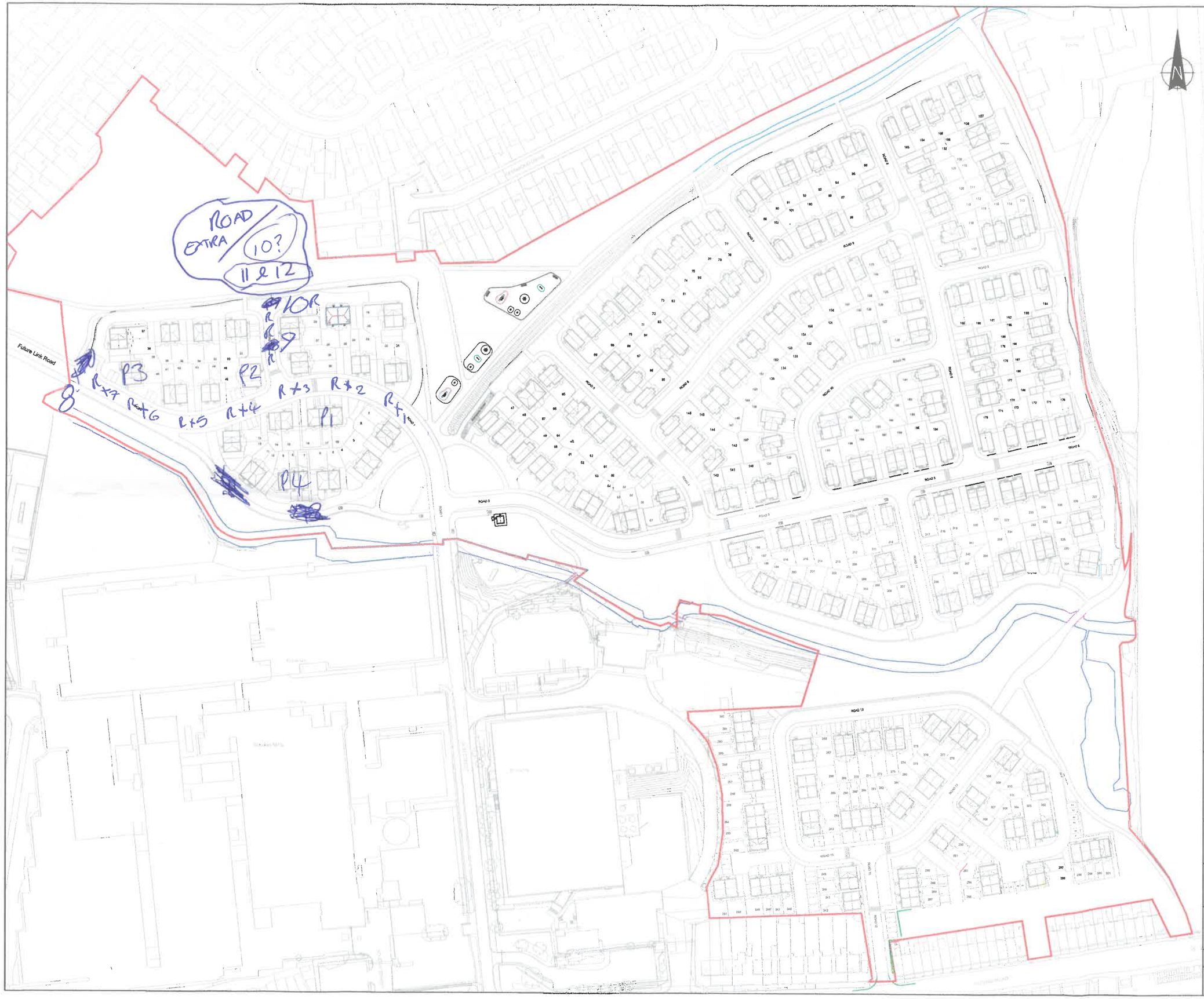
Pressure at 1.25 mm deflexion =	148	kPa
Modulus of subgrade reaction (k) =	118	MPa/m
Equivalent 762 mm plate reaction =	52	MPa/m
Equivalent CBR =	9.1	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 14-Jul-23





Sheet Plan Scale:NTS

Notes:

Site boundary	
Major contour	
Minor contour (1m)	
Spot level	x 33.48
Bottom / top of bank	

1ST RD CBRS
R1-12

PLOTS P1-4

Survey Information:

Coord System	Grid/Tape	Primary Survey Control	Secondary Survey Control
OSGB36(15)	Grid	Leica SmartNet	Site

Rev	Date	Amendment	Drawn	Checked

Urban Regen
ESTABLISHED 2001

Client: Kellen Homes

Project: Don Street

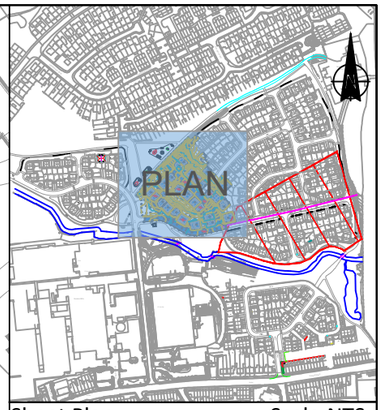
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Scale:	First issue:	Drawn:	Checked:
NTS @ A1			

Drawing No: 367 - 22 - 01 Revision:

14-Jul-23





Sheet Plan Scale:NTS

Notes:

- Site boundary
- Major contour
- Minor contour (1m)
- Spot level ×33.48
- Bottom / top of bank
- CBR Results - See Report "MRN 4623/26 & MRN 4623/20"

Survey Information:

Co-ord System:	Co-ord Type:	Primary Survey Control:	Secondary Survey Control:
OSGB36(15)	Grid	Leica SmartNet	Site

Rev	Date	Amendment	Drawn	Checked

Urban Regen
ESTABLISHED 2001

Client: Kellen Homes

Project: Don Street

Title: 367 - Area 2
Asbuilt & Constraints Plan

Scale:	First Issue:	Drawn:	Checked:
NTS @ A1	28.06.2023	JV	JV

Drawing No: 367 - 23 - 31- 01 Revision:

MURRAY RIX
CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client Urban Regen Ltd

Address Langley Road
Pendlebury
Salford
M6 6FG

Contract Don Street,
Middleton M24 2GG

Job Number MRN 4623/20
Date of Issue 16 May 2023
Page 1 of 10

Approved Signatories

S J Hutchings, O P Davies

Notes

1 All remaining samples and remnants from this contract will be disposed 28 days from the date of this report unless you notify us to the contrary.

2 Result certificates, in this report, not bearing a UKAS mark, are not included in our UKAS accreditation schedule.

3 Opinions and interpretations expressed herein are outside the scope of our UKAS accreditation.

4 Certified that the samples have been examined and tested in accordance with the terms of the contract/order and unless otherwise stated conform to the standards/specifications quoted.

5 The results included within the report are representative of the samples submitted for analysis.

6 This certificate should not be reproduced, except in full, without the express permission of the laboratory.

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

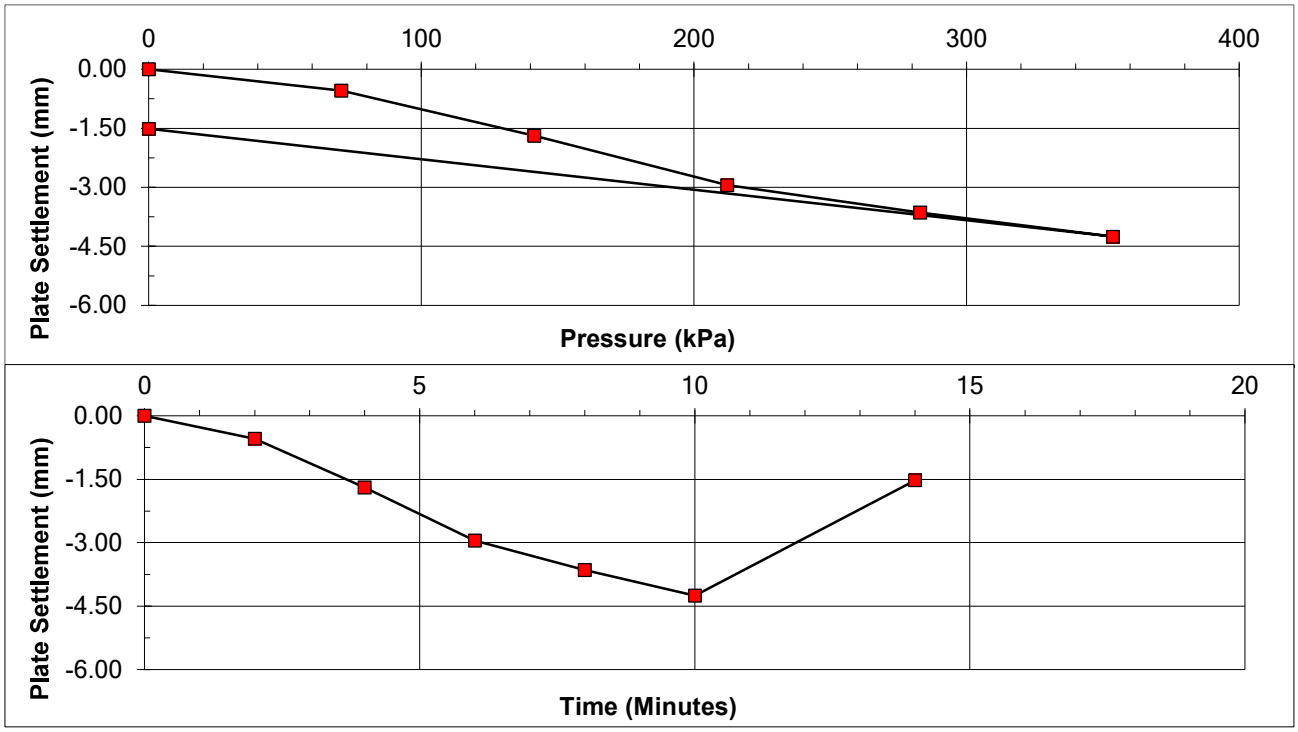
TEST CERTIFICATE

PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd				
SITE	Don Street, Middleton M24 4GG				
JOB NUMBER	MRN 4623/20				
TEST LOCATION	P1	LOADING DEVICE	10 Tonne Enerpac Jack		
TEST DATE	15-May-23	PLATE SIZE (mm)	300 diameter		
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant		
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required		

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
4231	4543	4551	4442	0.00	0.00	0.0
4162	4521	4479	4387	-0.54	5.00	70.7
4038	4407	4372	4272	-1.69	10.00	141.5
3942	4210	4289	4147	-2.95	15.00	212.2
3867	4139	4225	4077	-3.65	20.00	282.9
3797	4079	4173	4016	-4.25	25.00	353.7
4104	4386	4379	4290	-1.52	0.00	0.0



Pressure at 1.25 mm deflexion =	114	kPa
Modulus of subgrade reaction (k) =	91	MPa/m
Equivalent 762 mm plate reaction =	40	MPa/m
Equivalent CBR =	5.9	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons) DATE 16-May-23
(Laboratory Manager)

MURRAY RIX

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DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

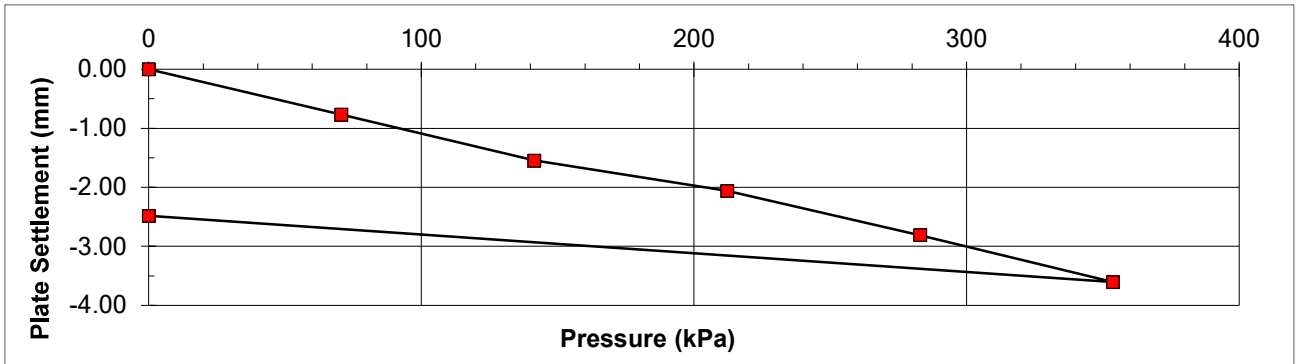
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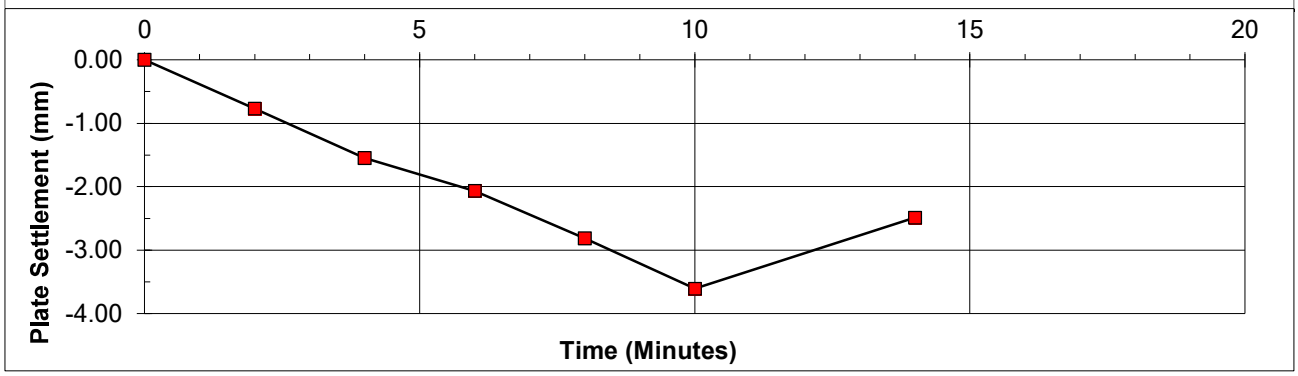
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd				
SITE	Don Street, Middleton M24 4GG				
JOB NUMBER	MRN 4623/20				
TEST LOCATION	P2	LOADING DEVICE	10 Tonne Enerpac Jack		
TEST DATE	15-May-23	PLATE SIZE (mm)	300 diameter		
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant		
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required		

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
4382	4199	4621	4401	0.00	0.00	0.0
4314	4110	4547	4324	-0.77	5.00	70.7
4209	4082	4447	4246	-1.55	10.00	141.5
4188	3994	4401	4194	-2.06	15.00	212.2
4052	3938	4368	4119	-2.81	20.00	282.9
4038	3817	4265	4040	-3.61	25.00	353.7
4136	3984	4336	4152	-2.49	0.00	0.0





Pressure at 1.25 mm deflexion =	114	kPa
Modulus of subgrade reaction (k) =	92	MPa/m
Equivalent 762 mm plate reaction =	40	MPa/m
Equivalent CBR =	5.9	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager)

DATE 16-May-23

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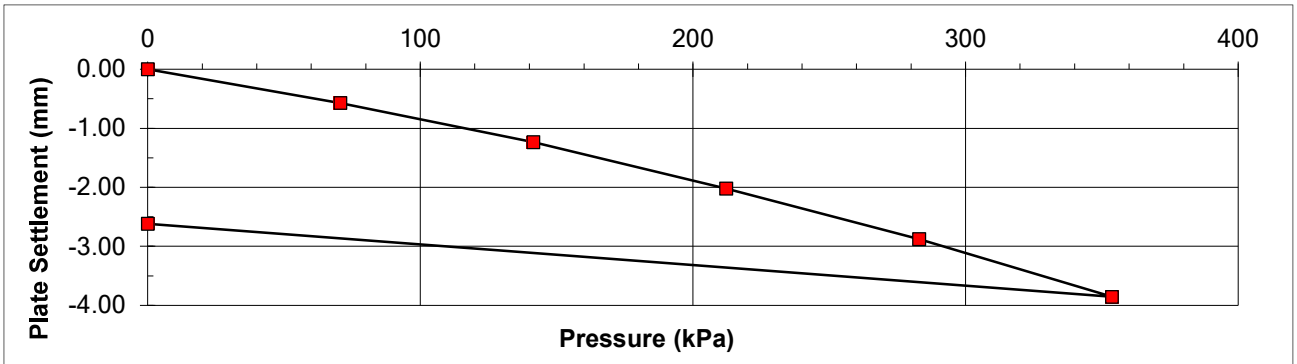
TEST CERTIFICATE

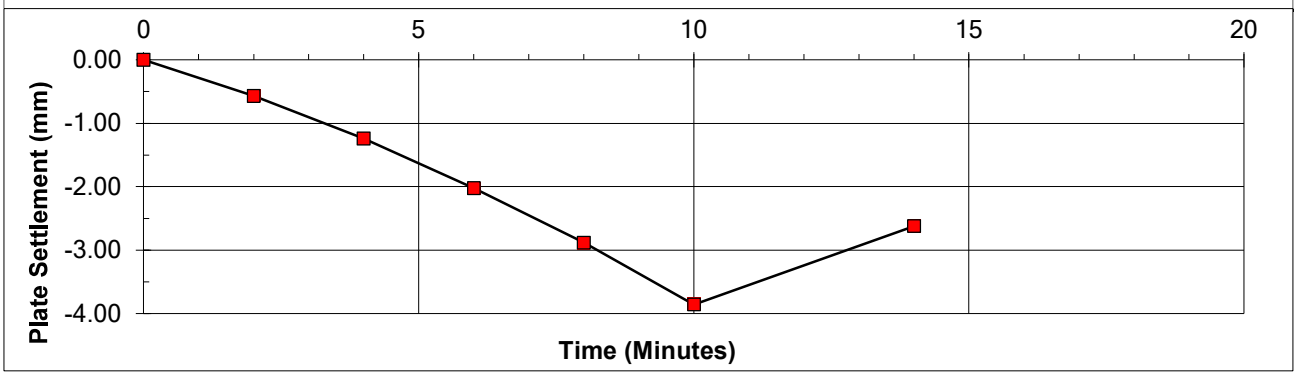
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 4GG		
JOB NUMBER	MRN 4623/20		
TEST LOCATION	P3	LOADING DEVICE	10 Tonne Enerpac Jack
TEST DATE	15-May-23	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
4381	3671	4885	4312	0.00	0.00	0.0
4307	3620	4839	4255	-0.57	5.00	70.7
4226	3564	4776	4189	-1.24	10.00	141.5
4199	3448	4684	4110	-2.02	15.00	212.2
4040	3396	4637	4024	-2.88	20.00	282.9
3940	3289	4551	3927	-3.86	25.00	353.7
4066	3423	4662	4050	-2.62	0.00	0.0





Pressure at 1.25 mm deflexion =	143	kPa
Modulus of subgrade reaction (k) =	114	MPa/m
Equivalent 762 mm plate reaction =	50	MPa/m
Equivalent CBR =	8.6	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 16-May-23

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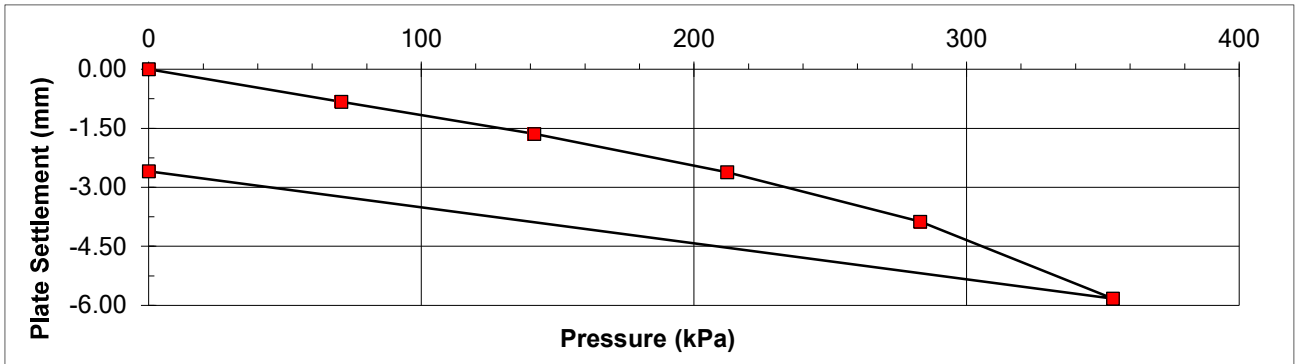
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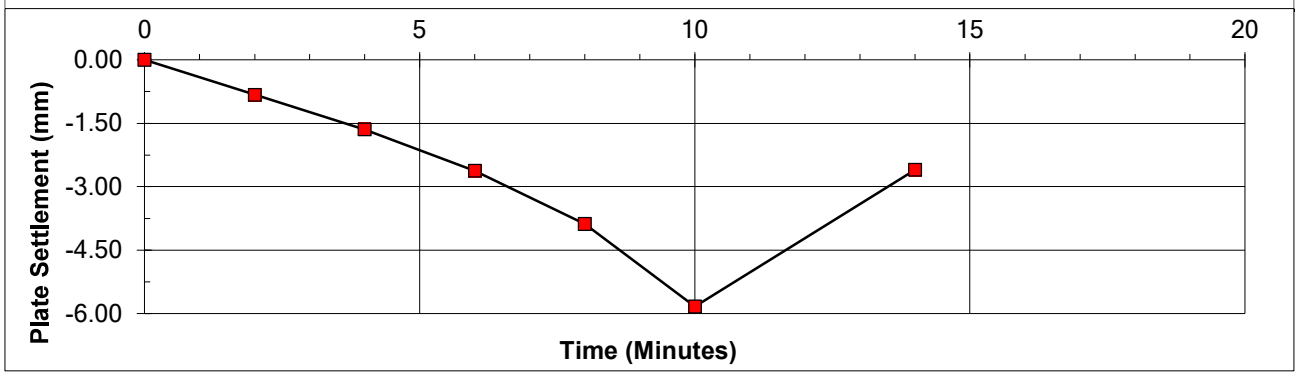
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 4GG		
JOB NUMBER	MRN 4623/20		
TEST LOCATION	P4	LOADING DEVICE	10 Tonne Enerpac Jack
TEST DATE	15-May-23	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
4507	4820	4411	4579	0.00	0.00	0.0
4472	4709	4309	4497	-0.83	5.00	70.7
4388	4633	4223	4415	-1.65	10.00	141.5
4261	4605	4086	4317	-2.62	15.00	212.2
4137	4476	3962	4192	-3.88	20.00	282.9
3912	4250	3827	3996	-5.83	25.00	353.7
4264	4569	4126	4320	-2.60	0.00	0.0





Pressure at 1.25 mm deflexion =	107	kPa
Modulus of subgrade reaction (k) =	86	MPa/m
Equivalent 762 mm plate reaction =	38	MPa/m
Equivalent CBR =	5.2	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons) DATE 16-May-23
(Laboratory Manager)

MURRAY RIX

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TEL 0161 475 0870

UKAS TESTING 1580

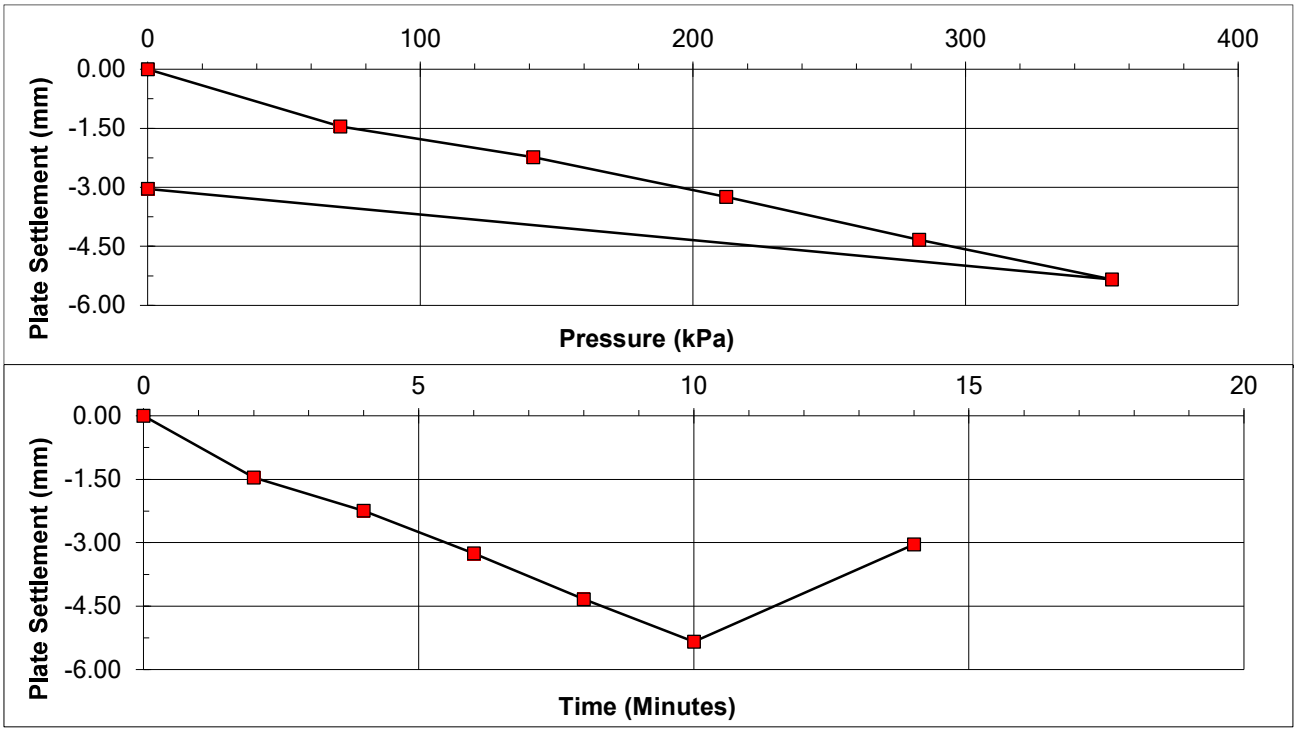
TEST CERTIFICATE

PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 4GG		
JOB NUMBER	MRN 4623/20		
TEST LOCATION	P5	LOADING DEVICE	10 Tonne Enerpac Jack
TEST DATE	15-May-23	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
4561	4436	4250	4416	0.00	0.00	0.0
4302	4340	4168	4270	-1.46	5.00	70.7
4233	4264	4078	4192	-2.24	10.00	141.5
4140	4158	3974	4091	-3.25	15.00	212.2
4033	4057	3856	3982	-4.34	20.00	282.9
3929	3953	3762	3881	-5.34	25.00	353.7
4184	4215	3936	4112	-3.04	0.00	0.0



Pressure at 1.25 mm deflexion =	61	kPa
Modulus of subgrade reaction (k) =	49	MPa/m
Equivalent 762 mm plate reaction =	21	MPa/m
Equivalent CBR =	2.0	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 16-May-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

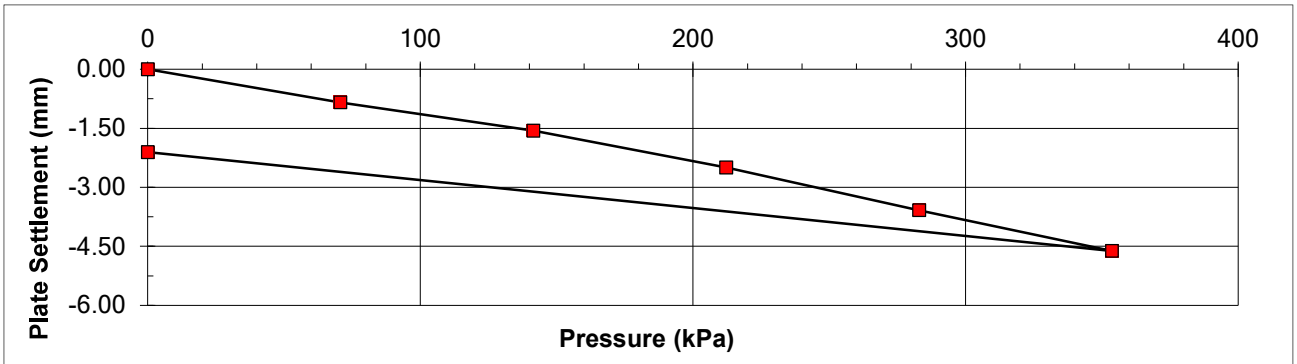
TEST CERTIFICATE

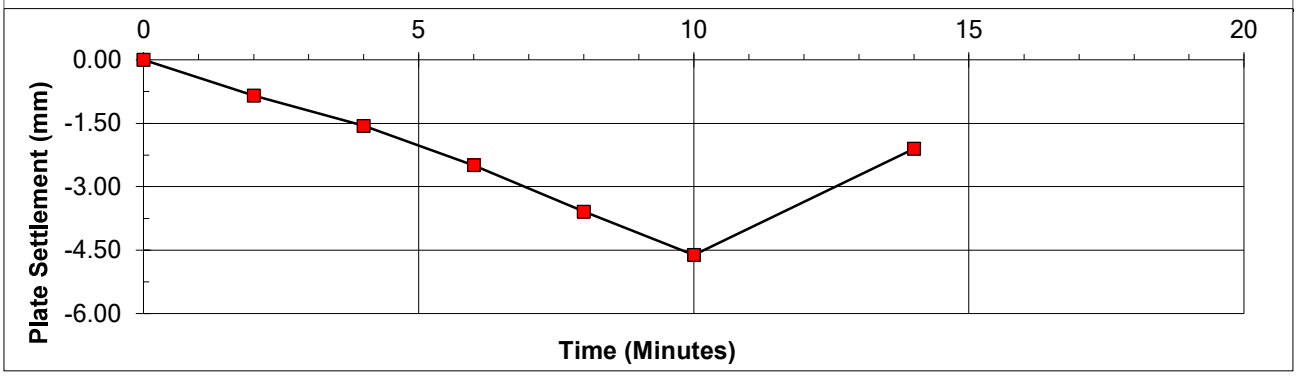
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd				
SITE	Don Street, Middleton M24 4GG				
JOB NUMBER	MRN 4623/20				
TEST LOCATION	R1	LOADING DEVICE		10 Tonne Enerpac Jack	
TEST DATE	15-May-23	PLATE SIZE (mm)		300 diameter	
TEST DEPTH	Surface	REACTION LOAD USED		Site Plant	
MATERIAL UNDER TEST	Crush		MOISTURE CONTENT		Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
4351	4236	4347	4311	0.00	0.00	0.0
4299	4130	4251	4227	-0.85	5.00	70.7
4236	4058	4172	4155	-1.56	10.00	141.5
4151	3962	4073	4062	-2.49	15.00	212.2
4040	3857	3961	3953	-3.59	20.00	282.9
3936	3749	3864	3850	-4.62	25.00	353.7
4162	4099	4042	4101	-2.10	0.00	0.0





Pressure at 1.25 mm deflexion =	111	kPa
Modulus of subgrade reaction (k) =	89	MPa/m
Equivalent 762 mm plate reaction =	39	MPa/m
Equivalent CBR =	5.5	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons) DATE 16-May-23
(Laboratory Manager)

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

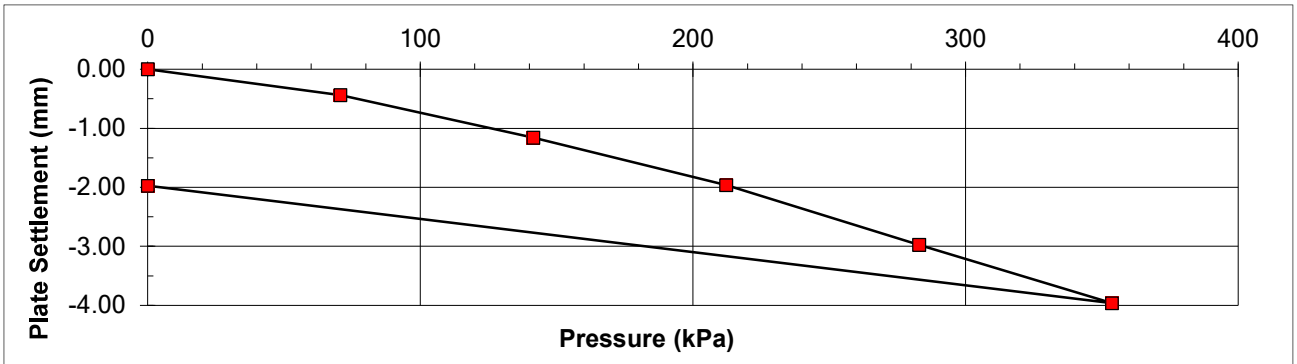
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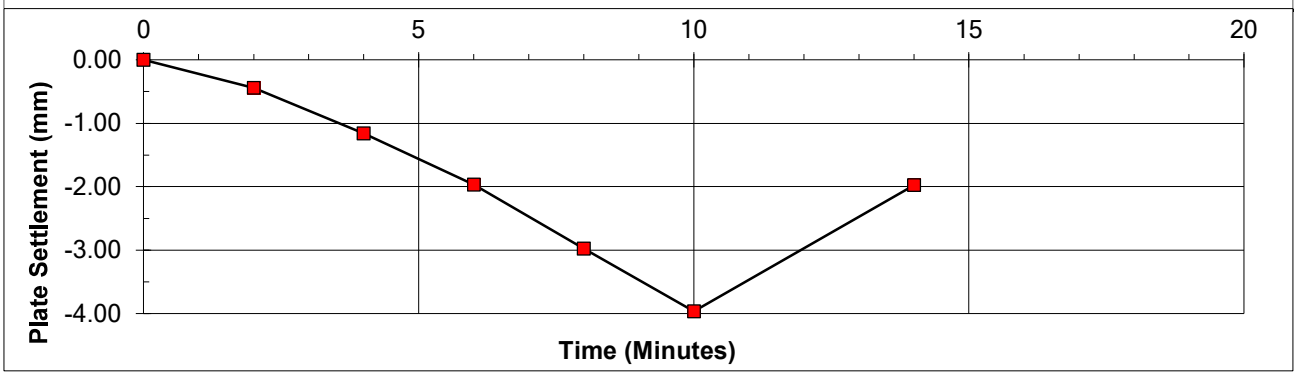
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd				
SITE	Don Street, Middleton M24 4GG				
JOB NUMBER	MRN 4623/20				
TEST LOCATION	R2	LOADING DEVICE		10 Tonne Enerpac Jack	
TEST DATE	15-May-23	PLATE SIZE (mm)		300 diameter	
TEST DEPTH	Surface	REACTION LOAD USED		Site Plant	
MATERIAL UNDER TEST	Crush		MOISTURE CONTENT		Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
4557	4465	4305	4442	0.00	0.00	0.0
4468	4387	4340	4398	-0.44	5.00	70.7
4432	4346	4201	4326	-1.16	10.00	141.5
4327	4221	4189	4246	-1.97	15.00	212.2
4256	4168	4010	4145	-2.98	20.00	282.9
4186	4001	3951	4046	-3.96	25.00	353.7
4362	4275	4097	4245	-1.98	0.00	0.0





Pressure at 1.25 mm deflexion =	149	kPa
Modulus of subgrade reaction (k) =	119	MPa/m
Equivalent 762 mm plate reaction =	53	MPa/m
Equivalent CBR =	9.3	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 16-May-23

MURRAY RIX

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DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

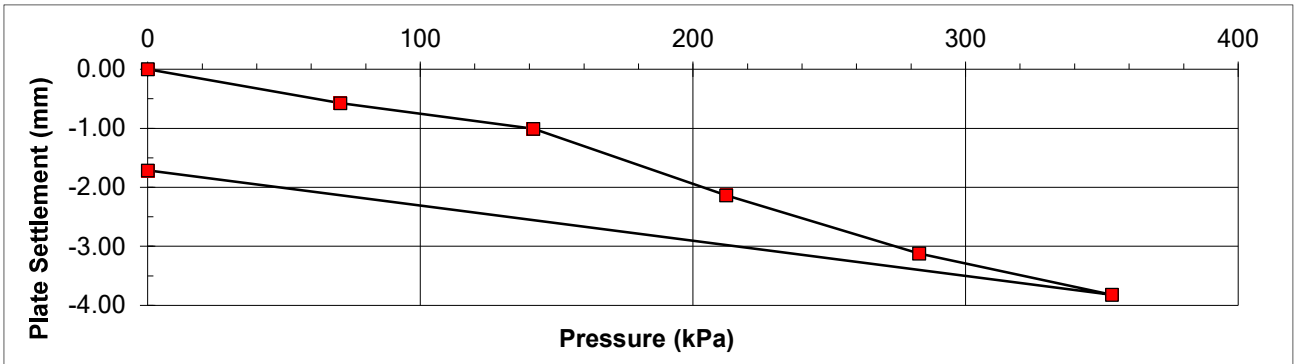
TEST CERTIFICATE

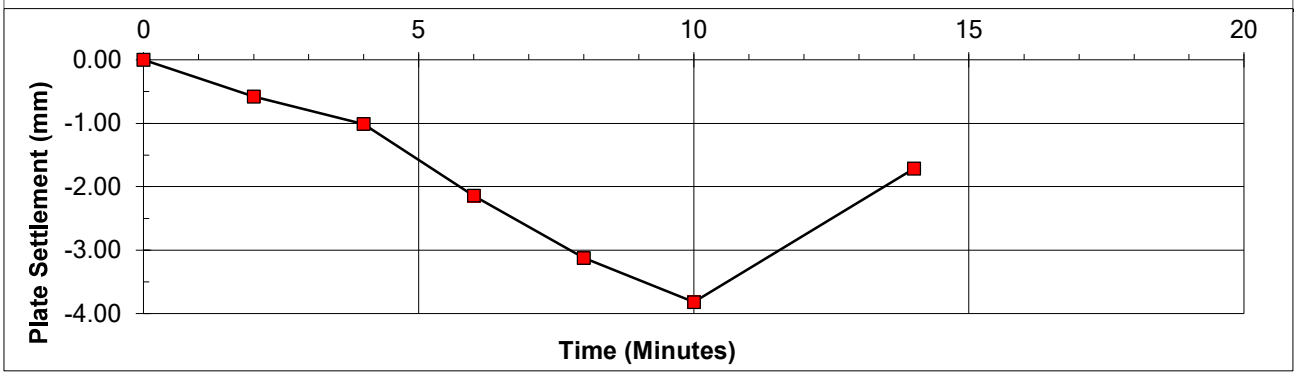
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd				
SITE	Don Street, Middleton M24 4GG				
JOB NUMBER	MRN 4623/20				
TEST LOCATION	R3	LOADING DEVICE	10 Tonne Enerpac Jack		
TEST DATE	15-May-23	PLATE SIZE (mm)	300 diameter		
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant		
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required		

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
4506	4384	4357	4416	0.00	0.00	0.0
4445	4327	4302	4358	-0.58	5.00	70.7
4400	4274	4270	4315	-1.01	10.00	141.5
4294	4159	4152	4202	-2.14	15.00	212.2
4230	4001	4079	4103	-3.12	20.00	282.9
4195	3964	3942	4034	-3.82	25.00	353.7
4357	4157	4219	4244	-1.71	0.00	0.0





Pressure at 1.25 mm deflexion =	156	kPa
Modulus of subgrade reaction (k) =	125	MPa/m
Equivalent 762 mm plate reaction =	55	MPa/m
Equivalent CBR =	10.1	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 16-May-23

MURRAY RIX

CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client Urban Regen Ltd

Address Langley Road
Pendlebury
Salford
M6 6FG

Contract Don Street,
Middleton M24 2GG

Job Number MRN 4623/26
Date of Issue 07 June 2023
Page 1 of 4

Approved Signatories

S J Hutchings, O P Davies

Notes

1 All remaining samples and remnants from this contract will be disposed 28 days from the date of this report unless you notify us to the contrary.

2 Result certificates, in this report, not bearing a UKAS mark, are not included in our UKAS accreditation schedule.

3 Opinions and interpretations expressed herein are outside the scope of our UKAS accreditation.

4 Certified that the samples have been examined and tested in accordance with the terms of the contract/order and unless otherwise stated conform to the standards/specifications quoted.

5 The results included within the report are representative of the samples submitted for analysis.

6 This certificate should not be reproduced, except in full, without the express permission of the laboratory.

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

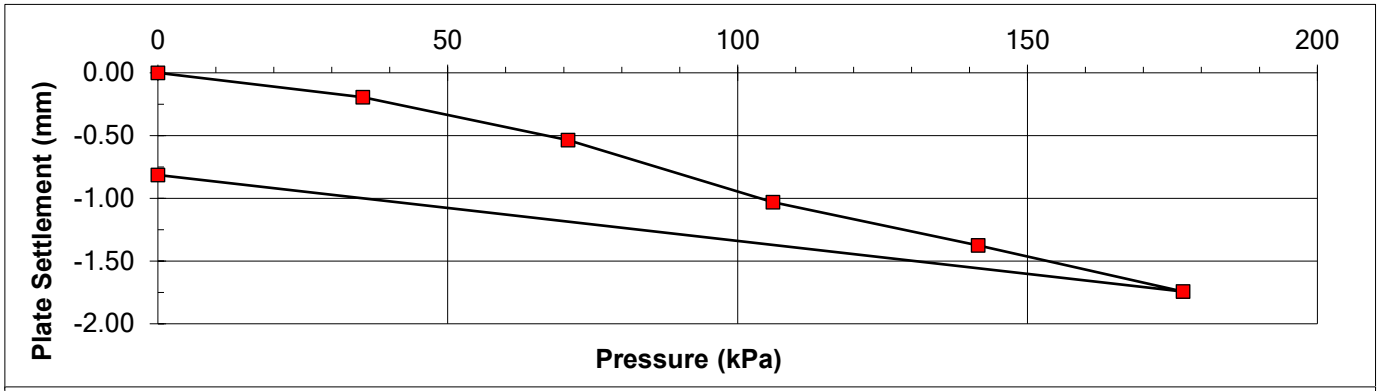
UKAS TESTING 1580

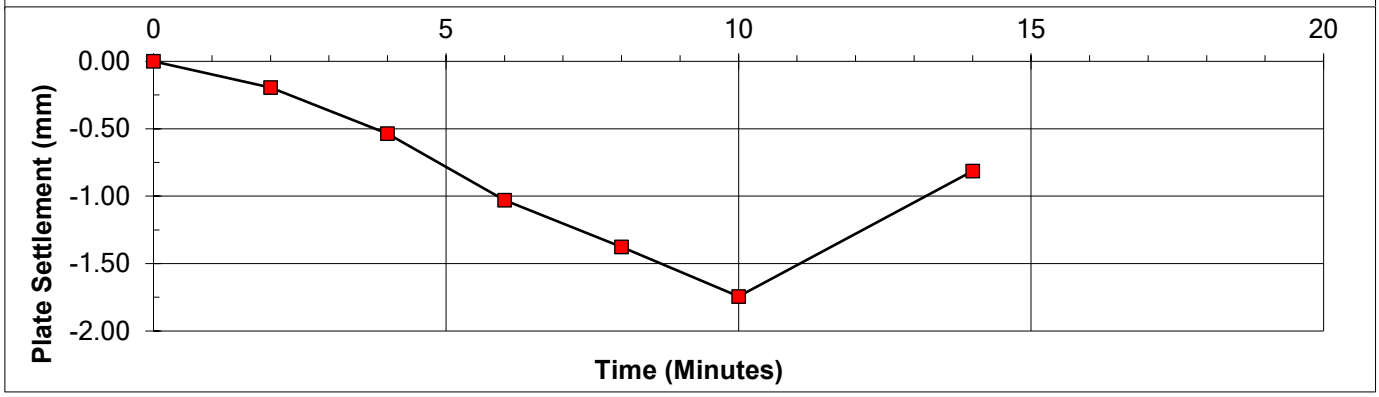
TEST CERTIFICATE

PLATE INCREMENTAL LOAD TEST
BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 4GG		
JOB NUMBER	MRN 4623/26		
TEST LOCATION	Test 01 (Cabin)	LOADING DEVICE	20 Tonne Enerpac Jack
TEST DATE	06-Jun-23	PLATE SIZE (mm)	600 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Clean Stone	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
4932	4130	3912	4325	0.00	0.00	0.0
4908	4109	3899	4305	-0.19	10.00	35.4
4870	4068	3875	4271	-0.54	20.00	70.7
4809	4020	3836	4222	-1.03	30.00	106.1
4776	3976	3809	4187	-1.38	40.00	141.5
4741	3940	3770	4150	-1.74	50.00	176.8
4782	4107	3841	4243	-0.81	0.00	0.0





Pressure at 1.25 mm deflexion =	129	kPa
Modulus of subgrade reaction (k) =	103	MPa/m
Equivalent 762 mm plate reaction =	83	MPa/m
Equivalent CBR =	20.3	%

REMARKS

SIGNED

NAME S.J Hutchings (Director)

DATE 07-Jun-23

MURRAY RIX

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DUKINFIELD, CHESHIRE SK16 4QX
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UKAS TESTING 1580

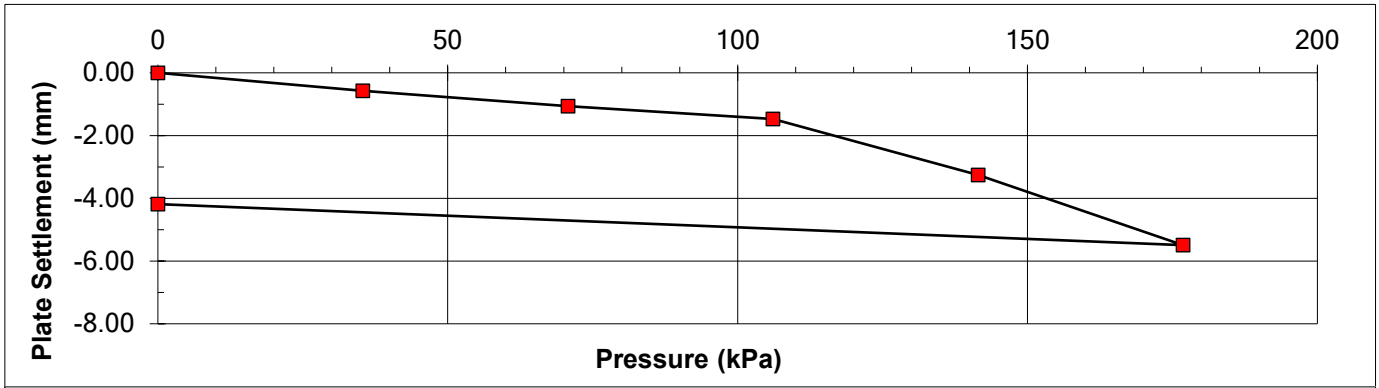
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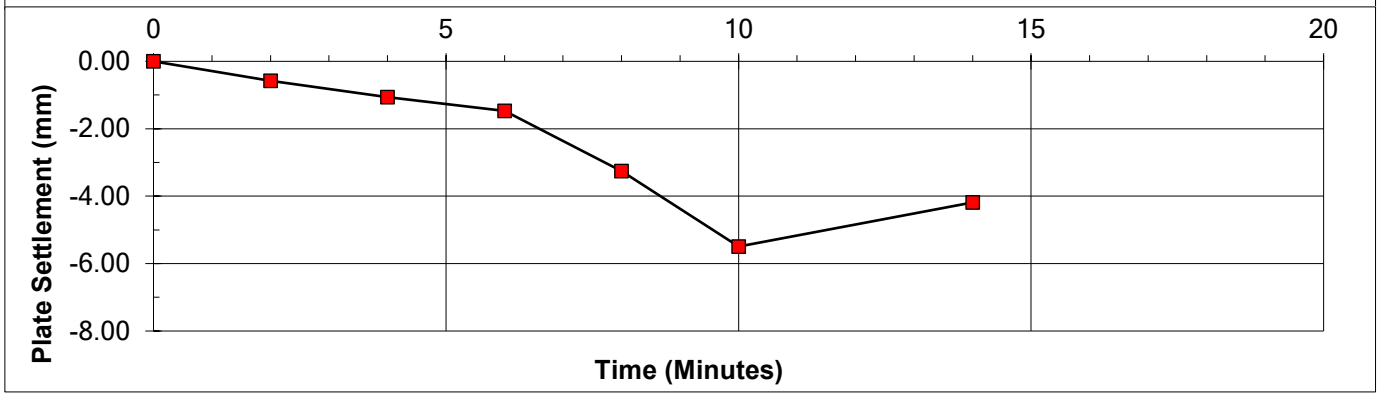
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 4GG		
JOB NUMBER	MRN 4623/26		
TEST LOCATION	Test 02 (Plot 146)	LOADING DEVICE	20 Tonne Enerpac Jack
TEST DATE	06-Jun-23	PLATE SIZE (mm)	600 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
4398	4564	3877	4280	0.00	0.00	0.0
4348	4507	3811	4222	-0.58	10.00	35.4
4302	4478	3740	4173	-1.06	20.00	70.7
4288	4391	3720	4133	-1.47	30.00	106.1
4133	4154	3576	3954	-3.25	40.00	141.5
3902	3871	3418	3730	-5.49	50.00	176.8
4067	4039	3476	3861	-4.19	0.00	0.0





Pressure at 1.25 mm deflexion =	87	kPa
Modulus of subgrade reaction (k) =	70	MPa/m
Equivalent 762 mm plate reaction =	56	MPa/m
Equivalent CBR =	10.3	%

REMARKS

SIGNED

NAME S.J Hutchings (Director) DATE 07-Jun-23

MURRAY RIX

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DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

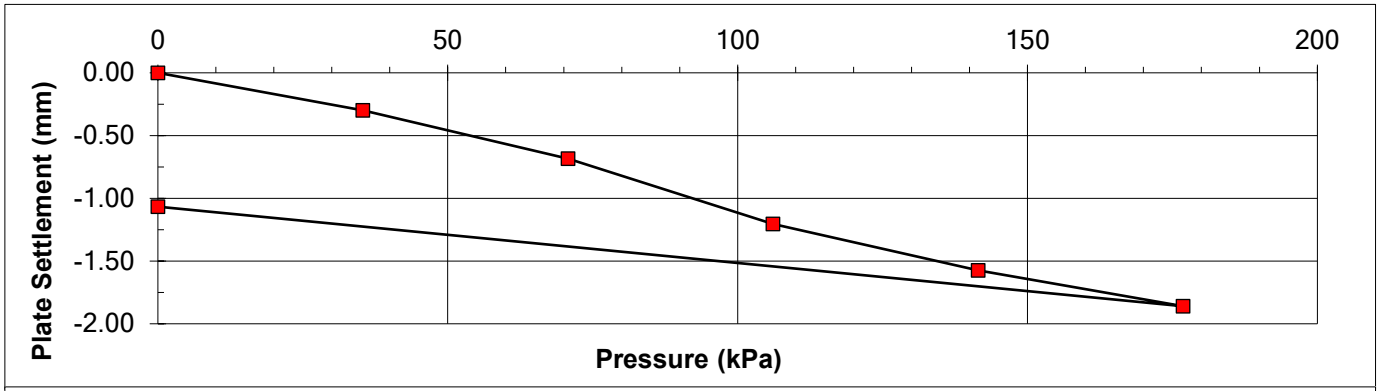
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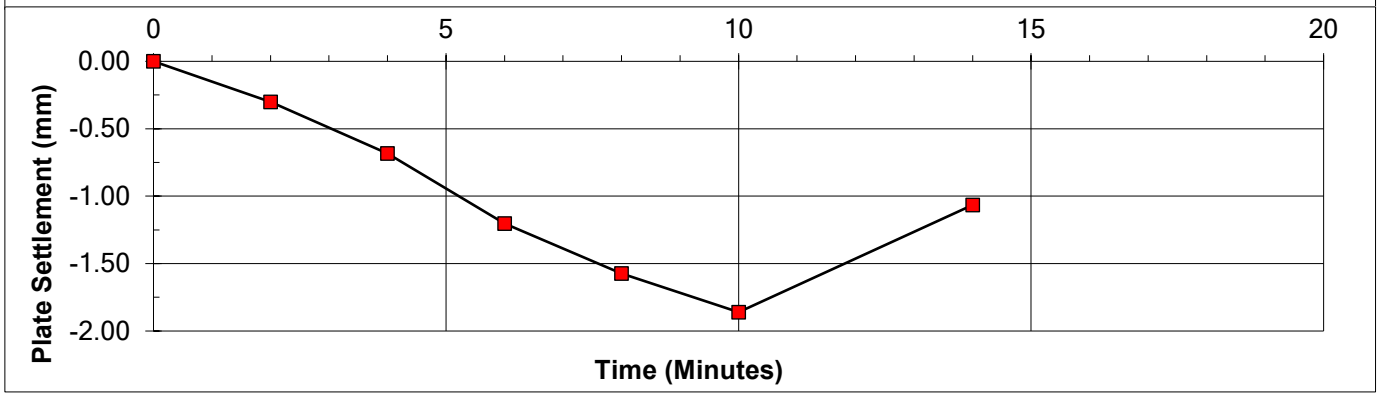
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 4GG		
JOB NUMBER	MRN 4623/26		
TEST LOCATION	Test 03 (Plot 86)	LOADING DEVICE	20 Tonne Enerpac Jack
TEST DATE	06-Jun-23	PLATE SIZE (mm)	600 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
4561	4298	4112	4324	0.00	0.00	0.0
4489	4288	4104	4294	-0.30	10.00	35.4
4433	4251	4082	4255	-0.68	20.00	70.7
4361	4200	4049	4203	-1.20	30.00	106.1
4312	4168	4019	4166	-1.57	40.00	141.5
4277	4138	3998	4138	-1.86	50.00	176.8
4419	4201	4031	4217	-1.07	0.00	0.0





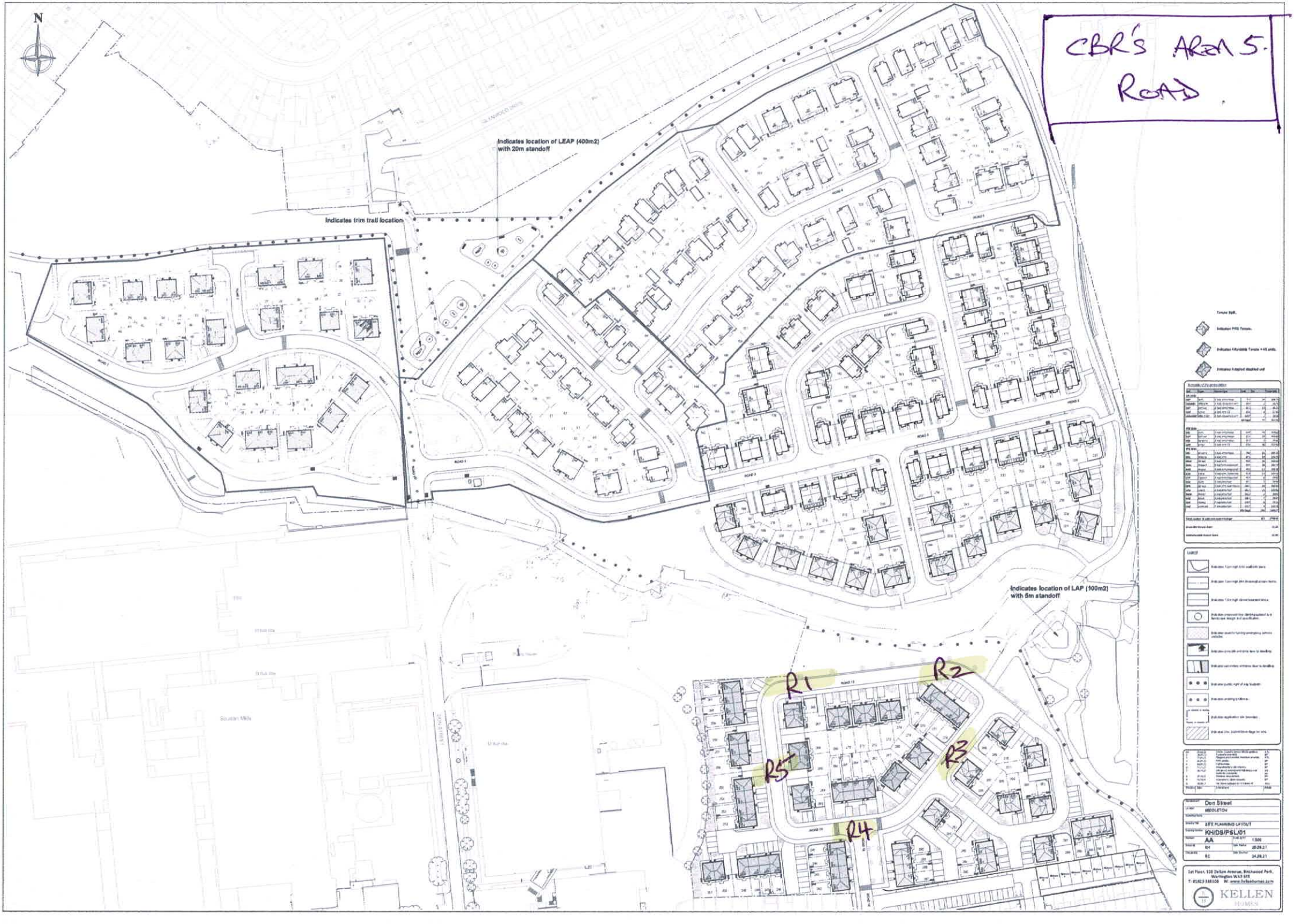
Pressure at 1.25 mm deflexion =	111	kPa
Modulus of subgrade reaction (k) =	88	MPa/m
Equivalent 762 mm plate reaction =	71	MPa/m
Equivalent CBR =	15.6	%

REMARKS

SIGNED

NAME S.J Hutchings (Director)

DATE 07-Jun-23


CBR's Area 5.
Road
N
Indicates location of LEAP (400m2) with 20m standoff
Indicates trim trail location
Indicates location of LAP (100m2) with 8m standoff
R1
R2
R3
R4
R5
Don Street
MIDDLETON
SITE PLANNING LAYOUT
KH/DS/PSL/01
AA
1:500
KH
28.09.21
RC
28.09.21
KELLEN HOMES

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

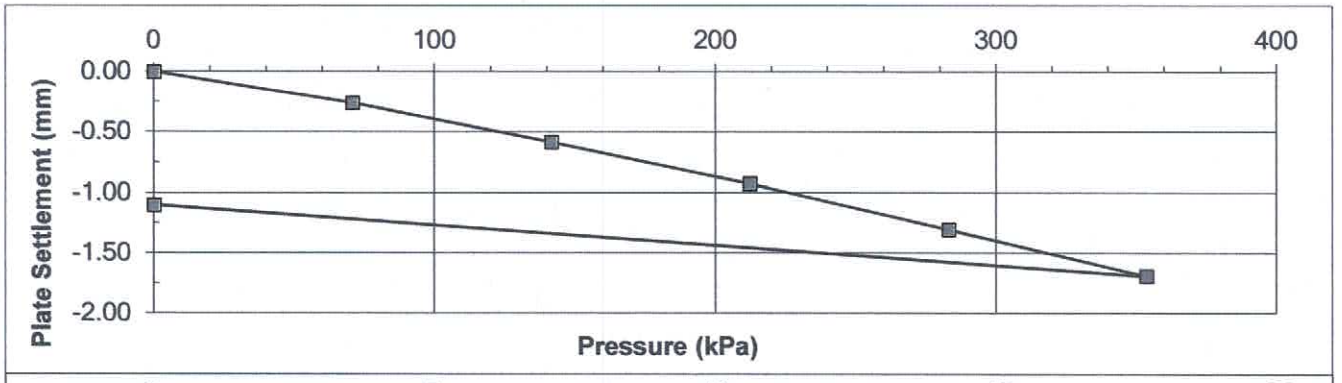
TEST CERTIFICATE

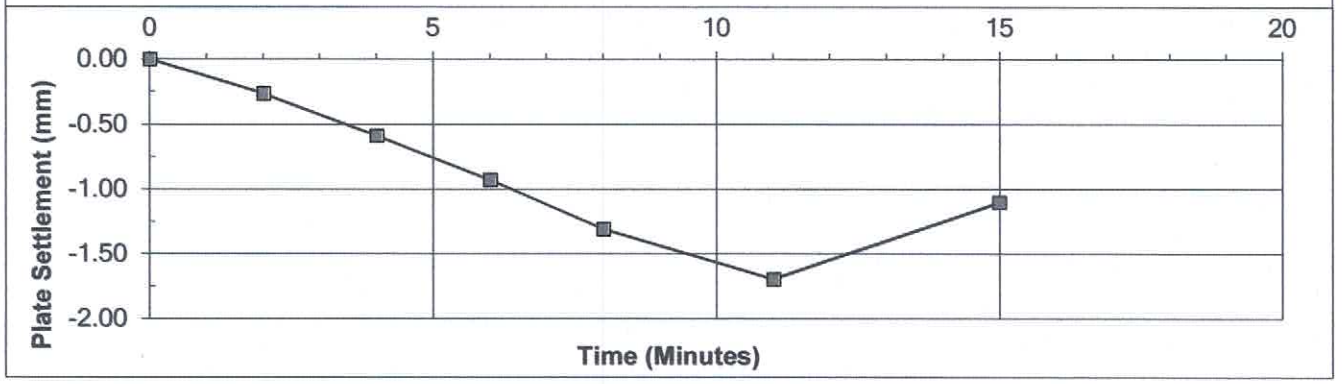
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd				
SITE	Don Street, Middleton M24 4GG				
JOB NUMBER	MRN 4623/15				
TEST LOCATION	R1	LOADING DEVICE		10 Tonne Enerpac Jack	
TEST DATE	28-Apr-23	PLATE SIZE (mm)		300 diameter	
TEST DEPTH	Surface	REACTION LOAD USED		Site Plant	
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT		Not Required	

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
3473	4483	3623	3860	0.00	0.00	0.0
3450	4458	3592	3833	-0.26	5.00	70.7
3420	4421	3562	3801	-0.59	10.00	141.5
3391	4381	3529	3767	-0.93	15.00	212.2
3358	4341	3488	3729	-1.31	20.00	282.9
3311	4308	3451	3690	-1.70	25.00	353.7
3365	4371	3512	3749	-1.10	0.00	0.0





Pressure at 1.25 mm deflexion =	272	kPa
Modulus of subgrade reaction (k) =	218	MPa/m
Equivalent 762 mm plate reaction =	96	MPa/m
Equivalent CBR =	26.4	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 02-May-23

MURRAY RIX

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DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

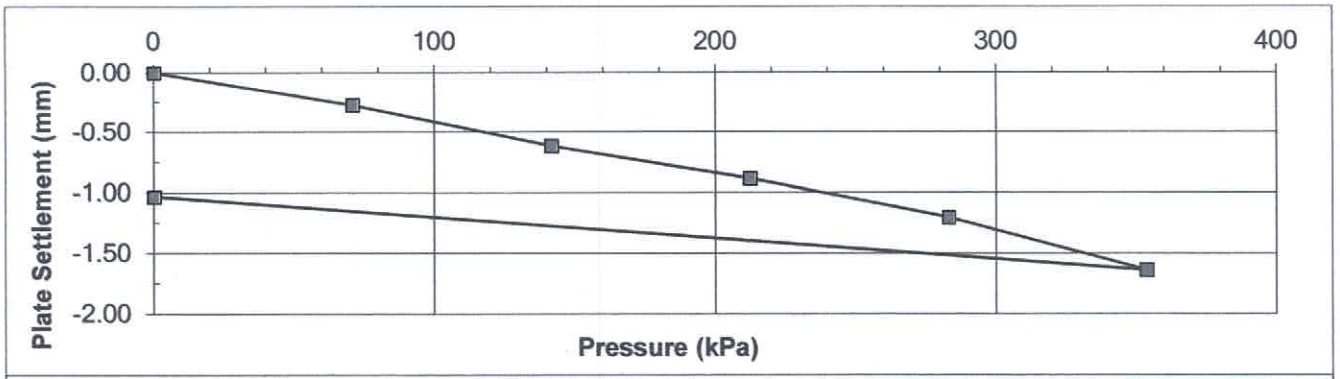
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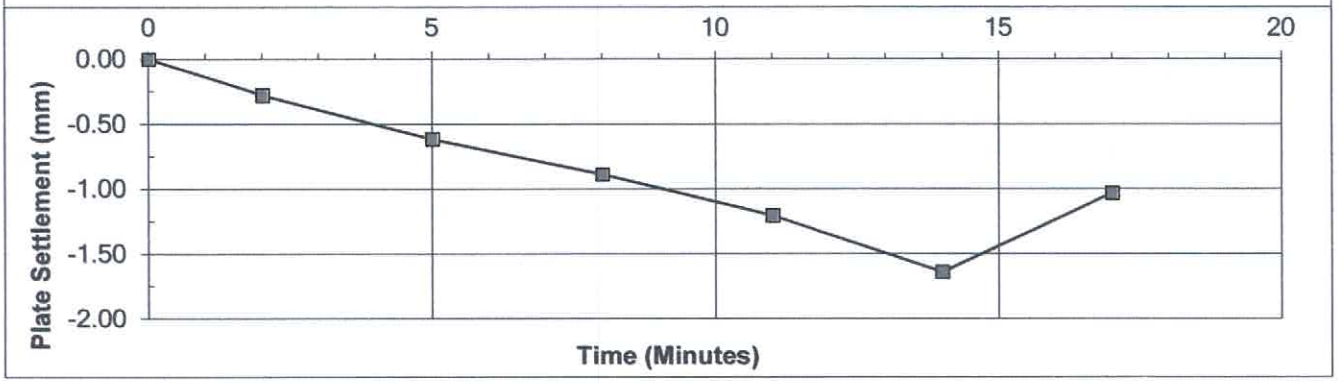
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd				
SITE	Don Street, Middleton M24 4GG				
JOB NUMBER	MRN 4623/15				
TEST LOCATION	R2	LOADING DEVICE		10 Tonne Enerpac Jack	
TEST DATE	28-Apr-23	PLATE SIZE (mm)		300 diameter	
TEST DEPTH	Surface	REACTION LOAD USED		Site Plant	
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT		Not Required	

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
2132	4503	3142	3259	0.00	0.00	0.0
2108	4468	3118	3231	-0.28	5.00	70.7
2083	4428	3081	3197	-0.62	10.00	141.5
2051	4410	3050	3170	-0.89	15.00	212.2
2023	4381	3012	3139	-1.20	20.00	282.9
1989	4338	2958	3095	-1.64	25.00	353.7
2042	4412	3013	3156	-1.03	0.00	0.0





Pressure at 1.25 mm deflexion =	291 kPa
Modulus of subgrade reaction (k) =	232 MPa/m
Equivalent 762 mm plate reaction =	103 MPa/m
Equivalent CBR =	29.5 %

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 02-May-23

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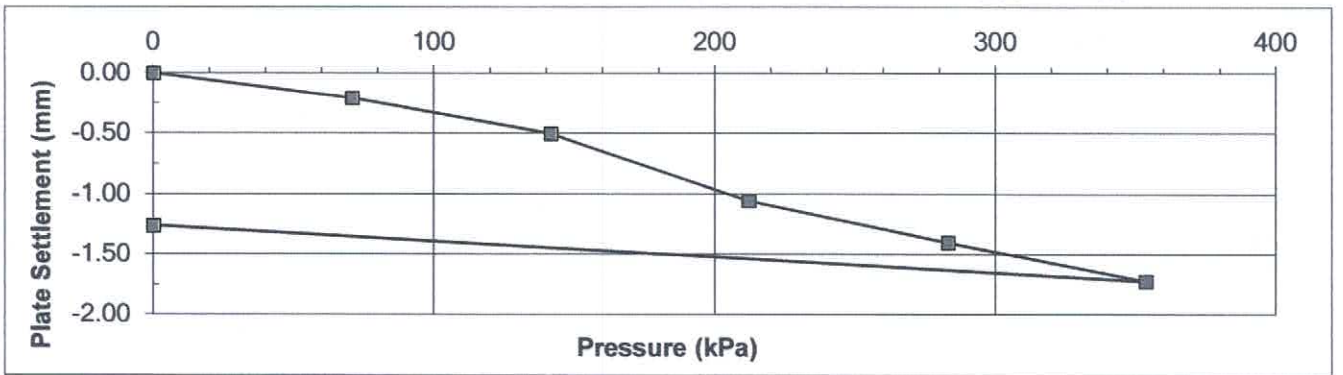
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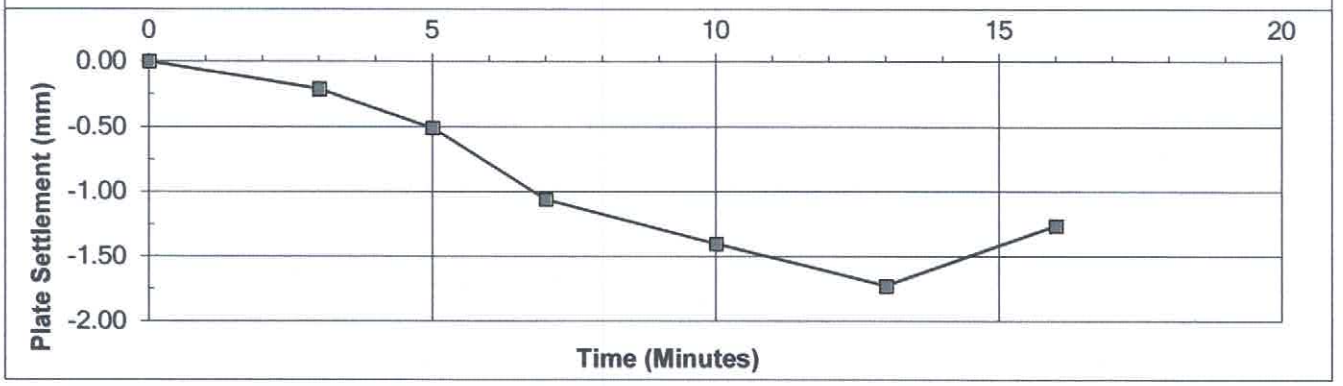
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd				
SITE	Don Street, Middleton M24 4GG				
JOB NUMBER	MRN 4623/15				
TEST LOCATION	R3	LOADING DEVICE		10 Tonne Enerpac Jack	
TEST DATE	28-Apr-23	PLATE SIZE (mm)		300 diameter	
TEST DEPTH	Surface	REACTION LOAD USED		Site Plant	
MATERIAL UNDER TEST	Crush		MOISTURE CONTENT		Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
3498	4563	2632	3564	0.00	0.00	0.0
3478	4541	2611	3543	-0.21	5.00	70.7
3458	4511	2572	3514	-0.51	10.00	141.5
3382	4452	2541	3458	-1.06	15.00	212.2
3343	4418	2511	3424	-1.40	20.00	282.9
3311	4392	2472	3392	-1.73	25.00	353.7
3365	4431	2518	3438	-1.26	0.00	0.0





Pressure at 1.25 mm deflexion =	251 kPa
Modulus of subgrade reaction (k) =	201 MPa/m
Equivalent 762 mm plate reaction =	89 MPa/m
Equivalent CBR =	23.0 %

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 02-May-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

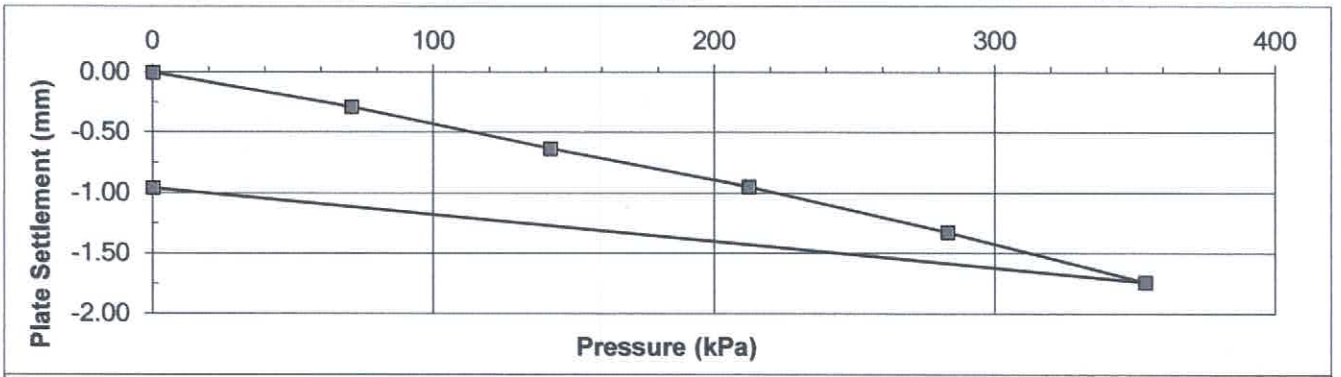
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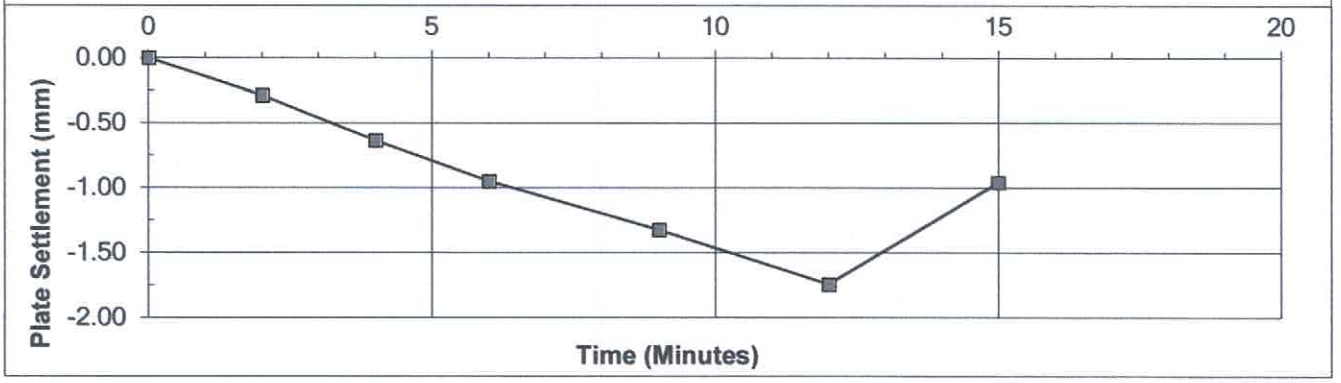
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd				
SITE	Don Street, Middleton M24 4GG				
JOB NUMBER	MRN 4623/15				
TEST LOCATION	R4	LOADING DEVICE		10 Tonne Enerpac Jack	
TEST DATE	28-Apr-23	PLATE SIZE (mm)		300 diameter	
TEST DEPTH	Surface	REACTION LOAD USED		Site Plant	
MATERIAL UNDER TEST	Crush		MOISTURE CONTENT		Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
3183	4158	2583	3308	0.00	0.00	0.0
3148	4128	2561	3279	-0.29	5.00	70.7
3123	4092	2518	3244	-0.64	10.00	141.5
3091	4058	2490	3213	-0.95	15.00	212.2
3058	4018	2451	3176	-1.32	20.00	282.9
3008	3981	2412	3134	-1.74	25.00	353.7
3082	4061	2493	3212	-0.96	0.00	0.0





Pressure at 1.25 mm deflexion =	269 kPa
Modulus of subgrade reaction (k) =	215 MPa/m
Equivalent 762 mm plate reaction =	95 MPa/m
Equivalent CBR =	25.8 %

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 02-May-23

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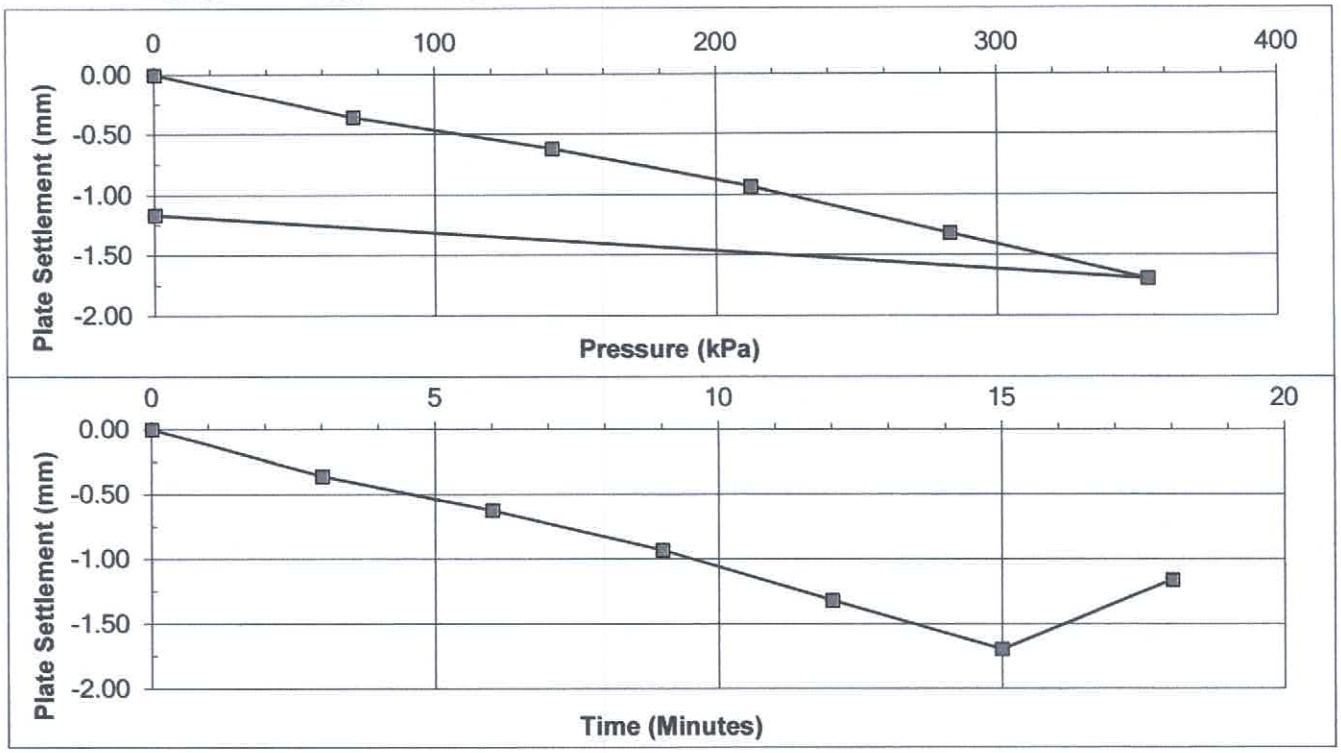
TEST CERTIFICATE

PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 4GG		
JOB NUMBER	MRN 4623/15		
TEST LOCATION	R5	LOADING DEVICE	10 Tonne Enerpac Jack
TEST DATE	28-Apr-23	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
2265	3601	2198	2688	0.00	0.00	0.0
2240	3558	2158	2652	-0.36	5.00	70.7
2211	3538	2128	2626	-0.62	10.00	141.5
2181	3508	2095	2595	-0.93	15.00	212.2
2142	3468	2058	2556	-1.32	20.00	282.9
2101	3441	2013	2518	-1.70	25.00	353.7
2165	3499	2051	2572	-1.16	0.00	0.0



Pressure at 1.25 mm deflexion =	270	kPa
Modulus of subgrade reaction (k) =	216	MPa/m
Equivalent 762 mm plate reaction =	95	MPa/m
Equivalent CBR =	26.0	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 02-May-23

MURRAY RIX
CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client Urban Regen Ltd

Address Langley Road
Pendlebury
Salford
M6 6FG

Contract Don Street,
Middleton M24 2GG

Job Number MRN 4623/15
Date of Issue 02 May 2023

Approved Signatories

S J Hutchings, O P Davies

Notes

1 All remaining samples and remnants from this contract will be disposed 28 days from the date of this report unless you notify us to the contrary.

2 Result certificates, in this report, not bearing a UKAS mark, are not included in our UKAS accreditation schedule.

3 Opinions and interpretations expressed herein are outside the scope of our UKAS accreditation.

4 Certified that the samples have been examined and tested in accordance with the terms of the contract/order and unless otherwise stated conform to the standards/specifications quoted.

5 The results included within the report are representative of the samples submitted for analysis.

6 This certificate should not be reproduced, except in full, without the express permission of the laboratory.

Andrew House, Hadfield Street, Dukinfield, Cheshire SK16 4QX Tel: 0161 475 0870
Email: enquiries@murrayrix.com Website: www.murrayrix.com

Also at: London: 020 8523 1999

UKAS TESTING 1580

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MURRAY RIX

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DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

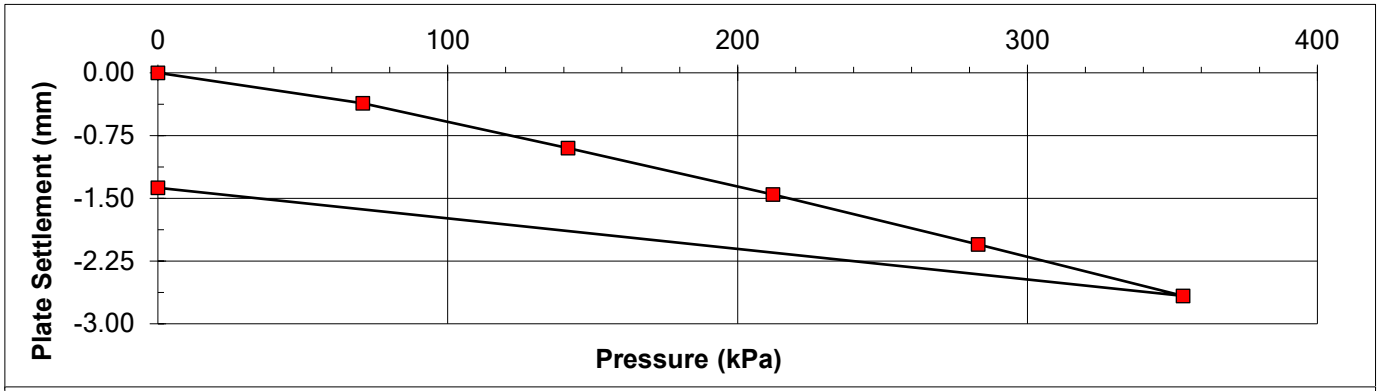
UKAS TESTING 1580

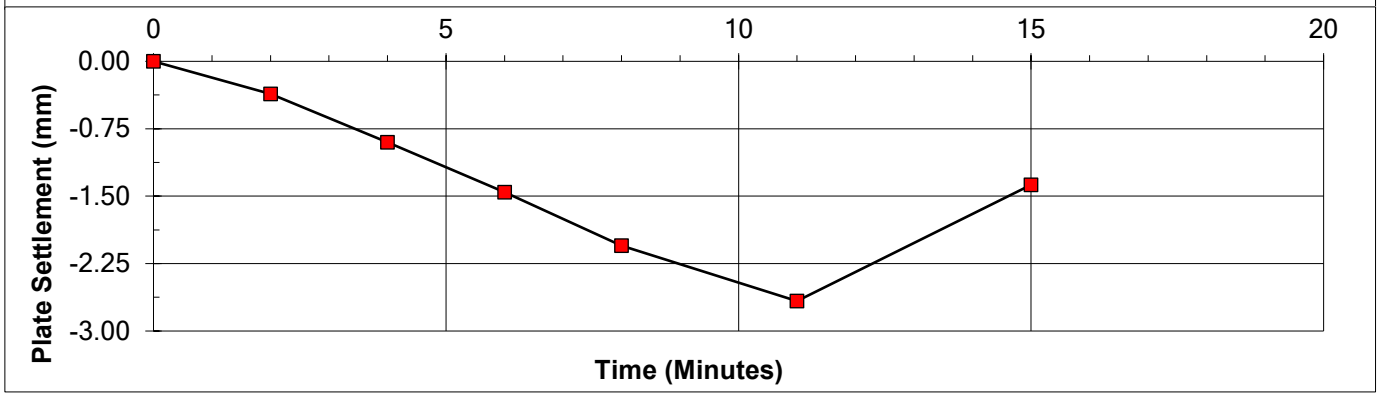
TEST CERTIFICATE

PLATE INCREMENTAL LOAD TEST
BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd				
SITE	Don Street, Middleton M24 4GG				
JOB NUMBER	MRN 4623/15				
TEST LOCATION	P9	LOADING DEVICE	10 Tonne Enerpac Jack		
TEST DATE	28-Apr-23	PLATE SIZE (mm)	300 diameter		
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant		
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required		

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
2999	2115	3543	2886	0.00	0.00	0.0
2958	2080	3510	2849	-0.36	5.00	70.7
2901	2028	3458	2796	-0.90	10.00	141.5
2861	1958	3401	2740	-1.46	15.00	212.2
2801	1901	3340	2681	-2.05	20.00	282.9
2741	1845	3271	2619	-2.67	25.00	353.7
2865	1982	3398	2748	-1.37	0.00	0.0





Pressure at 1.25 mm deflexion =	186	kPa
Modulus of subgrade reaction (k) =	149	MPa/m
Equivalent 762 mm plate reaction =	66	MPa/m
Equivalent CBR =	13.6	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 02-May-23

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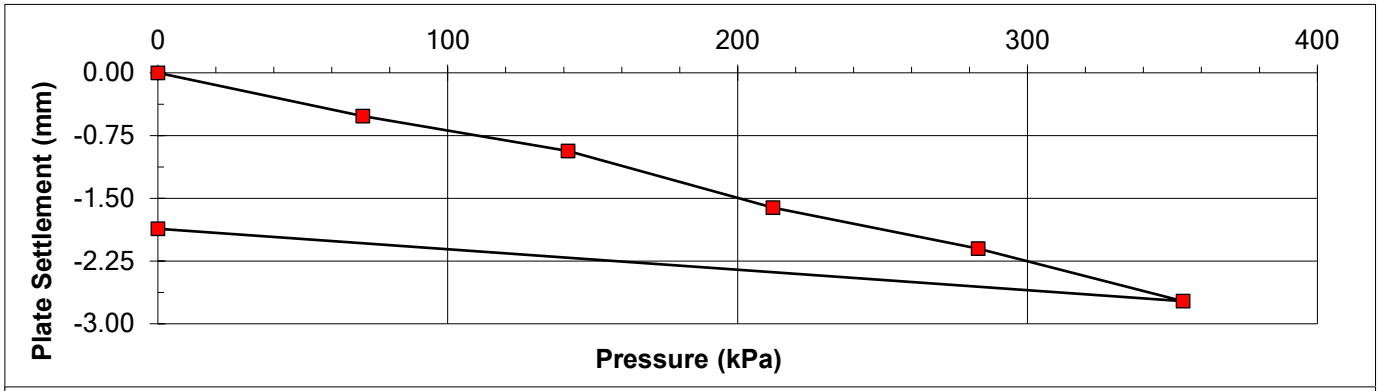
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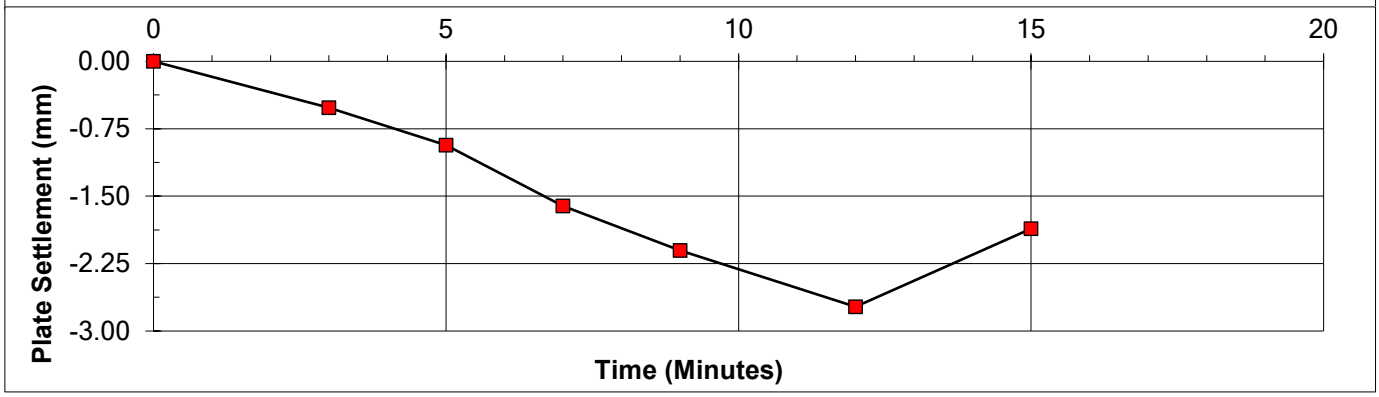
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 4GG		
JOB NUMBER	MRN 4623/15		
TEST LOCATION	P10	LOADING DEVICE	10 Tonne Enerpac Jack
TEST DATE	28-Apr-23	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
2581	3268	3538	3129	0.00	0.00	0.0
2543	3218	3471	3077	-0.52	5.00	70.7
2508	3171	3428	3036	-0.93	10.00	141.5
2442	3101	3361	2968	-1.61	15.00	212.2
2401	3045	3310	2919	-2.10	20.00	282.9
2340	3000	3228	2856	-2.73	25.00	353.7
2418	3095	3315	2943	-1.86	0.00	0.0





Pressure at 1.25 mm deflexion =	175	kPa
Modulus of subgrade reaction (k) =	140	MPa/m
Equivalent 762 mm plate reaction =	62	MPa/m
Equivalent CBR =	12.2	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 02-May-23

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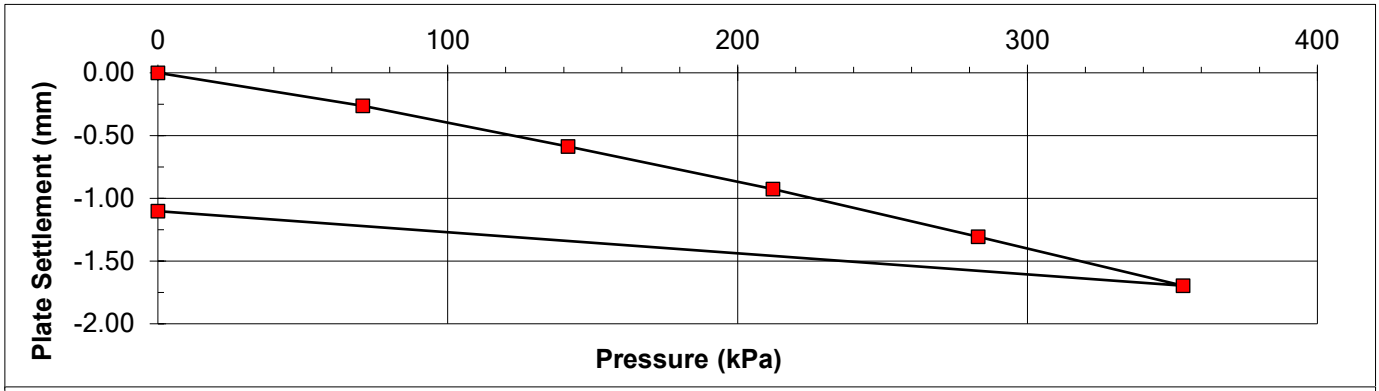
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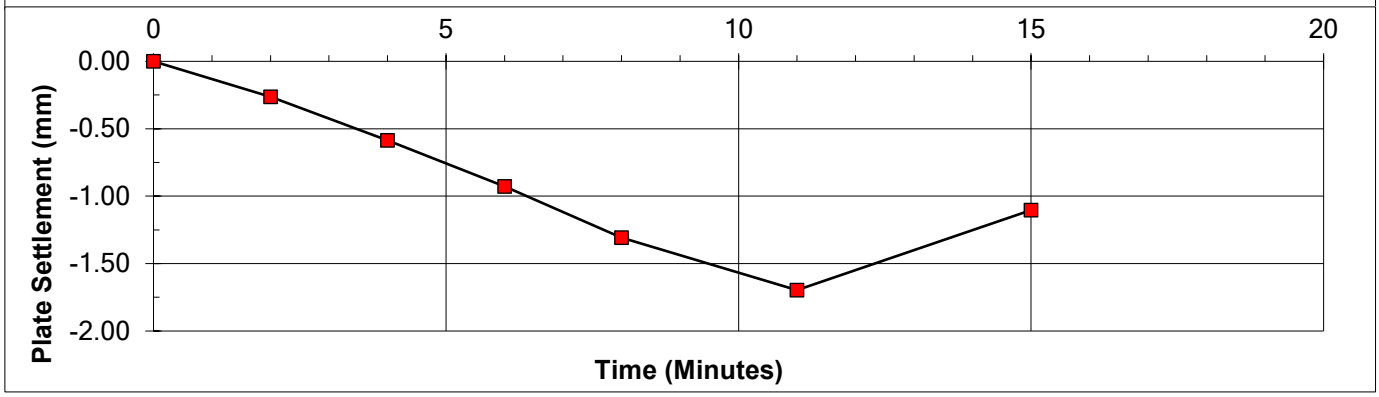
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd				
SITE	Don Street, Middleton M24 4GG				
JOB NUMBER	MRN 4623/15				
TEST LOCATION	R1	LOADING DEVICE	10 Tonne Enerpac Jack		
TEST DATE	28-Apr-23	PLATE SIZE (mm)	300 diameter		
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant		
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required		

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
3473	4483	3623	3860	0.00	0.00	0.0
3450	4458	3592	3833	-0.26	5.00	70.7
3420	4421	3562	3801	-0.59	10.00	141.5
3391	4381	3529	3767	-0.93	15.00	212.2
3358	4341	3488	3729	-1.31	20.00	282.9
3311	4308	3451	3690	-1.70	25.00	353.7
3365	4371	3512	3749	-1.10	0.00	0.0





Pressure at 1.25 mm deflexion =	272	kPa
Modulus of subgrade reaction (k) =	218	MPa/m
Equivalent 762 mm plate reaction =	96	MPa/m
Equivalent CBR =	26.4	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 02-May-23

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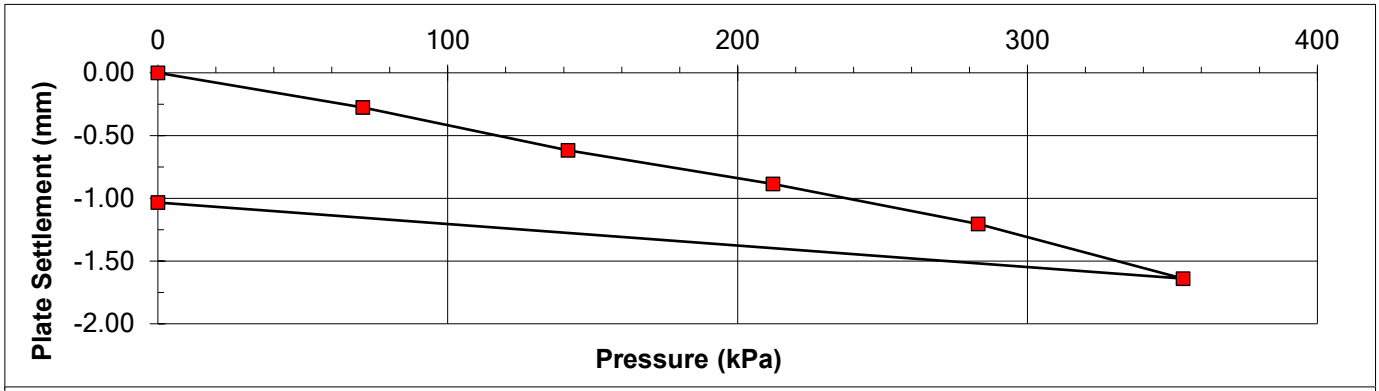
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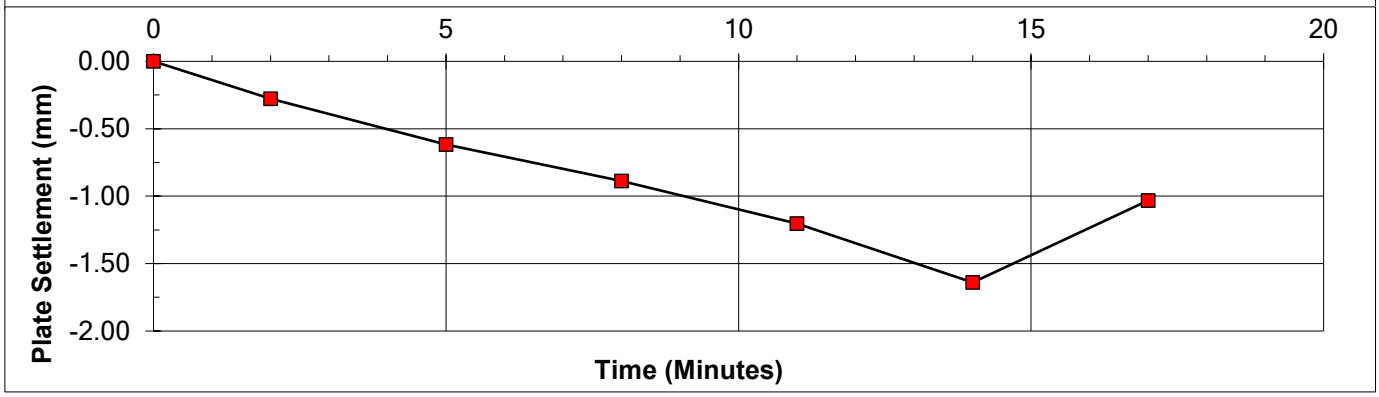
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 4GG		
JOB NUMBER	MRN 4623/15		
TEST LOCATION	R2	LOADING DEVICE	10 Tonne Enerpac Jack
TEST DATE	28-Apr-23	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
2132	4503	3142	3259	0.00	0.00	0.0
2108	4468	3118	3231	-0.28	5.00	70.7
2083	4428	3081	3197	-0.62	10.00	141.5
2051	4410	3050	3170	-0.89	15.00	212.2
2023	4381	3012	3139	-1.20	20.00	282.9
1989	4338	2958	3095	-1.64	25.00	353.7
2042	4412	3013	3156	-1.03	0.00	0.0





Pressure at 1.25 mm deflexion =	291	kPa
Modulus of subgrade reaction (k) =	232	MPa/m
Equivalent 762 mm plate reaction =	103	MPa/m
Equivalent CBR =	29.5	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 02-May-23

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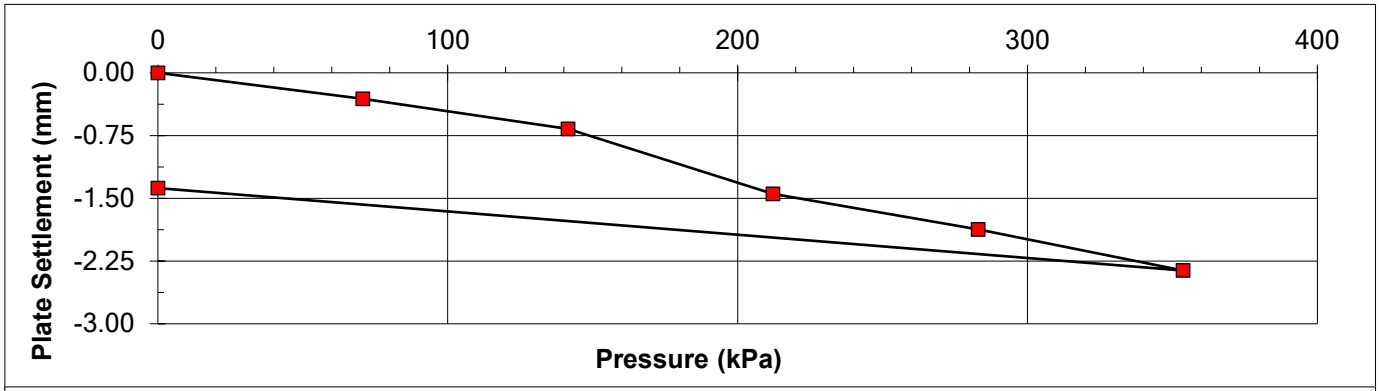
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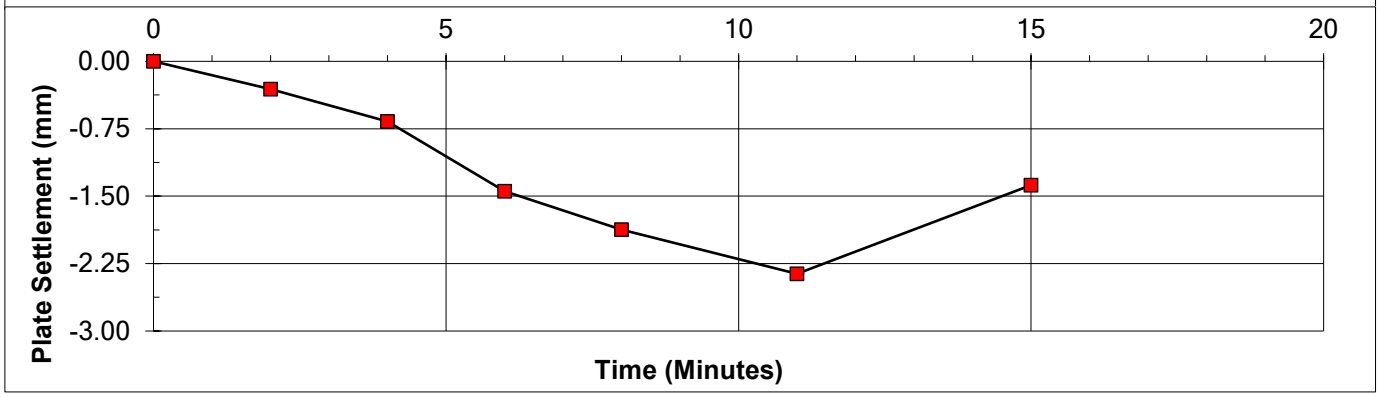
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd				
SITE	Don Street, Middleton M24 4GG				
JOB NUMBER	MRN 4623/15				
TEST LOCATION	P4	LOADING DEVICE	10 Tonne Enerpac Jack		
TEST DATE	28-Apr-23	PLATE SIZE (mm)	300 diameter		
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant		
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required		

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
3152	2123	3326	2867	0.00	0.00	0.0
3123	2092	3293	2836	-0.31	5.00	70.7
3091	2058	3251	2800	-0.67	10.00	141.5
3021	1981	3165	2722	-1.45	15.00	212.2
2981	1930	3128	2680	-1.87	20.00	282.9
2920	1891	3081	2631	-2.36	25.00	353.7
3038	1982	3168	2729	-1.38	0.00	0.0





Pressure at 1.25 mm deflexion =	194	kPa
Modulus of subgrade reaction (k) =	155	MPa/m
Equivalent 762 mm plate reaction =	69	MPa/m
Equivalent CBR =	14.7	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 02-May-23

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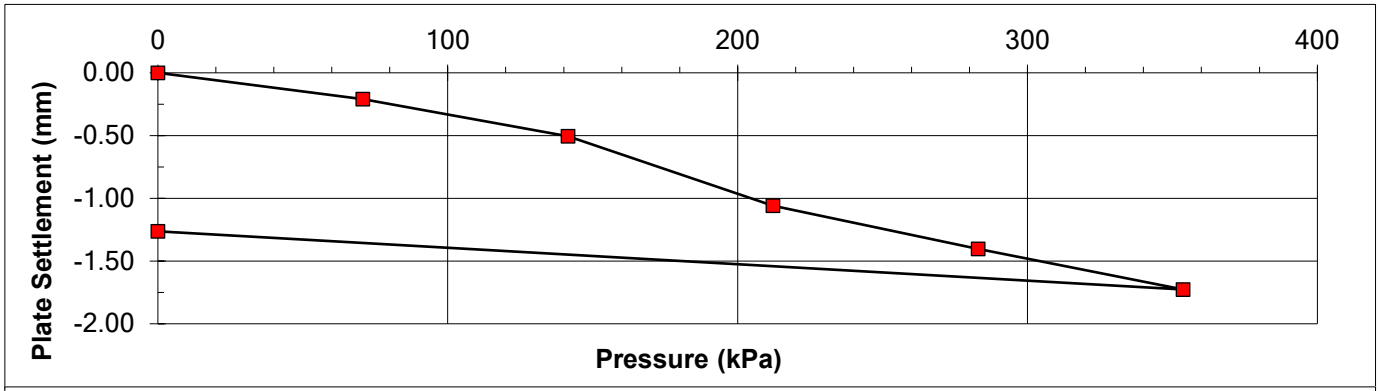
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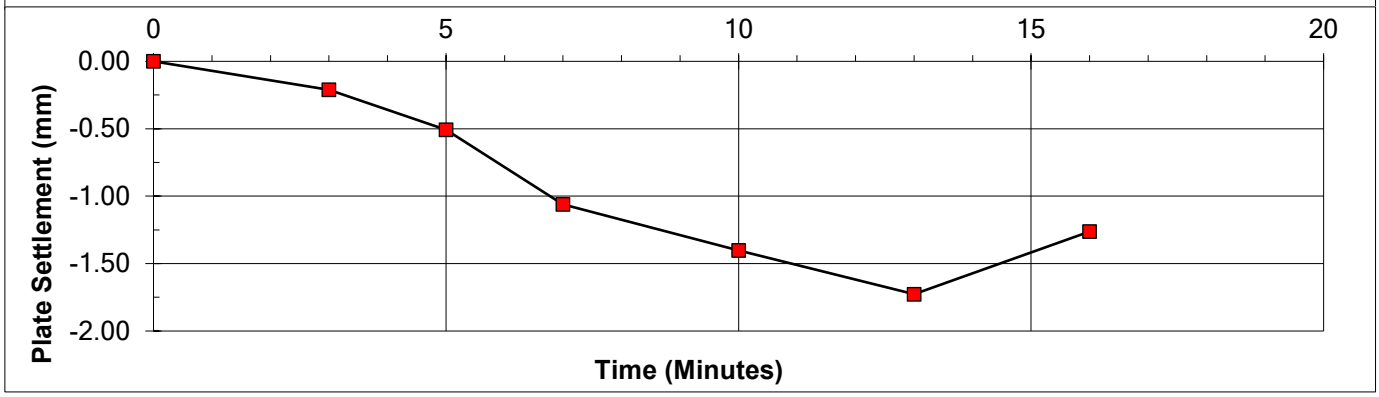
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 4GG		
JOB NUMBER	MRN 4623/15		
TEST LOCATION	R3	LOADING DEVICE	10 Tonne Enerpac Jack
TEST DATE	28-Apr-23	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
3498	4563	2632	3564	0.00	0.00	0.0
3478	4541	2611	3543	-0.21	5.00	70.7
3458	4511	2572	3514	-0.51	10.00	141.5
3382	4452	2541	3458	-1.06	15.00	212.2
3343	4418	2511	3424	-1.40	20.00	282.9
3311	4392	2472	3392	-1.73	25.00	353.7
3365	4431	2518	3438	-1.26	0.00	0.0





Pressure at 1.25 mm deflexion =	251	kPa
Modulus of subgrade reaction (k) =	201	MPa/m
Equivalent 762 mm plate reaction =	89	MPa/m
Equivalent CBR =	23.0	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 02-May-23

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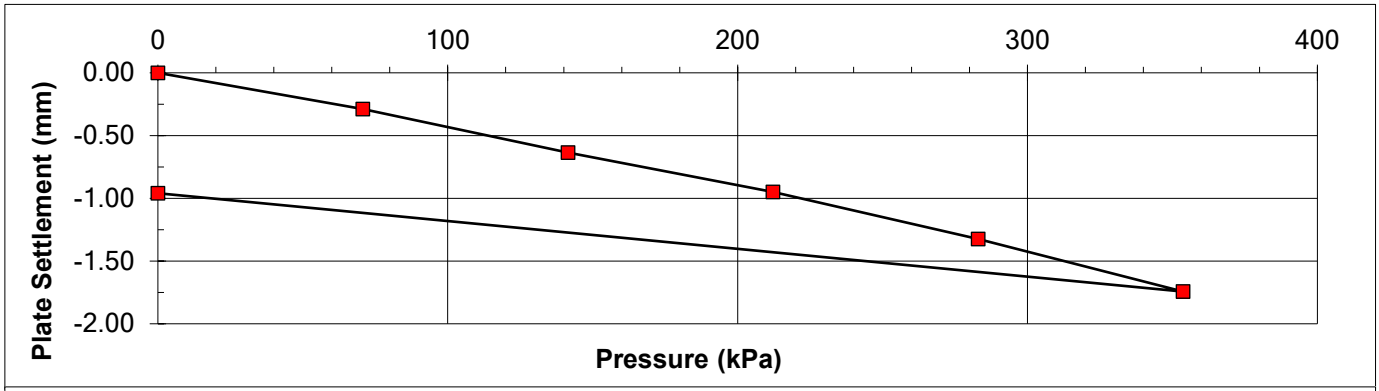
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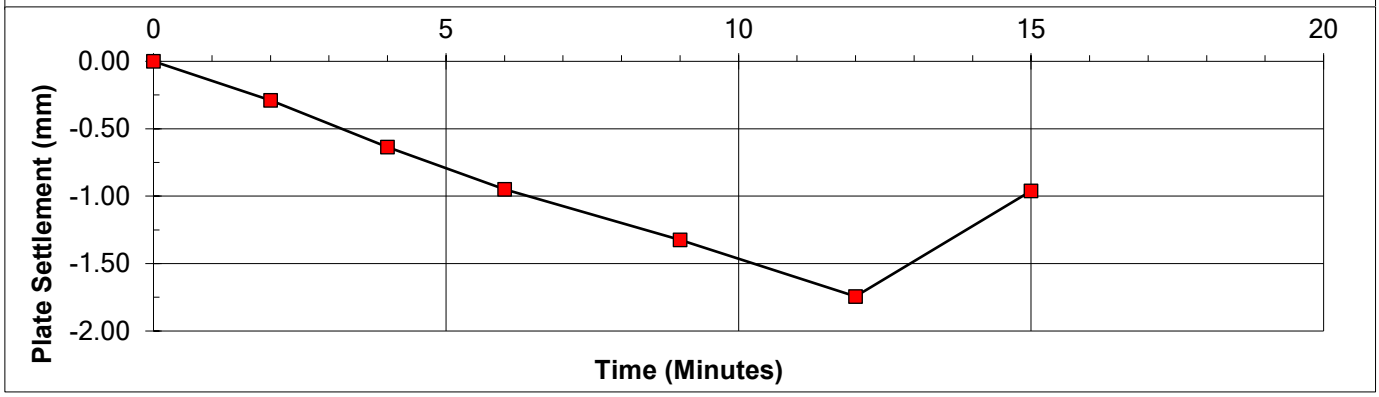
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd				
SITE	Don Street, Middleton M24 4GG				
JOB NUMBER	MRN 4623/15				
TEST LOCATION	R4	LOADING DEVICE	10 Tonne Enerpac Jack		
TEST DATE	28-Apr-23	PLATE SIZE (mm)	300 diameter		
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant		
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required		

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
3183	4158	2583	3308	0.00	0.00	0.0
3148	4128	2561	3279	-0.29	5.00	70.7
3123	4092	2518	3244	-0.64	10.00	141.5
3091	4058	2490	3213	-0.95	15.00	212.2
3058	4018	2451	3176	-1.32	20.00	282.9
3008	3981	2412	3134	-1.74	25.00	353.7
3082	4061	2493	3212	-0.96	0.00	0.0





Pressure at 1.25 mm deflexion =	269	kPa
Modulus of subgrade reaction (k) =	215	MPa/m
Equivalent 762 mm plate reaction =	95	MPa/m
Equivalent CBR =	25.8	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 02-May-23

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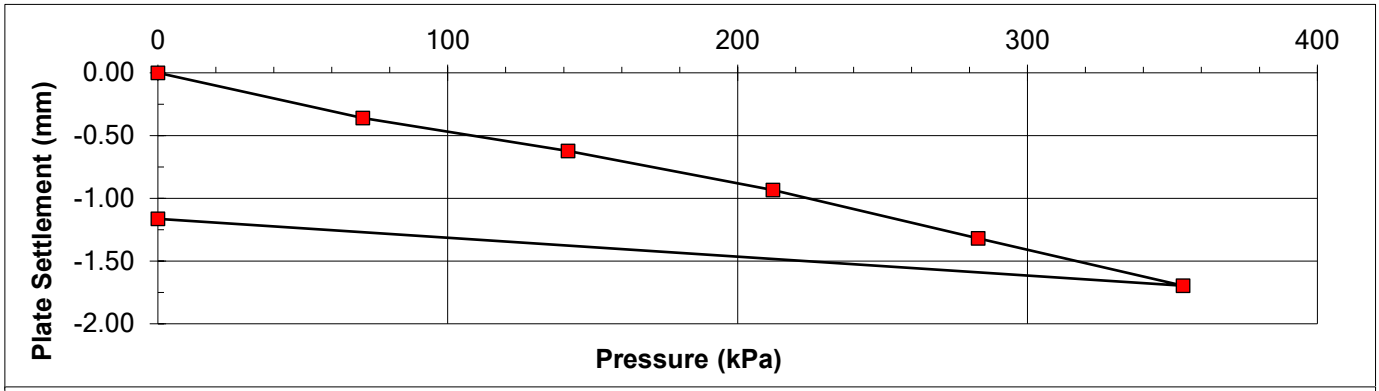
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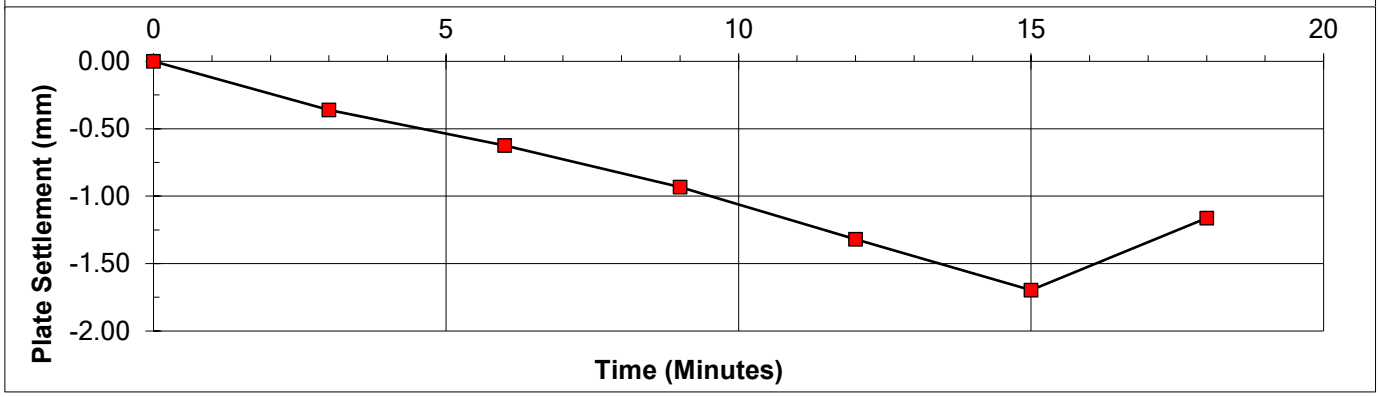
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 4GG		
JOB NUMBER	MRN 4623/15		
TEST LOCATION	R5	LOADING DEVICE	10 Tonne Enerpac Jack
TEST DATE	28-Apr-23	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
2265	3601	2198	2688	0.00	0.00	0.0
2240	3558	2158	2652	-0.36	5.00	70.7
2211	3538	2128	2626	-0.62	10.00	141.5
2181	3508	2095	2595	-0.93	15.00	212.2
2142	3468	2058	2556	-1.32	20.00	282.9
2101	3441	2013	2518	-1.70	25.00	353.7
2165	3499	2051	2572	-1.16	0.00	0.0





Pressure at 1.25 mm deflexion =	270	kPa
Modulus of subgrade reaction (k) =	216	MPa/m
Equivalent 762 mm plate reaction =	95	MPa/m
Equivalent CBR =	26.0	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 02-May-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

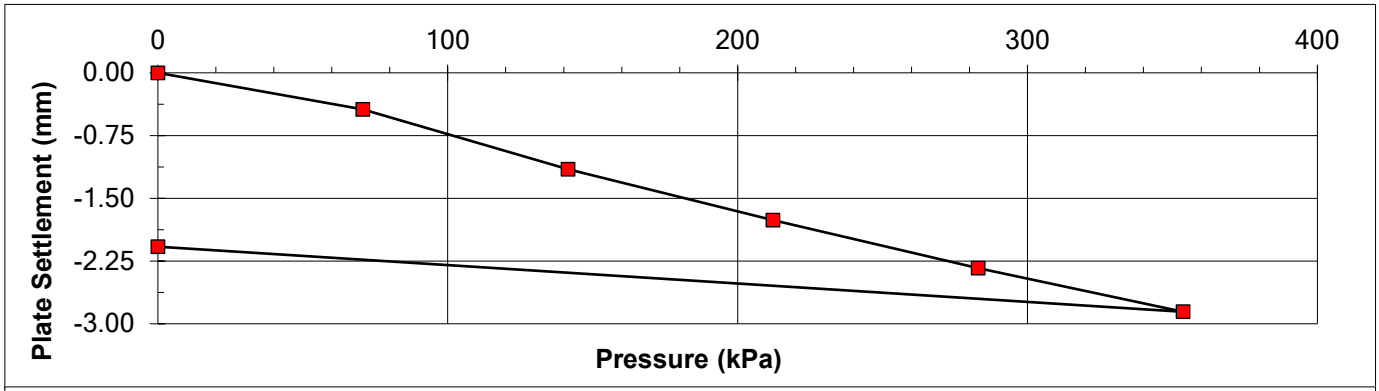
TEST CERTIFICATE

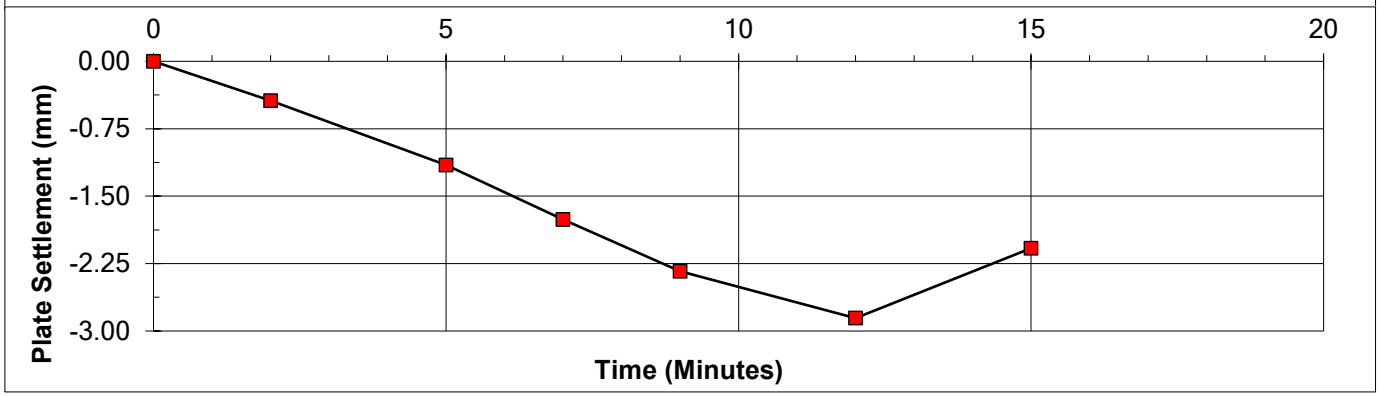
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 4GG		
JOB NUMBER	MRN 4623/15		
TEST LOCATION	P1	LOADING DEVICE	10 Tonne Enerpac Jack
TEST DATE	28-Apr-23	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
2481	3132	4468	3360	0.00	0.00	0.0
2441	3081	4428	3317	-0.44	5.00	70.7
2372	3018	4345	3245	-1.15	10.00	141.5
2311	2951	4291	3184	-1.76	15.00	212.2
2251	2901	4228	3127	-2.34	20.00	282.9
2210	2843	4171	3075	-2.86	25.00	353.7
2281	2915	4261	3152	-2.08	0.00	0.0





Pressure at 1.25 mm deflexion =	153	kPa
Modulus of subgrade reaction (k) =	122	MPa/m
Equivalent 762 mm plate reaction =	54	MPa/m
Equivalent CBR =	9.7	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 02-May-23

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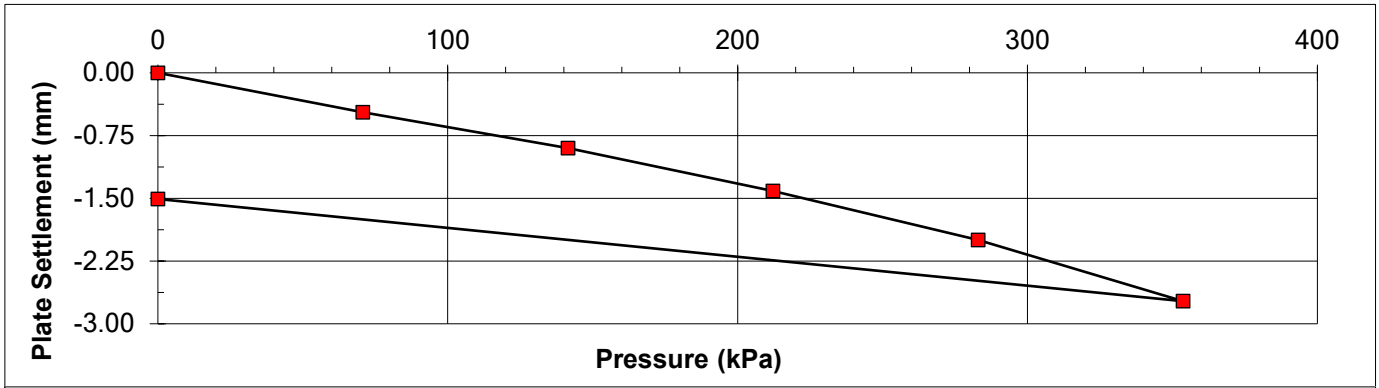
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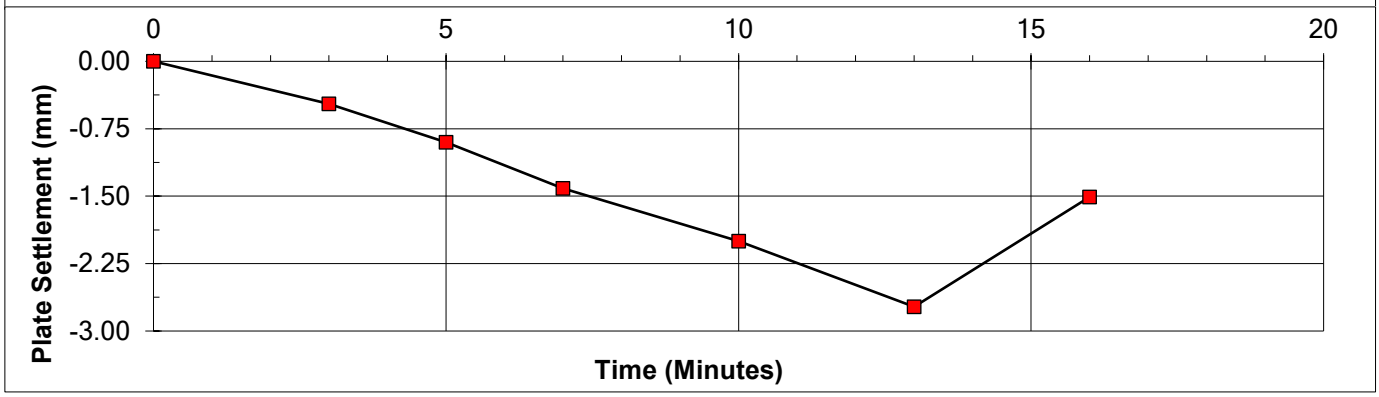
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 4GG		
JOB NUMBER	MRN 4623/15		
TEST LOCATION	P2	LOADING DEVICE	10 Tonne Enerpac Jack
TEST DATE	28-Apr-23	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
3603	2123	3158	2961	0.00	0.00	0.0
3571	2061	3110	2914	-0.47	5.00	70.7
3518	2031	3065	2871	-0.90	10.00	141.5
3461	1981	3018	2820	-1.41	15.00	212.2
3392	1920	2972	2761	-2.00	20.00	282.9
3321	1843	2901	2688	-2.73	25.00	353.7
3445	1963	3023	2810	-1.51	0.00	0.0





Pressure at 1.25 mm deflexion =	190	kPa
Modulus of subgrade reaction (k) =	152	MPa/m
Equivalent 762 mm plate reaction =	67	MPa/m
Equivalent CBR =	14.1	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 02-May-23

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UKAS TESTING 1580

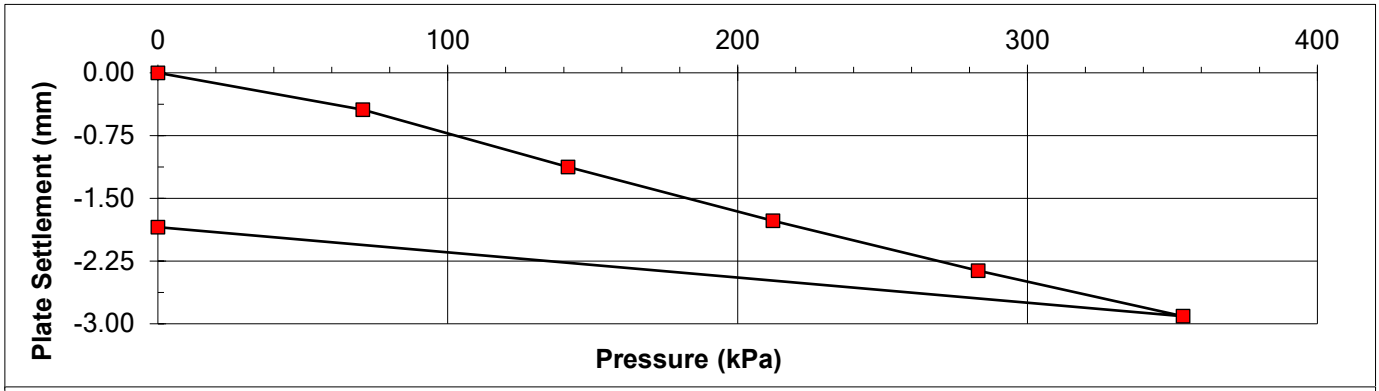
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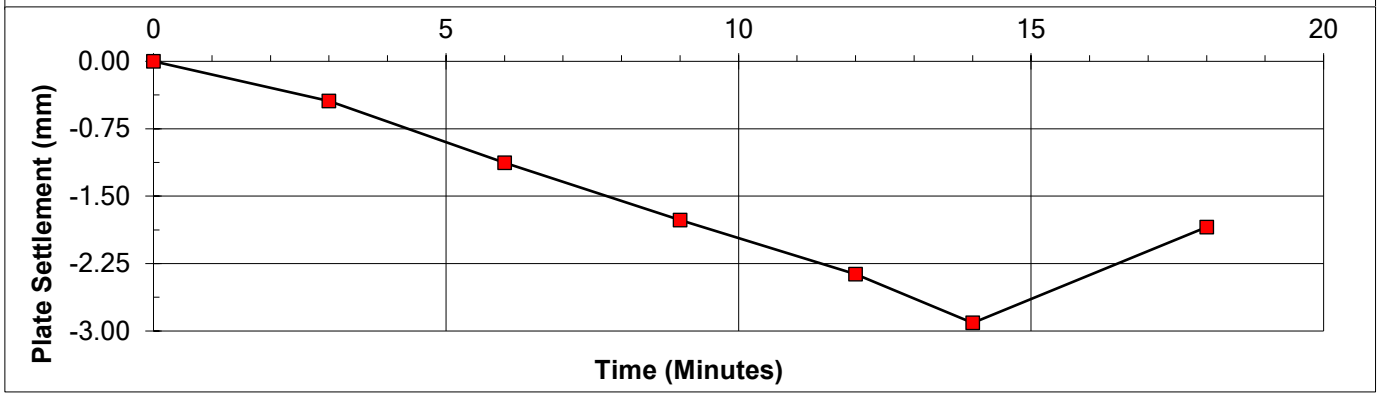
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 4GG		
JOB NUMBER	MRN 4623/15		
TEST LOCATION	P3	LOADING DEVICE	10 Tonne Enerpac Jack
TEST DATE	28-Apr-23	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
2461	3043	4523	3342	0.00	0.00	0.0
2412	3002	4481	3298	-0.44	5.00	70.7
2345	2932	4412	3230	-1.13	10.00	141.5
2261	2878	4358	3166	-1.77	15.00	212.2
2201	2815	4301	3106	-2.37	20.00	282.9
2161	2751	4242	3051	-2.91	25.00	353.7
2265	2851	4358	3158	-1.84	0.00	0.0





Pressure at 1.25 mm deflexion =	155	kPa
Modulus of subgrade reaction (k) =	124	MPa/m
Equivalent 762 mm plate reaction =	55	MPa/m
Equivalent CBR =	9.9	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 02-May-23

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TEL 0161 475 0870

UKAS TESTING 1580

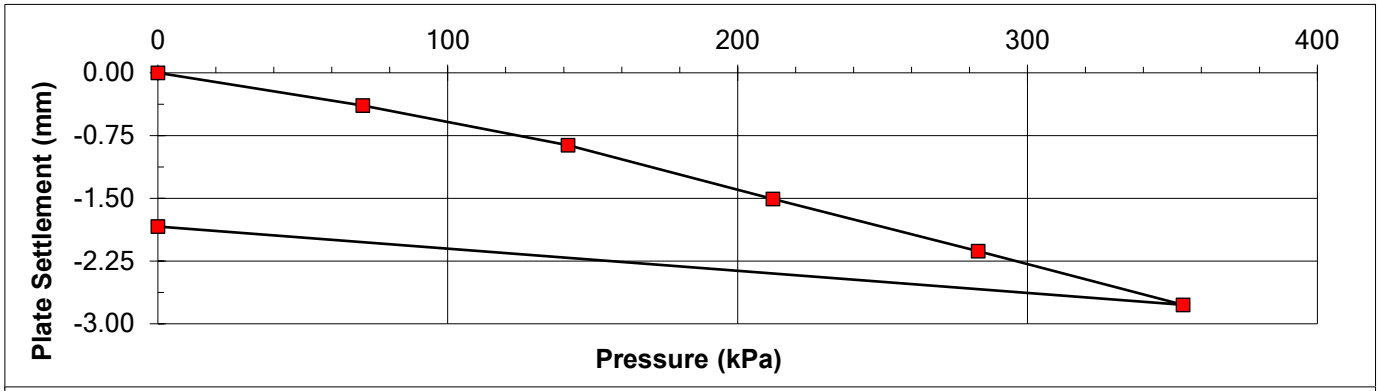
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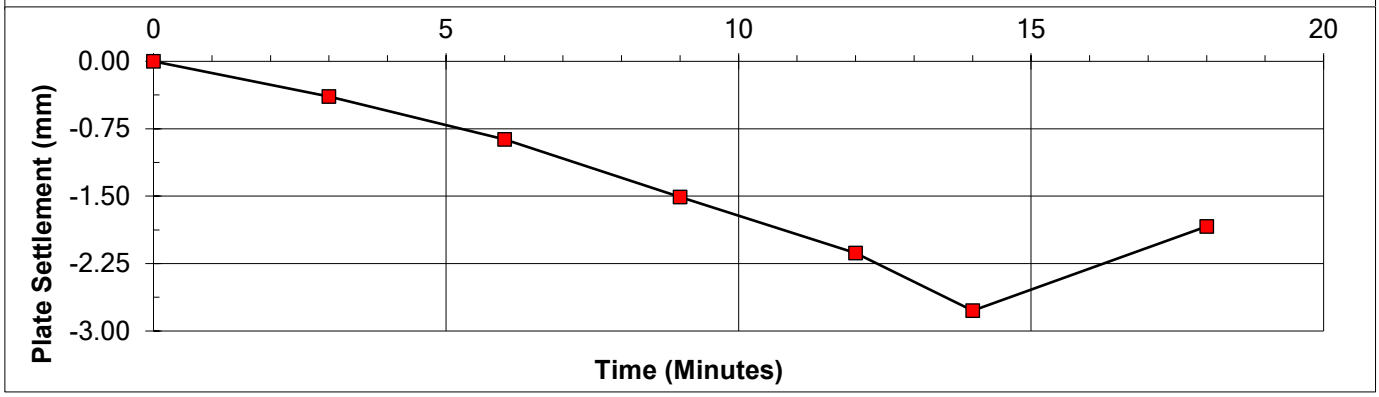
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd				
SITE	Don Street, Middleton M24 4GG				
JOB NUMBER	MRN 4623/15				
TEST LOCATION	P5	LOADING DEVICE	10 Tonne Enerpac Jack		
TEST DATE	28-Apr-23	PLATE SIZE (mm)	300 diameter		
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant		
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required		

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
3173	4623	2131	3309	0.00	0.00	0.0
3138	4592	2080	3270	-0.39	5.00	70.7
3098	4541	2028	3222	-0.87	10.00	141.5
3031	4471	1972	3158	-1.51	15.00	212.2
2958	4411	1918	3096	-2.13	20.00	282.9
2900	4352	1843	3032	-2.77	25.00	353.7
2992	4442	1942	3125	-1.84	0.00	0.0





Pressure at 1.25 mm deflexion =	184	kPa
Modulus of subgrade reaction (k) =	147	MPa/m
Equivalent 762 mm plate reaction =	65	MPa/m
Equivalent CBR =	13.3	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 02-May-23

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UKAS TESTING 1580

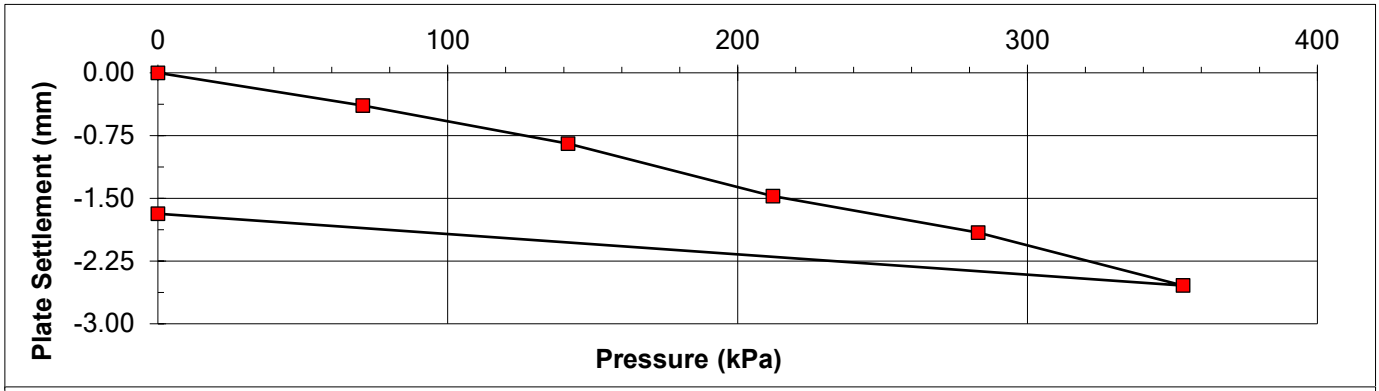
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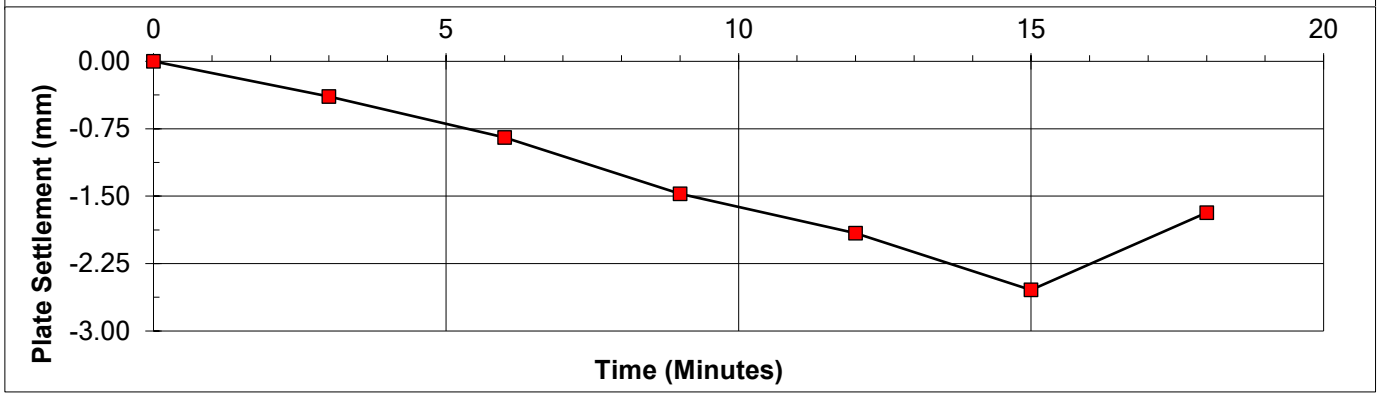
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 4GG		
JOB NUMBER	MRN 4623/15		
TEST LOCATION	P6	LOADING DEVICE	10 Tonne Enerpac Jack
TEST DATE	28-Apr-23	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
3198	4273	3145	3539	0.00	0.00	0.0
3158	4240	3101	3500	-0.39	5.00	70.7
3118	4183	3061	3454	-0.85	10.00	141.5
3051	4122	3001	3391	-1.47	15.00	212.2
3001	4081	2961	3348	-1.91	20.00	282.9
2931	4021	2901	3284	-2.54	25.00	353.7
3018	4121	2972	3370	-1.68	0.00	0.0





Pressure at 1.25 mm deflexion =	187	kPa
Modulus of subgrade reaction (k) =	150	MPa/m
Equivalent 762 mm plate reaction =	66	MPa/m
Equivalent CBR =	13.8	%

REMARKS

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NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 02-May-23

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TEL 0161 475 0870

UKAS TESTING 1580

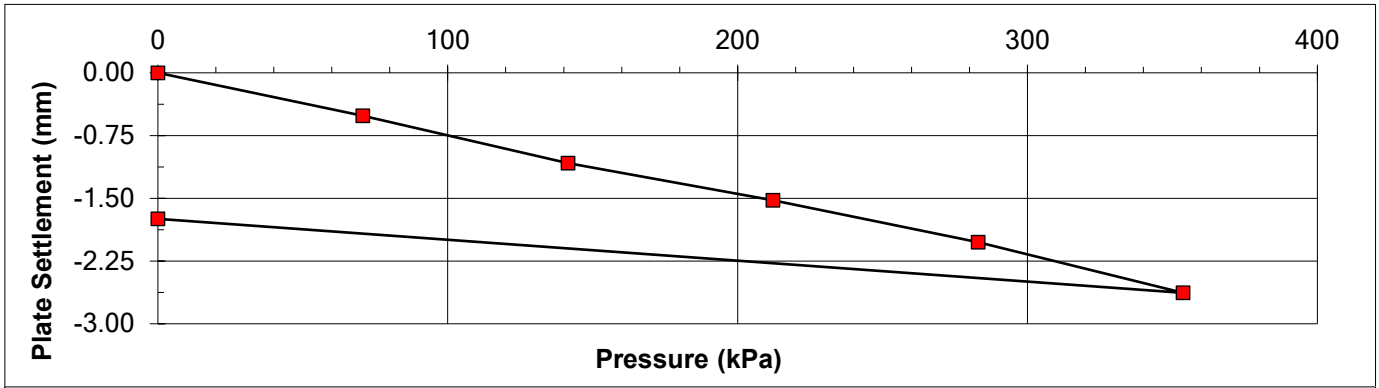
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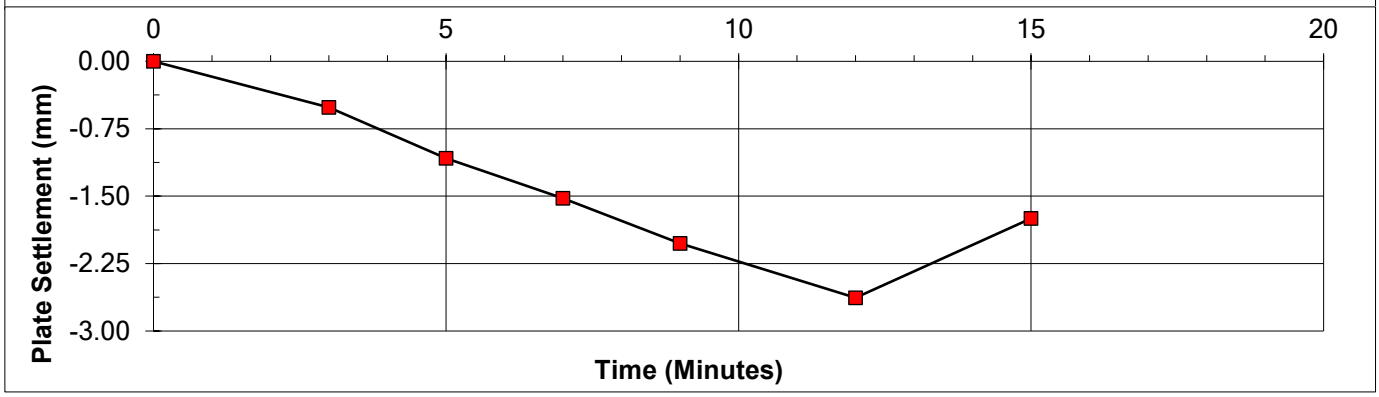
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 4GG		
JOB NUMBER	MRN 4623/15		
TEST LOCATION	P7	LOADING DEVICE	10 Tonne Enerpac Jack
TEST DATE	28-Apr-23	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
2261	3132	2465	2619	0.00	0.00	0.0
2211	3081	2412	2568	-0.51	5.00	70.7
2161	3022	2351	2511	-1.08	10.00	141.5
2110	2981	2310	2467	-1.52	15.00	212.2
2081	2928	2241	2417	-2.03	20.00	282.9
2028	2861	2180	2356	-2.63	25.00	353.7
2121	2968	2245	2445	-1.75	0.00	0.0





Pressure at 1.25 mm deflexion =	169	kPa
Modulus of subgrade reaction (k) =	135	MPa/m
Equivalent 762 mm plate reaction =	60	MPa/m
Equivalent CBR =	11.5	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 02-May-23

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TEL 0161 475 0870

UKAS TESTING 1580

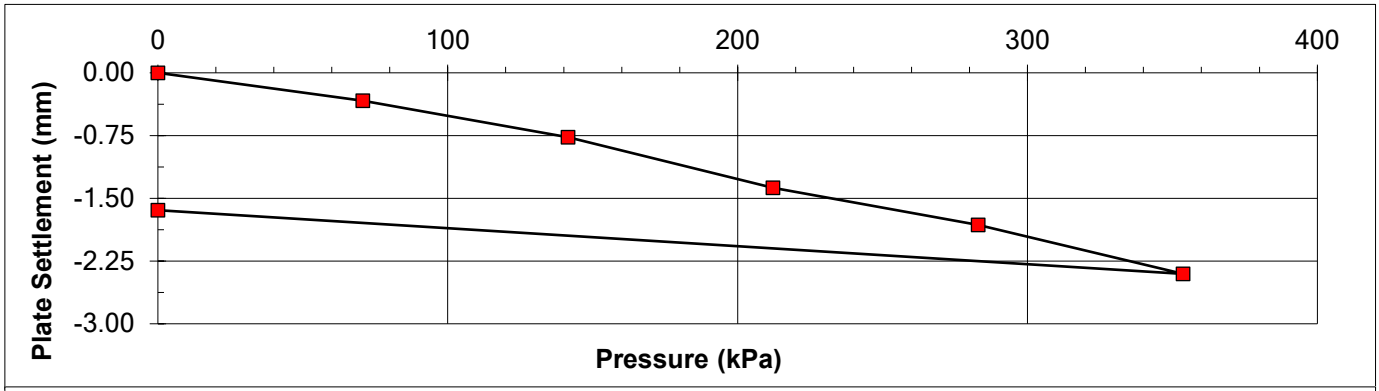
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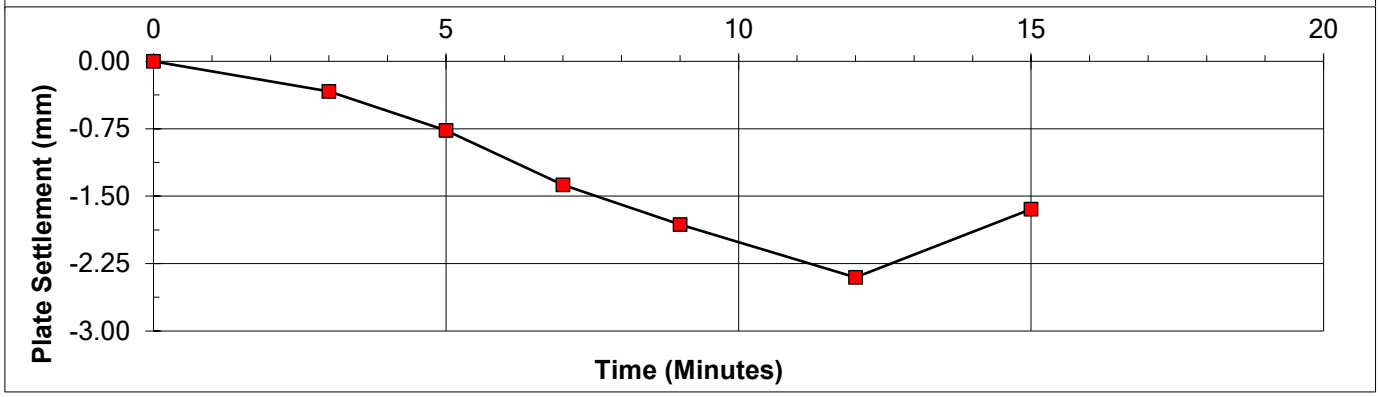
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Urban Regen Ltd		
SITE	Don Street, Middleton M24 4GG		
JOB NUMBER	MRN 4623/15		
TEST LOCATION	P8	LOADING DEVICE	10 Tonne Enerpac Jack
TEST DATE	28-Apr-23	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
3123	4331	3523	3659	0.00	0.00	0.0
3095	4291	3491	3626	-0.33	5.00	70.7
3052	4251	3443	3582	-0.77	10.00	141.5
2992	4192	3381	3522	-1.37	15.00	212.2
2951	4171	3310	3477	-1.82	20.00	282.9
2883	4115	3258	3419	-2.40	25.00	353.7
2968	4198	3318	3495	-1.64	0.00	0.0





Pressure at 1.25 mm deflexion =	198	kPa
Modulus of subgrade reaction (k) =	158	MPa/m
Equivalent 762 mm plate reaction =	70	MPa/m
Equivalent CBR =	15.2	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 02-May-23





Sheet Plan Scale:NTS

Notes:

Site boundary

Major contour

Minor contour (1m)

Spot level

Bottom / top of bank

Survey Information:

Coordinate System	Datum Type	Primary Survey Control	Secondary Survey Control
OSGB36(15)	Grid	Leica SmartNet	Site

Rev	Date	Amendment	Drawn	Checked

Urban Regen

Client: Kellen Homes

Project: Don Street

Title: 367 - Material Management Plan

Scale	First Issue	Drawn	Checked
NTS @ A1			

Drawing No: 367 - 22 - 01

Revision:

02-May-23

APPENDIX VII
CONTROLLED WATERS EXCEEDANCES AND MBAT

Date	Location	Exceedances vs EQS				
		Copper	Zinc	Cyanide	Nickel	
November 1st 2022	P1 – DWN	6.5	11	3.4		
	P2 – After HXP & LF	6.4	12	3.2		
	P3 – LF	6.2	14	3.2		
	P4 – UP	6.8	16	3.7		
	P5 - POND	2.8	-	-		
November 16th 2022	P1 – DWN	3.6	-	4.5		
	P2 – After HXP & LF	4.8	-	3.3		
	P3 – LF	4.4	-	3.6		
	P4 – UP	4.3	-	3.8		
	P5 - POND	1.2	-	-		
December 15th 2022	P1 – DWN	2.7	-	-		
	P2 – After HXP & LF	2.7	-	-		
	P3 – LF	2.8	-	-		
	P4 – UP	1.9	-	-		
	P5 - POND	1.3	-	-		
January 3rd 2023	P1 – DWN	3.7	16	3.8		
	P2 – After HXP & LF	3.7	15	4.2		
	P3 – LF	4.2	19	3.6		
	P4 – UP	4.2	16	<1		
	P5 - POND	-	-	17		
February 9th 2023	P1 – DWN	2.7	-	-		
	P2 – After HXP & LF	2.5	-	-		
	P3 – LF	2.3	-	-		
	P4 – UP	1.7	-	-		
	P5 – Not accessible	-	-	-		
March 17th 2023	P1 – DWN	4.2	-	4.6		
	P2 – MID LF	6.3	-	5.2		
	P2 – After HXP & LF	4	-	5.2		
	P4 – UP	5.1	13	4.8		
	P5 - POND	1.6	-	-		
April 14th 2023	P1 – DWN	5.1	14	1.7		
	P2 – After HXP & LF	5.3	54	1.5	Hexpol issue	
	P3 – LF	3.9	12	1.7		
	P4 – UP	3.5	-	1.7		
	P5 - POND	2.1	-	-		
April 28th 2023	P1 – DWN	2.4	-	1.3		
	P2 – After HXP & LF	2.1	-	-		
	P3 – LF	2.3	-	1.1		
	P4 – UP	3.1	-	1.2		
	P5 - POND	1.3	-	-		
May 12th 2023	P1 – DWN	2.8	-	2.9		
	P2 – After HXP & LF	2.4	-	2.7		
	P3 – LF	3.2	-	2.6		
	P4 – UP	4.2	-	2.4		
	P5 - POND	1.1	-	-		
May 25th 2023	P1 – DWN	22	-	1.4	5.6	
	P2 – After HXP & LF	25	-	1.4	5.7	
	P3 – LF	22	-	-	5.3	
	P4 – UP	19	-	-	5.5	
	P5 - POND	No Access				
	Copper & nickel is bio available in all locations – following heavy rain the river has higher suspended solids in all locations (including up stream) – the higher suspended solids likely results in the exceedances – origins is off site anyway					

Date	Location	Exceedances vs EQS				
		Copper	Zinc	Cyanide	Nickel	Lead
8th June 2023	P1 – DWN	2.5	-	-	-	
	P2 – After HXP & LF	2.7	-	2.3	-	
	P3 – LF	2.7	-	-	-	
	P4 – UP	3.6	-	-	-	
	P5 - POND	1.9	-	-	-	
21st June 2023	P1 – DWN	3.7	-	-	-	
	P2 – After HXP & LF	5.2	12	-	-	
	P3 – LF	3.8	-	-	-	
	P4 – UP	3.9	-	-	-	
	P5 - POND	6.7	-	-	-	
7th July 2023	P1 – DWN	7	-	-	-	
	P2 – After HXP & LF	7.1	-	-	-	
	P3 – LF	3.2	-	-	-	
	P4 – UP	5.2	-	-	-	
	P5 - POND	No Access				
26th July 2023	P1 – DWN	8.1	-	4.7	-	
	P2 – After HXP & LF	8.1	-	6.1	-	
	P3 – LF	5.6	-	8.2	-	
	P4 – UP	3	-	8.2	-	
	P5 - POND	No Access				
11th August 2023	P1 – DWN	3.2	-	3.2	-	-
	P2 – After HXP & LF	3.2	-	-	-	-
	P3 – LF	4.2	-	2.3	-	-
	P4 – UP	3.2	-	1.6	-	-
	P5 - POND	No Access				
25th August 2023	P1 – DWN	3.8	-	2.5	-	-
	P2 – After HXP & LF	3.3	-	2.5	-	-
	P3 – LF	4.1	-	2	-	-
	P4 – UP	3.2	-	2.8	-	-
	P5 - POND	No Access				
6th September 2023	P1 – DWN	2.1	-	3.1	-	-
	P2 – After HXP & LF	3.6	-	3.1	-	-
	P3 – LF	3.5	-	2.9	-	-
	P4 – UP	3	-	2.8	-	-
	P5 - POND	No Access				
20th September 2023	P1 – DWN	9.9	-	4.1	-	-
	P2 – After HXP & LF	7.3	-	4.1	-	-
	P3 – LF	16	-	4.8	-	-
	P4 – UP	14	-	4.6	-	3.2
	P5 - POND	No Access				
3rd October 2023	P1 – DWN	5.2	-	5.1	-	-
	P2 – After HXP & LF	5.2	11	2.5	-	-
	P3 – LF	7.3	-	3.4	-	-
	P4 – UP	6.1	11	2.2	-	-
	P5 - POND	No Access				
25th October 2023	P1 – DWN	5.8	-	3.3	-	-
	P2 – After HXP & LF	5	-	3.5	-	-
	P3 – LF	3.9	-	3.4	-	-
	P4 – UP	4.6	-	3.3	-	-
	P5 - POND	No Access				
7th November 2023	P1 – DWN	6.8		5.4	-	-
	P2 – After HXP & LF	6.7	18	4.7	-	-
	P3 – LF	6.1	17	5.3	-	-

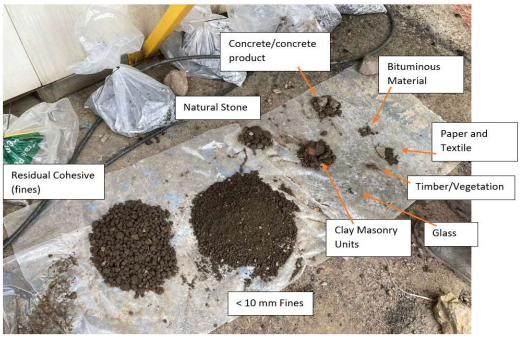
	P4 – UP	5.7	21	4.3	-	-
	P5 - POND	No Access				
23rd of November 2023	P1 – DWN	4.4	-	4.7	-	-
	P2 – After HXP & LF	4.4	-	4.7	-	-
	P3 – LF	5.1	-	5.4	-	-
	P4 – UP	4.7	-	4.5	-	-
	P5 - POND	No Access				
7th of December 2023	P1 – DWN	3.8	-	3.5	-	-
	P2 – After HXP & LF	2.4	-	4	-	-
	P3 – LF	2.3	-	4.2	-	-
	P4 – UP	2.2	-	3.6	-	-
	P5 - POND	No Access				

INPUT DATA											RESULTS (Copper)				RESULTS (Zinc)				RESULTS (Mn)				RESULTS (Ni)			
ID	Location	Waterbody	Date	Measured Cu Concentration (dissolved) (µg l^{-1})	Measured Zn Concentration (dissolved) (µg l^{-1})	Measured Mn Concentration (dissolved) (µg l^{-1})	Measured Ni Concentration (dissolved) (µg l^{-1})	pH	DOC	Ca	Site-specific PNEC Dissolved Copper (µg l^{-1})	BioF	Bioavailable Copper Concentration (µg l^{-1})	Risk Characterisation Ratio	Site-specific PNEC Dissolved Zinc (µg l^{-1})	BioF	Bioavailable Zinc Concentration (µg l^{-1})	Risk Characterisation Ratio	Site-specific PNEC Dissolved Manganese (µg l^{-1})	BioF	Bioavailable Manganese Concentration (µg l^{-1})	Risk Characterisation Ratio	Site-specific PNEC Dissolved Nickel (µg l^{-1})	BioF	Bioavailable Nickel Concentration (µg l^{-1})	Risk Characterisation Ratio
1	P1	River Irk	01/11/2022	6.5	11	13	2	7.8	10.1	52	38.15	0.03	0.17	0.17	46.21	0.24	2.59	0.24	177.10	0.69	9.03	0.07	16.48	0.24	0.49	0.12
2	P2	River Irk	01/11/2022	6.4	12	6.2	2.1	7.7	10.4	50	42.05	0.02	0.15	0.15	46.07	0.24	2.84	0.26	217.00	0.57	3.51	0.03	17.67	0.23	0.48	0.12
3	P3	River Irk	01/11/2022	6.2	14	6.7	1.9	7.7	9.81	50	40.21	0.02	0.15	0.15	43.96	0.25	3.47	0.32	217.00	0.57	3.80	0.03	17.10	0.23	0.44	0.11
4	P4	River Irk	01/11/2022	6.8	16	7.6	2.1	7.8	10.6	56	39.25	0.03	0.17	0.17	47.94	0.23	3.64	0.33	177.10	0.69	5.28	0.04	17.39	0.23	0.48	0.12
5	P5	Pond	01/11/2022	2.8	4.9	340	0.5	7.5	2.79	92	11.41	0.09	0.25	0.25	21.27	0.51	2.51	0.23	577.98	0.21	72.36	0.59	12.64	0.32	0.16	0.04
6	P1	River Irk	16/11/2022	3.6	6.4	4.2	1.4	8	7.41	81	24.27	0.04	0.15	0.15	37.87	0.29	1.84	0.17	219.55	0.56	2.35	0.02	13.91	0.29	0.40	0.10
7	P2	River Irk	16/11/2022	4.8	8.1	4.1	2	7.9	7.49	81	27.12	0.04	0.18	0.18	37.31	0.29	2.37	0.22	266.45	0.46	1.89	0.02	15.23	0.26	0.53	0.13
8	P3	River Irk	16/11/2022	4.4	6.7	5.7	2.1	7.9	7.56	82	27.37	0.04	0.16	0.16	37.55	0.29	1.94	0.18	266.45	0.46	2.63	0.02	15.30	0.26	0.55	0.14
9	P4	River Irk	16/11/2022	4.3	10	7	1.6	7.9	7.71	82	27.88	0.04	0.15	0.15	38.08	0.29	2.86	0.26	266.45	0.46	3.23	0.03	15.47	0.26	0.41	0.10
10	P5	Pond	16/11/2022	1.2	3.4	2.2	0.5	7.6	3.17	100	12.62	0.08	0.10	0.10	22.53	0.48	1.65	0.15	476.25	0.26	0.57	0.00	12.24	0.33	0.16	0.04
11	P1	River Irk	15/12/2022	2.7	6.2	200	1.3	7.9	2.89	95	8.74	0.11	0.31	0.31	21.94	0.50	3.08	0.28	266.45	0.46	92.33	0.75	9.06	0.44	0.57	0.14
12	P2	River Irk	15/12/2022	2.7	5.9	160	1.1	7.8	3.26	97	11.26	0.09	0.24	0.24	23.01	0.47	2.79	0.26	323.36	0.38	60.86	0.49	10.47	0.38	0.42	0.11
13	P3	River Irk	15/12/2022	2.8	7.1	190	1.1	7.8	2.83	100	9.49	0.11	0.29	0.29	21.77	0.50	3.56	0.33	323.36	0.38	72.27	0.59	9.89	0.40	0.44	0.11
14	P4	River Irk	15/12/2022	1.9	5.4	150	1.1	7.7	3.12	97	11.62	0.09	0.16	0.16	22.46	0.49	2.62	0.24	392.43	0.31	47.01	0.38	11.21	0.36	0.39	0.10
15	P5	Pond	15/12/2022	1.3	2	770	0.5	7.4	2.08	92	8.47	0.12	0.15	0.15	19.51	0.56	1.12	0.10	701.43	0.18	135.02	1.10	12.56	0.32	0.16	0.04
16	P1	River Irk	03/01/2023	3.7	16	7.4	1.6	7.5	7.22	58	32.68	0.03	0.11	0.11	33.24	0.33	5.25	0.48	325.80	0.38	2.79	0.02	17.52	0.23	0.37	0.09
17	P2	River Irk	03/01/2023	3.7	15	11	1.8	7.5	6.39	58	28.66	0.03	0.13	0.13	30.75	0.35	5.32	0.49	325.80	0.38	4.15	0.03	16.68	0.24	0.43	0.11
18	P3	River Irk	03/01/2023	4.2	19	8.6	2	7.5	7.07	61	32.01	0.03	0.13	0.13	32.77	0.33	6.32	0.58	325.80	0.38	3.25	0.03	17.76	0.23	0.45	0.11
19	P4	River Irk	03/01/2023	4.2	16	4.6	1.5	7.5	7.08	56	31.97	0.03	0.13	0.13	32.83	0.33	5.31	0.49	325.80	0.38	1.74	0.01	17.11	0.23	0.35	0.09
20	P5	Pond	03/01/2023	0.5	3.9	370	0.5	7.7	2.92	83	10.72	0.09	0.05	0.05	21.60	0.50	1.97	0.18	392.43	0.31	115.97	0.94	11.72	0.34	0.17	0.04
21	P1	River Irk	09/02/2023	2.7	5	94	1.1	8	4.23	85	12.60	0.08	0.21	0.21	26.45	0.41	2.06	0.19	219.55	0.56	52.66	0.43	10.19	0.39	0.43	0.11
22	P2	River Irk	09/02/2023	2.5	5	78	1.2	7.9	3.64	86	11.67	0.09	0.21	0.21	24.21	0.45	2.25	0.21	266.45	0.46	36.01	0.29	10.34	0.39	0.46	0.12
23	P3	River Irk	09/02/2023	2.3	5.6	100	1.5	7.9	4.01	89	13.17	0.08	0.17	0.17	25.47	0.43	2.40	0.22	266.45	0.46	46.16	0.38	10.49	0.38	0.57	0.14
24	P4	River Irk	09/02/2023	1.7	6.1	110	1.2	7.8	3.61	87	12.73	0.08	0.13	0.13	23.92	0.46	2.78	0.26	323.36	0.38	41.84	0.34	11.11	0.36	0.43	0.11
25	P1	River Irk	17/03/2023	4.2	9.6	9.7	1.6	7.7	5.92	71	24.41	0.04	0.17	0.17	30.60	0.36	3.42	0.31	392.43	0.31	3.04	0.02	15.50	0.26	0.41	0.10
26	P2	River Irk	17/03/2023	6.3	10	15	2	7.7	5.64	68	23.09	0.04	0.27	0.27	29.69	0.37	3.67	0.34	217.00	0.57	8.50	0.07	15.02	0.27	0.53	0.13
27	P3	River Irk	17/03/2023	4	9.9	14	1.4	7.7	5.84	72	24.05	0.04	0.17	0.17	30.35	0.36	3.56	0.33	392.43	0.31	4.39	0.04	15.47	0.26	0.36	0.09
28	P4	River Irk	17/03/2023	5.1	13	23	1.5	7.8	5.49	68	20.96	0.05	0.24	0.24	29.74	0.37	4.76	0.44	177.10	0.69	15.97	0.13	13.86	0.29	0.43	0.11
29	P5	Pond	17/03/2023	1.6	3.1	12	0.5	7.6	2.87	78	11.20	0.09	0.14	0.14	21.24	0.51	1.59	0.15	476.25	0.26	3.10	0.03	13.03	0.31	0.15	0.04
30	P1	River Irk	14/04/2023	5.1	14	55	1.6	8	4.67	85	14.30	0.07	0.36	0.36	27.99	0.39	5.45	0.50	219.55	0.56	30.81	0.25	10.69	0.37	0.60	0.15
31	P2	River Irk	14/04/2023	5.3	54	80	1.6	7.5	4.6	61	19.89	0.05	0.27	0.27	25.54	0.43	23.04	2.11	325.80	0.38	30.20	0.25	15.20	0.26	0.42	0.11
32	P3	River Irk	14/04/2023	3.9	12	57	1.7	8	4.79	75	14.78	0.07	0.26	0.26	28.31	0.39	4.62	0.42	219.55	0.56	31.93	0.26	11.35	0.35	0.60	0.15
33	P4	River Irk	14/04/2023	3.5	6.8	15	1.4	7.9	4.32	80	14.45	0.07	0.24	0.24	26.37	0.41	2.81	0.26	266.45	0.46	6.92	0.06	11.75	0.34	0.48	0.12
34	P5	Pond	14/04/2023	2.1	6.9	79	0.5	7.5	3.72	90	15.81	0.06	0.13	0.13	23.63	0.46	3.18	0.29	577.98	0.21	16.81	0.14	14.01	0.29	0.14	0.04
35	P1	River Irk	28/04/2023	2.4	5.5	3.3	1.2	7.8	4.36	82	15.99	0.06	0.15	0.15	26.20	0.42	2.29	0.21	323.36	0.38	1.26	0.01	12.65	0.32	0.38	0.09
36	P2	River Irk	28/04/2023	2.1	8.3	2.4	0.9	7.4	4.41	65	19.38	0.05	0.11	0.11	24.73	0.44	3.66	0.34	399.21	0.31	0.74	0.01	16.32	0.25	0.22	0.06
37	P3	River Irk	28/04/2023	2.3	4.4	2.4	1	7.8	4.05	91	14.65	0.07	0.16	0.16	25.35	0.43	1.89	0.17	323.36	0.38	0.91	0.01	11.53	0.35	0.35	0.09
38	P4	River Irk	28/04/2023	3.1	8.9	3.6	1.3	7.8	4.38	89	16.10	0.06	0.19	0.19	26.35	0.41	3.68	0.34	323.36	0.38	1.37	0.01	11.97	0.33	0.43	0.11
39	P5	Pond	28/04/2023	1.3	4	3.3	0.5	7.5	3.19	100	13.29	0.08	0.10	0.10	22.45	0.49	1.94	0.18	577.98	0.21	0.70	0.01	13.23	0.30	0.15	0.04
40	P1	River Irk	12/05/2023	2.8	3.5	12	1	7.8	4.62	100	17.18	0.06	0.16	0.16	27.22	0.40	1.40	0.13	323.36	0.38	4.56	0.04	12.29	0.33	0.33	0.08
41	P2	River Irk	12/05/2023	2.4	7.4	8.2	1.2	7.5	4.65	92	20.40	0.05	0.12	0.12	26.10	0.42	3.09	0.28	577.98	0.21	1.75	0.01	15.38	0.26	0.31	0.08
42	P3	River Irk	12/05/2023	3.2	4	15	1.1	7.7	4.28	110	16.87	0.06	0.19	0.19	25.97	0.42	1.68	0.15	392.43	0.31	4.70	0.04	12.84	0.31	0.34	0.09
43	P4	River Irk	12/05/2023	4.2	4.3	8.5	1	7.7	4.47	87	17.73	0.06	0.24	0.24	26.26	0.42	1.78	0.16	392.43	0.31	2.66	0.02	13.25	0.30	0.30	0.08
44	P5	Pond	12/05/2023	1.1	7.2	370	0.5	7.5	3.4	93	14.29	0.07	0.08	0.08	22.86	0.48	3.43	0.32	577.98	0.21	78.74	0.64	13.54	0.30	0.15	0.04
45	P1	River Irk	25/05/2023	22	2.1	16	5.6	9.2	17	160	1.00	1.00	22.00	22.00	73.29	0.15	0.31	0.03	123.00	1.00	16.00	0.13	4.00	1.00	5.60	1.40
46	P2	River Irk	25/05/2023	25	1.8	2.7	5.7	9.2	17.1	160	1.00	1.00	25.00	25.00	73.69	0.15	0.27	0.02	123.00	1.00	2.70	0.02	4.00	1.00	5.70	1.43
47	P3	River Irk	25/05/2023	22	1.7	4.9	5.3	9.3	18.6	150	1.00	1.00	22.00	22.00	80.18	0.14	0.23	0.02	123.00	1.00	4.90	0.04	4.00	1.00	5.30	1.33
48	P4	River Irk	25/05/2023	19	1.3	1.2	5.5	9	17.6	160	1.00	1.00	19.00	19.00	75.73	0.14	0.19	0.02	123.00	1.00	1.20	0.01	4.00	1.00	5.50	1.38
49	P1	River Irk	08/06/2023	2.5	2.5	13	0.9	8.1	2.73	85	6.15	0.16	0.41	0.41	21.29	0.51	1.28	0.12	180.91	0.68	8.84	0.07	7.61	0.53	0.47	0.12
50	P2	River Irk	08/06/2023	2.7	2.3	20	1.2	7.9	3.02	82	9.25	0.11	0.29	0.29	22.10	0.49	1.13	0.10	266.45	0.46	9.23	0.08	10.12	0.40	0.47	0.12
51	P3	River Irk	08/06/2023	2.7	6.4	8.2	0.9	7.9	2.7	85	8.05	0.12	0.34	0.34	21.13	0.52	3.30	0.30	266.45	0.46	3.79	0.03	9.35	0.43	0.39	0.10
52	P4	River Irk	08/06/2023	3.6	1.4	18	1	7.9	3.02	80	9.25	0.11	0.39	0.39	22.06	0.49	0.69	0.06	266.45	0.46	8.31	0.07	10.32	0.39	0.39	0.10
53	P5	Pond	08/06/2023	1.9	4.6	78	0.5	7.7	2.53	92	9.09	0.11	0.21	0.21	20.67	0.53	2.43	0.22	392.43	0.31	24.45	0.20	10.39	0.39	0.19	0.05
54	P1	River Irk	21/06/2023	3.7	5	2.6	1.3	8	4.11	100	12.14	0.08	0.30	0.30	26.22	0.42	2.08	0.19	219.55	0.56	1.46	0.01	9.62	0.42	0.54	0.14
55	P2	River Irk	21/06/2023	5.2	12	2.2	3.4	7.7	3.8	110	14.66	0.07	0.35	0.35	24.60	0.44	5.32	0.49	392.43	0.31	0.69	0.01	12.17	0.33	1.12	0.28
56	P3	River Irk	21/06/2023	3.8	8.2	8.4	1.5	7.7	3.66	91	14.02	0.07	0.27	0.27	23.92	0.46	3.74	0.34	392.43	0.31	2.63	0.02	11.97	0.33	0.50	0.13
57	P4	River Irk	21/06/2023	3.9	7.2	8.2	2	7.7	3.65	97	13.98	0.07	0.28	0.28	23.99	0.45	3.27	0.30	392.43	0.31	2.57	0.02	11.96	0.33	0.67	0.17
58	P5	Pond	21/06/2023	6.7	7.2	470	1.4	7.6	3	110	11.84	0.08	0.57	0.57	22.25	0.49	3.53	0.32	476.25	0.26	121.39	0.99	11.99	0.33	0.47	0.12
59	P1	River Irk	07/07/2023	7	3.7	13	1	8	2.58	89	6.65	0.15	1.05	1.05	20.87	0.52	1.93	0.18	219.55	0.56	7.28	0.06	7.78	0.51	0.51	0.13
60	P2	River Irk	07/07/2023	7.1	4	4	1.1	8	2.71	100	7.06	0.14	1.01	1.01	21.52	0.51	2.03	0.19	219.55	0.56	2.24	0.02	7.93	0.50	0.55	0.14
61	P3	River Irk	07/07/2023	3.2	4.4	1.6	1.1	8	2.7	89	7.04	0.14	0.45	0.45	21.27	0.51	2.25	0.21	219.55	0.56	0.90	0.01	7.92	0.50	0.56	0.14
62	P4	River Irk	07/07/2023	5.2	6.1	3.7	0.9	7.9	2.63	90	7.78	0.13	0.67	0.67	21.01	0.52	3.16	0.29	266.45	0.46	1.71	0.01	8.72	0.46	0.41	0.10
63	P1	River Irk	26/07/2023	8.1	8.4	5.6	1.9	8.2	5.63	93	14.02	0.07	0.58	0.58	31.43	0.35	2.91	0.27	149.07	0.83	4.62	0.04	9.15	0.44	0.83	0.21
64	P2	River Irk	26/07/2023	8.1	6.6	4.8	1.6	8.2	5.5	90	13.62	0.07	0.59	0.59	30.95	0.35	2.32	0.21	149.07	0.83	3.96	0.03	9.01	0.44	0.71	0.18
65	P3	River Irk	26/07/2023	5.6	7.1	4.7	1.6	8.2	5.48	84	13.56	0.07	0.41	0.41	30.85	0.35	2.51	0.23	149.07	0.83	3.88	0.03	9.42	0.42	0.68	0.17
66	P4	River Irk	26/07/2023	3	2.2	0.89	0.6	8.2	5.99	89	15.12	0.07	0.20	0.20	32.69	0.33	0.73	0.07	149.07	0.83	0.73	0.01	9.51	0.42	0.25	0.06
67	P1	River Irk	11/08/2023	3.2	2.5	1.1	1	8.2	4.3	78	9.85	0.10	0.32	0.32	26.60	0.41	1.02	0.09	149.07	0.83	0.91	0.01	8.77	0.46	0.46	0.11
68	P2	River Irk	11/08/2023	3.2	3	1.5	1	8.1	4.66	78	12.62	0.08	0.25	0.25	27.88	0.39	1.17	0.11	180.91	0.68	1.02	0.01	10.13	0.39	0.39	0.10
69	P3	River Irk	11/08/2023	4.2	3.8	1.2	1	8.1	4.27	84	11.23	0.09	0.37	0.37	26.58	0.41	1.56	0.14	180.91	0.68	0.82	0.01	9.33	0.43	0.43	0.11
70	P4	River Irk	11/08/2023	3.2	3.2	1.5	1.1	8.1	4.61	85	12.42	0.08	0.26	0.26	27.78	0.39	1.26	0.12	180.91	0.68	1.02	0.01	9.57	0.42	0.46	0.11
71	P1	River Irk	25/08/2023	3.8	4	1.5	0.9	8	3.28	89	9.05	0.11	0.42	0.42	23.24	0.47	1.88	0.17	219.55	0.56	0.84	0.01	8.62	0.46	0.42	0.10
72	P2	River Irk	25/08/2023	3.3	4.3	2.2	1.1	7.9	4	91	13.13	0.08	0.25	0.25	25.46	0.43	1.84	0.17	266.45	0.46	1.02	0.01	10.48	0.38	0.42	0.11
73	P3	River Irk	25/08/2023	4.1	4.7	1.5	1.2	7.9	3.45	100	10.91	0.09	0.38	0.38	23.81	0.46	2.15	0.20	266.45	0.46	0.69	0.01	9.77	0.41	0.49	0.12
74	P4	River Irk	25/08/2023	3.2	7.4	1.7	1	7.9	3.49	97	11.07	0.09	0.29	0.29	23.89	0.46	3.38	0.31	266.45	0.46	0.78	0.01	9.82	0.41	0.41	0.10
75	P1	River Irk	06/09/2023	2.1	1.5	0.66	0.8	8.1	3.41	85	8.29	0.12	0.25	0.25	23.61	0.46	0.69	0.06	180.91	0.68	0.45	0.00	8.32	0.48	0.38	0.10
76	P2	River Irk	06/09/2023	3.6	2.2	2	1	8	3.07	99	8.30	0.12	0.43	0.43	22.70	0.48	1.06	0.10	219.55	0.56	1.12	0.01	8.37	0.48	0.48	0.12
77	P3	River Irk	06/09/2023	3.5	2	1.2	1.1	8	3.38	87	9.42	0.11	0.37	0.37	23.54	0.46	0.93	0.08	219.55	0.56	0.67	0.01	8.92	0.45	0.49	0.12
78	P4	River Irk	06/09/2023	3	3.5	1.3	1.1	8.1	3	82	6.99	0.14	0.43	0.43	22.15	0.49	1.72	0.16	180.91	0.68	0.88	0.01	8.28	0.48	0.53	0.13
79	P1	River Irk	20/09/2023	9.9	12	2	1.8	7.8	9.02	43	34.98	0.03	0.28	0.28	42.45	0.26	3.08	0.28	177.10	0.69	1.39	0.01	14.64	0.27	0.49	0.12
80	P2	River Irk	20/09/2023	7.6	5.2	3	2.1	7.8	9.08	48	35.17	0.03	0.22	0.22	42.54	0.26	1.33	0.12	177.10	0.69	2.08	0.02	15.13	0.26	0.56	0.14
81	P3	River Irk	20/09/2023	16	9.8	2.9	1.7	7.7	8.54	65	35.72	0.03	0.45	0.45	39.20	0.28	2.72	0.25	217.00	0.57	1.64	0.01	17.68	0.23	0.38	0.10
82	P4	River Irk	20/09/2023	14	8.2	35	2	7.7	8.61	50	35.87	0.03	0.39	0.39	39.72	0.27	2.25	0.21	217.00	0.57	19.84	0.16	15.95	0.25	0.50	0.13
83	P1	River Irk	03/10/2023	5.2	6.3	5.1	1.4	7.9	7.36	59	26.63	0.04	0.20	0.20	36.98	0.29	1.86	0.17	144.53	0.85	4.34	0.04	13.69	0.29	0.41	0.10
84	P2	River Irk	03/10/2023	5.2	11	1.3	1.4	7.9	7.99	57	28.84	0.03	0.18	0.18	39.34	0.28	3.05	0.28	144.53	0.85	1.11	0.01	14.01	0.29	0.40	0.10
85	P3	River Irk	03/10/2023	7.3	8.7	1.5	2.1	7.7	8.17	53	34.14	0.03	0.21	0.21	38.14	0.29	2.49	0.23	217.00	0.57	0.85	0.01	15.88	0.25	0.53	0.13
86	P4	River Irk	03/10/2023	6.1	11	1.4	1.2	7.6	7.07	45	30.77	0.03	0.20	0.20	33.64	0.32	3.56	0.33	265.90	0.46	0.65	0.01	14.78	0.27	0.32	0.08
87	P1	River Irk	25/10/2023	4.4	9.6	21	1.8	7.8	5.82	62	22.39	0.04	0.20	0.20	30.81	0.35	3.40	0.31	177.10	0.69	14.59	0.12	13.67	0.29	0.53	0.13
88	P2	River Irk	25/10/2023	4.4	6.6	31	1.7	7.9	9.52	67	33.11	0.03	0.13	0.13	44.89	0.24	1.60	0.15	144.53	0.85	26.38	0.21	16.44	0.24	0.41	0.10
89	P3	River Irk	25/10/2023	5.1	8.6	22	2	7.9	5.65	71	19.96	0.05	0.26	0.26	30.84	0.35	3.04	0.28	266.45	0.46	10.16	0.08	13.14	0.30	0.61	0.15
90	P4	River Irk	25/10/2023	4.7	8.3	9.8	1.9	7.9	9.08	64	32.08	0.03	0.15	0.15	43.30	0.25	2.09	0.19	144.53	0.85	8.34	0.07	15.72	0.25	0.48	0.12
91	P1	River Irk	25/10/2023	5.8	4.8	13	1.7	8.1	10.2	70	26.06	0.04	0.22	0.22	48.71	0.22	1.07	0.10	180.91	0.68	8.84	0.07	14.50	0.28	0.47	0.12
92	P2	River Irk	25/10/2023	5	4.7	5.8	1.7	8	6.06	83	19.62	0.05	0.25	0.25	32.93	0.33	1.56	0.14	219.55	0.56	3.25	0.03	12.40	0.32	0.55	0.14
93	P3	River Irk	25/10/2023	3.9	3.7	8.6	1.7	8	9.92	84	29.56	0.03	0.13	0.13	47.32	0.23	0.85	0.08	219.55	0.56	4.82	0.04	16.62	0.24	0.41	0.10
94	P4	River Irk	25/10/2023	4.6	4	1.9	1.7	8	6.3	92	20.51	0.05	0.22	0.22	33.81	0.32	1.29	0.12	219.55	0.56	1.06	0.01	12.26	0.33	0.55	0.14
95	P1	River Irk	07/11/2023	5.8	4.8	13	1.7	8.1	10.2	70	26.06	0.04	0.22	0.22	48.71	0.22	1.07	0.10	180.91	0.68	8.84	0.07	14.50	0.28	0.47	0.12
96	P2	River Irk	07/11/2023	5	4.7	5.8	1.7	8	6.06	83	19.62	0.05	0.25	0.25	32.93	0.33	1.56	0.14	219.55	0.56	3.25	0.03	12.40	0.32	0.55	0.14
97	P3	River Irk	07/11/2023	3.9	3.7	8.6	1.7	8	9.92	84	29.56	0.03	0.13	0.13	47.32	0.23	0.85	0.08	219.55	0.56	4.82	0.04	16.62	0.24	0.41	0.10
98	P4	River Irk	07/11/2023	4.6	4	1.9	1.7	8	6.3	92	20.51	0.05	0.22	0.22	33.81	0.32	1.29	0.12	219.55	0.56	1.06	0.01	12.26	0.33	0.55	0.14
99	P1	River Irk	07/12/2023	3.8	16.6	40	1.8	7.8	9.46	62	36.28	0.03	0.10	0.10	43.58	0.25	4.15	0.38	177.10	0.69	27.78	0.23	17.07	0.23	0.42	0.11
100	P2	River Irk	07/12/2023	2.4	11.6	59	1.7	7.8	5.48	66	20.91	0.05	0.11	0.11	29.69	0.37	4.26	0.39	177.10	0.69	40.98	0.33	13.70	0.29	0.50	0.12
101	P3	River Irk	07/12/2023	2.3	27.6	100	2.1	7.8	8.36	49	32.67	0.03	0.07	0.07	39.86	0.27	7.55	0.69	177.10	0.69	69.45	0.56	14.57	0.27	0.58	0.14
102	P4	River Irk	07/12/2023	2.2	43.6	41	33	7.7	5.24	83	21.31	0.05	0.10	0.10	28.56	0.38	16.64	1.53	392.43	0.31	12.85	0.10	14.69	0.27	8.99	2.25
103	P1	River Irk	18/12/2023	3.8	8.2	1.4	1.6	7.8	8.68	61	33.81	0.03	0.11	0.11	40.80	0.27	2.19	0.20	177.10	0.69	0.97	0.01	16.23	0.25	0.39	0.10
104	P2	River Irk	18/12/2023	2.4	8.6	0.67	1.4	7.7	4.88	65	19.54	0.05	0.12	0.12	27.25	0.40	3.44	0.32	217.00	0.57	0.38	0.00	14.02	0.29	0.40	0.10
105	P3	River Irk	18/12/2023	2.3	6.7	0.67	1.6	7.7	5.03	66	20.24	0.05	0.11	0.11	27.74	0.39	2.63	0.24	217.00	0.57	0.38	0.00	14.25	0.28	0.45	0.11
106	P4	River Irk	18/12/2023	2.2	6.1	0.67	1.4	7.7	4.83	64	19.31	0.05	0.11	0.11	27.08	0.40	2.46	0.23	217.00	0.57	0.38	0.00	13.88	0.29	0.40	0.10
107	P1	River Irk	08/01/2024	5.8	25	93	2.3	7.8	4.47	38	16.52	0.06	0.35	0.35	25.76	0.42	10.58	0.97	177.10	0.69	64.59	0.53	9.71	0.41	0.95	0.24
108	P2	River Irk	08/01/2024	12	16	120	1.9	7.8	4.04	63	14.59	0.07	0.82	0.82	24.85	0.44	7.02	0.64	177.10	0.69	83.34	0.68	12.10	0.33	0.63	0.16
109	P3	River Irk	08/01/2024	13	21	120	1.8	7.9	3.99	61	13.14	0.08	0.99	0.99	24.93	0.44	9.18	0.84	144.53	0.85	102.12	0.83	10.96	0.36	0.66	0.16
110	P4	River Irk	08/01/2024	5.3	11	100	1.6	7.9	4.2	83	13.95	0.07	0.38	0.38	26.01	0.42	4.61	0.42	266.45	0.46	46.16	0.38	11.38	0.35	0.56	0.14

APPENDIX VIII
FORENSIC ANALYSIS OF TREATED FINES

e3p	Materials Forensic Constituents (Adopted RB17 method)		
Site Name:	Don Street	**Site Address:**	**Land off Don Street, Middleton, M24 2GG**
Stockpile Reference:	Stockpile 1	**Stockpile Volume (approx):**	**1000 m3**
Excavation Date(s)	17th - 19th April 2023	**Treament Date(s):**	**N/A**
Material Description:	**Brown slightly sandy slightly gravelly clay. Gravel is fine to coarse, rounded to angular, mudstone, sandstone, brick, concrete, tarmacadam. Rare glass and plastic shards.**		
Photographs showing whole sample emptied out onto sheet and following sorting into constituent parts	**Sample -Pre Sorting** 		**Sample -Post Sorting** 
No Sub Samples (Min 10)	10	**Total Sample Volume Composite (Litres)**	**9.2 L**
Sampler	M. Dee	**Tester**	**M. Dee**

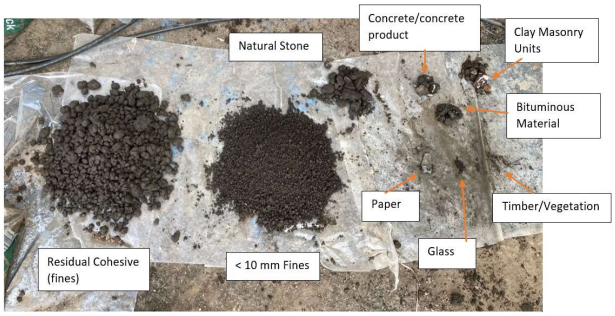
Volumes Acceptable Materials (Litres)		**Volumes Class X Unacceptable Materials (Litres)**	
Volume Passing 10mm Sieve (Fines)	4	**Carboard / Paper**	**0**
Residual Consisting of Cohesive Soil	4	**Plastic/Fibreglass/Rubber**	**< 0.1**
>10mm Clay Masonary Units (Brick, tile etc)	0.2	**Textiles**	**0**
>10mm Bituminous Material	< 0.1	**Timber/Vegetation**	**< 0.1**
>10 mm Concrete/Concrete Products	< 0.1		
>10 mm Natural Stone	0.8		
Total Volume Acceptable	**9**	**Total Volume Class X**	**< 0.1**
Total % Acceptable	**> 99%**	**Total % Unacceptable**	**< 1 %**
Pass / Fail	**Pass**		

e3p	Materials Forensic Constituents (Adopted RB17 method)		
Site Name:	Don Street	**Site Address:**	**Land off Don Street, Middleton, M24 2GG**
Stockpile Reference:	Stockpile 2	**Stockpile Volume (approx):**	**1000 m3**
Excavation Date(s)	23rd - 30th April 2023	**Treament Date(s):**	**N/A**
Material Description:	**Brown slightly sandy slightly gravelly clay. Gravel is fine to coarse, angular to rounded, of mudstone, sandstone, with fragments of brick, concrete, tarmacadam and rare glass shards.**		
Photographs showing whole sample emptied out onto sheet and following sorting into constituent parts	**Sample -Pre Sorting** 		**Sample -Post Sorting** 
No Sub Samples (Min 10)	10	**Total Sample Volume Composite (Litres)**	**9.35 L**
Sampler	M. Dee	**Tester**	**M. Dee**

Volumes Acceptable Materials (Litres)		**Volumes Class X Unacceptable Materials (Litres)**	
Volume Passing 10mm Sieve (Fines)	5	**Carboard / Paper**	**<0.1**
Residual Consisting of Cohesive Soil	2.9	**Plastic/Fibreglass/Rubber**	**< 0.1**
>10mm Clay Masonary Units (Brick, tile etc)	0.6	**Textiles**	**<0.1**
>10mm Bituminous Material	< 0.1	**Timber/Vegetation**	**< 0.1**
>10 mm Concrete/Concret Products	0.35	**Glass**	**<0.1**
>10 mm Natural Stone	0.4		
Total Volume Acceptable	**9.34**	**Total Volume Class X**	**0.1**
Total % Acceptable	**> 99%**	**Total % Unacceptable**	**< 1 %**
Pass / Fail	**Pass**		

e3p	Materials Forensic Constituents (Adopted RB17 method)		
Site Name:	Don Street	**Site Address:**	**Land off Don Street, Middleton, M24 2GG**
Stockpile Reference:	Stockpile 3	**Stockpile Volume (approx):**	**1000 m3**
Excavation Date(s)	23rd - 30th April 2023	**Treament Date(s):**	**N/A**
Material Description:	**Brown slightly sandy slightly gravelly clay. Gravel is fine to coarse, angular to rounded, of mudstone, sandstone, with fragments of brick, concrete, tarmacadam.**		
Photographs showing whole sample emptied out onto sheet and following sorting into constituent parts	**Sample -Pre Sorting** 		**Sample -Post Sorting** 
No Sub Samples (Min 10)	10	**Total Sample Volume Composite (Litres)**	**8.25 L**
Sampler	M. Dee	**Tester**	**M. Dee**

Volumes Acceptable Materials (Litres)		**Volumes Class X Unacceptable Materials (Litres)**	
Volume Passing 10mm Sieve (Fines)	2.9	**Carboard / Paper**	**<0.1**
Residual Consisting of Cohesive Soil	4	**Plastic/Fibreglass/Rubber**	**< 0.1**
>10mm Clay Masonary Units (Brick, tile etc)	0.2	**Timber/Vegetation**	**< 0.1**
>10mm Bituminous Material	< 0.1		
>10 mm Concrete/Concreet Products	0		
>10 mm Natural Stone	0.1		
Total Volume Acceptable	**8.2**	**Total Volume Class X**	**0.05**
Total % Acceptable	**> 99%**	**Total % Unacceptable**	**< 1 %**
Pass / Fail	**Pass**		

e3p	Materials Forensic Constituents (Adopted RB17 method)		
Site Name:	Don Street	**Site Address:**	**Land off Don Street, Middleton, M24 2GG**
Stockpile Reference:	Stockpile 4	**Stockpile Volume (approx):**	**1000 m3**
Excavation Date(s)	23rd - 30th April 2023	**Treament Date(s):**	**N/A**
Material Description:	**Brown slightly sandy slightly gravelly clay. Gravel is fine to coarse, angular to rounded, of mudstone, sandstone, with fragments of brick, concrete, tarmacadam and rare glass shards.**		
Photographs showing whole sample emptied out onto sheet and following sorting into constituent parts	**Sample -Pre Sorting** 		**Sample -Post Sorting** 
No Sub Samples (Min 10)	10	**Total Sample Volume Composite (Litres)**	**9.35 L**
Sampler	M. Dee	**Tester**	**M. Dee**

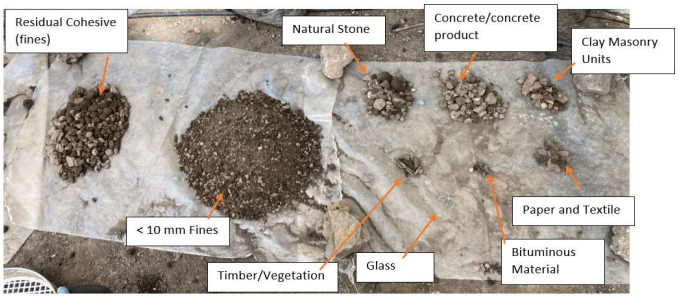
Volumes Acceptable Materials (Litres)		**Volumes Class X Unacceptable Materials (Litres)**	
Volume Passing 10mm Sieve (Fines)	3.5	**Carboard / Paper**	<0.1
Residual Consisting of Cohesive Soil	5.5	**Plastic/Fibreglass/Rubber**	< 0.1
>10mm Clay Masonary Units (Brick, tile etc)	0.2	**Timber/Vegetation**	< 0.1
>10mm Bituminous Material	0.1	**Glass**	<0.1
>10 mm Concrete/Concreet Products	0.1		
>10 mm Natural Stone	0.9		
Total Volume Acceptable	**9.34**	**Total Volume Class X**	**0.1**
Total % Acceptable	**> 99%**	**Total % Unacceptable**	**< 1 %**
Pass / Fail	**Pass**		

e3p	Materials Forensic Constituents (Adopted RB17 method)		
Site Name:	Don Street	**Site Address:**	**Land off Don Street, Middleton, M24 2GG**
Stockpile Reference:	Stockpile 5	**Stockpile Volume (approx):**	**1000 m3**
Excavation Date(s)	8th - 12th May 2023	**Treament Date(s):**	**N/A**
Material Description:	**Brown slightly sandy slightly gravelly clay. Gravel is fine to coarse, angular to rounded, of mudstone, sandstone, with fragments of brick, concrete, tarmacadam and rare glass shards.**		
Photographs showing whole sample emptied out onto sheet and following sorting into constituent parts	**Sample -Pre Sorting** 		**Sample -Post Sorting** 
No Sub Samples (Min 10)	10	**Total Sample Volume Composite (Litres)**	**9.15 L**
Sampler	G. Calvert	**Tester**	**G.Calvert**

Volumes Acceptable Materials (Litres)		**Volumes Class X Unacceptable Materials (Litres)**	
Volume Passing 10mm Sieve (Fines)	3.9	**Carboard / Paper**	0.1
Residual Consisting of Cohesive Soil	4.1	**Plastic/Fibreglass/Rubber**	<0.1
>10mm Clay Masonary Units (Brick, tile etc)	0.4	**Timber/Vegetation**	< 0.1
>10mm Bituminous Material	<0.1	**Glass**	<0.1
>10 mm Concrete/Concreet Products	0.1		
>10 mm Natural Stone	0.5		
Total Volume Acceptable	**9.05**	**Total Volume Class X**	**0.1**
Total % Acceptable	**> 99%**	**Total % Unacceptable**	**< 1 %**
Pass / Fail	**Pass**		

e3p	Materials Forensic Constituents (Adopted RB17 method)		
Site Name:	Don Street	**Site Address:**	**Land off Don Street, Middleton, M24 2GG**
Stockpile Reference:	Stockpile 6	**Stockpile Volume (approx):**	**1000 m3**
Excavation Date(s)	8th - 12th May 2023	**Treament Date(s):**	**N/A**
Material Description:	**Brown slightly gravelly sandy clay. Gravel is fine to coarse, angular to rounded, of mudstone, sandstone, with fragments of brick, concrete, tarmacadam, paper and rare glass shards.**		
Photographs showing whole sample emptied out onto sheet and following sorting into constituent parts	**Sample -Pre Sorting** 		**Sample -Post Sorting** 
No Sub Samples (Min 10)	10	**Total Sample Volume Composite (Litres)**	**8.69 L**
Sampler	M. DEE	**Tester**	**M. Dee/G.Calvert**

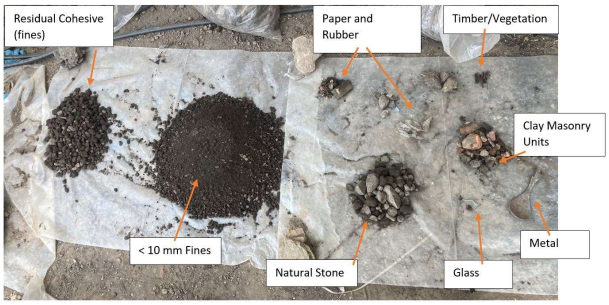
Volumes Acceptable Materials (Litres)		**Volumes Class X Unacceptable Materials (Litres)**	
Volume Passing 10mm Sieve (Fines)	5.3	**Carboard / Paper**	0.01
Residual Consisting of Cohesive Soil	2.2	**Plastic/Fibreglass/Rubber**	0.01
>10mm Clay Masonary Units (Brick, tile etc)	0.2	**Timber/Vegetation**	0.03
>10mm Bituminous Material	0.025	**Glass**	0.01
>10 mm Concrete/Concreet Products	0.5		
>10 mm Natural Stone	0.4		
Total Volume Acceptable	**8.63**	**Total Volume Class X**	**0.06**
Total % Acceptable	**> 99%**	**Total % Unacceptable**	**< 1 %**
Pass / Fail	**Pass**		

e3p	Materials Forensic Constituents (Adopted RB17 method)		
Site Name:	Don Street	**Site Address:**	Land off Don Street, Middleton, M24 2GG
Stockpile Reference:	Stockpile 7	**Stockpile Volume (approx):**	1000 m3
Excavation Date(s)	15th - 19th May 2023	**Treament Date(s):**	N/A
Material Description:	**Brown slightly gravelly sandy clay. Gravel is fine to coarse, angular to rounded, of mudstone, sandstone, with fragments of brick, concrete, tarmacadam, paper and rare glass shards.**		
Photographs showing whole sample emptied out onto sheet and following sorting into constituent parts	**Sample -Pre Sorting** 		**Sample -Post Sorting** 
No Sub Samples (Min 10)	10	**Total Sample Volume Composite (Litres)**	8.38 L
Sampler	M. DEE	**Tester**	M. Dee/G.Calvert

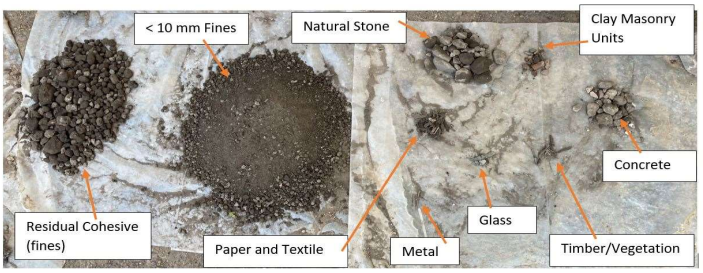
Volumes Acceptable Materials (Litres)		**Volumes Class X Unacceptable Materials (Litres)**	
Volume Passing 10mm Sieve (Fines)	4.7	**Carboard / Paper**	0.02
Residual Consisting of Cohesive Soil	2.3	**Timber/Vegetation**	0.03
>10mm Clay Masonary Units (Brick, tile etc)	0.3	**Glass**	0.01
>10mm Bituminous Material	0.015		
>10 mm Concrete/Concrete Products	0.5		
>10 mm Natural Stone	0.5		
Total Volume Acceptable	**8.32**	**Total Volume Class X**	**0.06**
Total % Acceptable	**> 99%**	**Total % Unacceptable**	**< 1 %**
Pass / Fail	**Pass**		

e3p	Materials Forensic Constituents (Adopted RB17 method)		
Site Name:	Don Street	**Site Address:**	Land off Don Street, Middleton, M24 2GG
Stockpile Reference:	Stockpile 9	**Stockpile Volume (approx):**	1000 m3
Excavation Date(s)	17th - 22nd May 2023	**Treament Date(s):**	N/A
Material Description:	**Brown slightly gravelly sandy clay. Gravel is fine to coarse, angular to rounded, of mudstone, sandstone, with fragments of brick, concrete, tarmacadam, paper and rare glass shards.**		
Photographs showing whole sample emptied out onto sheet and following sorting into constituent parts	**Sample -Pre Sorting** 		**Sample -Post Sorting** 
No Sub Samples (Min 10)	10	**Total Sample Volume Composite (Litres)**	10.61 L
Sampler	M. DEE	**Tester**	M. Dee/G.Calvert

Volumes Acceptable Materials (Litres)		**Volumes Class X Unacceptable Materials (Litres)**	
Volume Passing 10mm Sieve (Fines)	7	**Carboard / Paper**	0.01
Residual Consisting of Cohesive Soil	2.4	**Timber/Vegetation**	0.02
>10mm Clay Masonary Units (Brick, tile etc)	0.3	**Glass**	<0.01
>10mm Bituminous Material	0.02	**Metal**	0.03
>10 mm Concrete/Concrete Products	0.03		
>10 mm Natural Stone	0.8		
Total Volume Acceptable	**10.55**	**Total Volume Class X**	**0.06**
Total % Acceptable	**> 99%**	**Total % Unacceptable**	**< 1 %**
Pass / Fail	**Pass**		

e3p	Materials Forensic Constituents (Adopted RB17 method)		
Site Name:	Don Street	**Site Address:**	Land off Don Street, Middleton, M24 2GG
Stockpile Reference:	Stockpile 10	**Stockpile Volume (approx):**	1000 m3
Excavation Date(s)	24th - 30th May 2023	**Treament Date(s):**	N/A
Material Description:	Brown slightly sandy slightly gravelly clay. Gravel is fine to coarse, angular to rounded, of mudstone, sandstone, with fragments of brick, concrete, plastic and rare glass shards.		
Photographs showing whole sample emptied out onto sheet and following sorting into constituent parts	**Sample -Pre Sorting** 		**Sample -Post Sorting** 
No Sub Samples (Min 10)	10	**Total Sample Volume Composite (Litres)**	10.10 L
Sampler	G. Calvert	**Tester**	G.Calvert

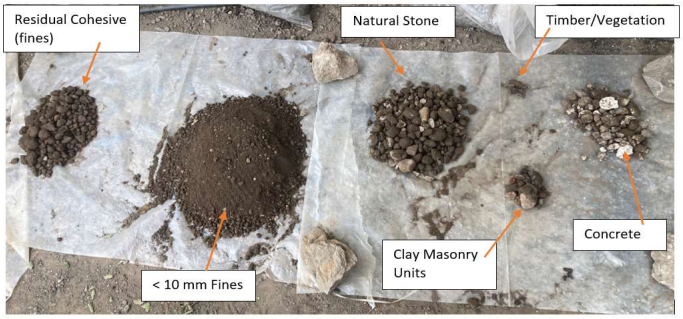
Volumes Acceptable Materials (Litres)		**Volumes Class X Unacceptable Materials (Litres)**	
Volume Passing 10mm Sieve (Fines)	6	**Carboard / Paper**	0.1
Residual Consisting of Cohesive Soil	2.6	**Plastic/Fibreglass/Rubber**	0.1
>10mm Clay Masonary Units (Brick, tile etc)	0.3	**Timber/Vegetation**	< 0.1
>10mm Bituminous Material	<0.1	**Glass**	<0.1
>10 mm Concrete/Concreet Products	0.2	**Metal**	0.1
>10 mm Natural Stone	0.7		
Total Volume Acceptable	**9.8**	**Total Volume Class X**	**0.3**
Total % Acceptable	**97.03%**	**Total % Unacceptable**	**2.97%**
Pass / Fail	**Fail**		

e3p	Materials Forensic Constituents (Adopted RB17 method)		
Site Name:	Don Street	**Site Address:**	Land off Don Street, Middleton, M24 2GG
Stockpile Reference:	Stockpile 10 Retest	**Stockpile Volume (approx):**	1000 m3
Excavation Date(s)	24th - 30th May 2023	**Treament Date(s):**	Re-Screened on 3 way screener 7th -13th June 2023
Material Description:	Brown slightly sandy slightly gravelly clay. Gravel is fine to coarse, angular to rounded, of mudstone, sandstone, with fragments of brick and concrete.		
Photographs showing whole sample emptied out onto sheet and following sorting into constituent parts	**Sample -Pre Sorting** 		**Sample -Post Sorting** 
No Sub Samples (Min 10)	10	**Total Sample Volume Composite (Litres)**	11.31 L
Sampler	M. Dee/G. Calvert	**Tester**	M. Dee/G. Calvert

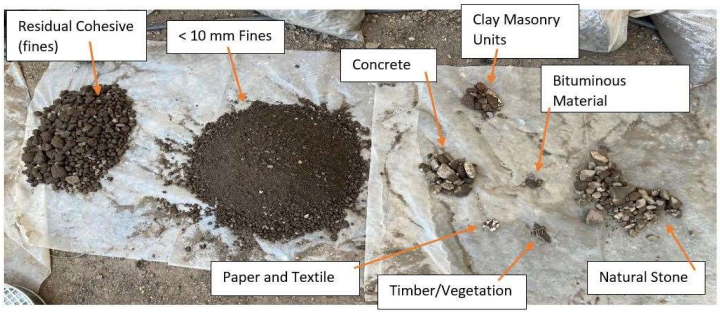
Volumes Acceptable Materials (Litres)		**Volumes Class X Unacceptable Materials (Litres)**	
Volume Passing 10mm Sieve (Fines)	7.1	**Carboard / Paper**	0.08
Residual Consisting of Cohesive Soil	2.8	**Plastic/Fibreglass/ Rubber**	N/A
>10mm Clay Masonary Units (Brick, tile etc)	0.1	**Timber/Vegetation**	0.03
>10mm Bituminous Material	N/A	**Glass**	<0.01
>10 mm Concrete/Concrete Products	0.2	**Metal**	<0.01
>10 mm Natural Stone	1		
Total Volume Acceptable	**11.2**	**Total Volume Class X**	**0.11**
Total % Acceptable	**> 99%**	**Total % Unacceptable**	**< 1 %**
Pass / Fail	**Pass**		

e3p	Materials Forensic Constituents (Adopted RB17 method)		
Site Name:	Don Street	**Site Address:**	Land off Don Street, Middleton, M24 2GG
Stockpile Reference:	Stockpile 11	**Stockpile Volume (approx):**	1000 m3
Excavation Date(s)	23rd - 30th May 2023	**Treament Date(s):**	N/A
Material Description:	Brown slightly sandy slightly gravelly clay. Gravel is fine to coarse, angular to rounded, of mudstone, sandstone, with fragments of brick and concrete.		
Photographs showing whole sample emptied out onto sheet and following sorting into constituent parts	**Sample -Pre Sorting** 		**Sample -Post Sorting** 
No Sub Samples (Min 10)	10	**Total Sample Volume Composite (Litres)**	9.95 L
Sampler	G. Calvert	**Tester**	G.Calvert

Volumes Acceptable Materials (Litres)		**Volumes Class X Unacceptable Materials (Litres)**	
Volume Passing 10mm Sieve (Fines)	6.2	**Carboard / Paper**	0.01
Residual Consisting of Cohesive Soil	2.1	**Plastic/Fibreglass/Rubber**	N/A
>10mm Clay Masonary Units (Brick, tile etc)	0.1	**Timber/Vegetation**	0.02
>10mm Bituminous Material	N/A	**Glass**	<0.01
>10 mm Concrete/Concret Products	0.7	**Metal**	0.02
>10 mm Natural Stone	0.8		
Total Volume Acceptable	**9.9**	**Total Volume Class X**	**0.05**
Total % Acceptable	**> 99%**	**Total % Unacceptable**	**< 1 %**
Pass / Fail	**Pass**		

e3p	Materials Forensic Constituents (Adopted RB17 method)		
Site Name:	Don Street	**Site Address:**	Land off Don Street, Middleton, M24 2GG
Stockpile Reference:	Stockpile 12	**Stockpile Volume (approx):**	1000 m3
Excavation Date(s)	1st - 6th June 2023	**Treament Date(s):**	N/A
Material Description:	Brown slightly sandy slightly gravelly clay. Gravel is fine to coarse, angular to rounded, of mudstone, sandstone, with fragments of brick and concrete.		
Photographs showing whole sample emptied out onto sheet and following sorting into constituent parts	**Sample -Pre Sorting** 		**Sample -Post Sorting** 
No Sub Samples (Min 10)	10	**Total Sample Volume Composite (Litres)**	8.91 L
Sampler	G. Calvert	**Tester**	G.Calvert

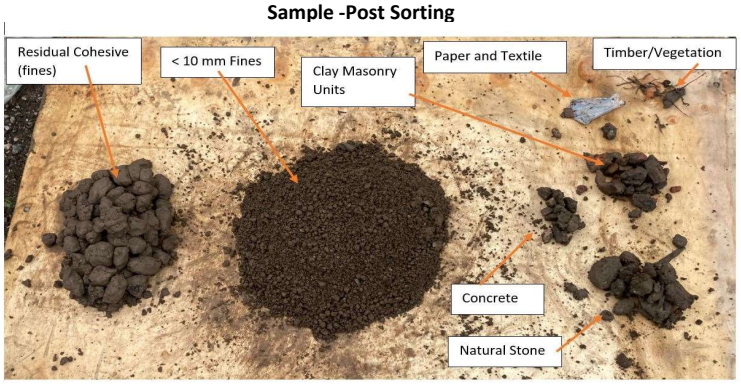
Volumes Acceptable Materials (Litres)		**Volumes Class X Unacceptable Materials (Litres)**	
Volume Passing 10mm Sieve (Fines)	5.1	**Carboard / Paper**	N/A
Residual Consisting of Cohesive Soil	1.2	**Plastic/Fibreglass/Rubber**	N/A
>10mm Clay Masonary Units (Brick, tile etc)	0.2	**Timber/Vegetation**	< 0.01
>10mm Bituminous Material	N/A	**Glass**	N/A
>10 mm Concrete/Concreet Products	0.7		
>10 mm Natural Stone	1.7		
Total Volume Acceptable	**8.9**	**Total Volume Class X**	**0.01**
Total % Acceptable	**> 99%**	**Total % Unacceptable**	**< 1 %**
Pass / Fail	**Pass**		

e3p	Materials Forensic Constituents (Adopted RB17 method)		
Site Name:	Don Street	**Site Address:**	**Land off Don Street, Middleton, M24 2GG**
Stockpile Reference:	Stockpile 13	**Stockpile Volume (approx):**	**1000 m3**
Excavation Date(s)	8th - 13th June 2023	**Treament Date(s):**	**N/A**
Material Description:	**Brown slightly sandy slightly gravelly clay. Gravel is fine to coarse, angular to rounded, of mudstone, sandstone, with fragments of brick and concrete.**		
Photographs showing whole sample emptied out onto sheet and following sorting into constituent parts	**Sample -Pre Sorting** 		**Sample -Post Sorting** 
No Sub Samples (Min 10)	10	**Total Sample Volume Composite (Litres)**	**9.70 L**
Sampler	M. Dee/G. Calvert	**Tester**	**M. Dee/G. Calvert**

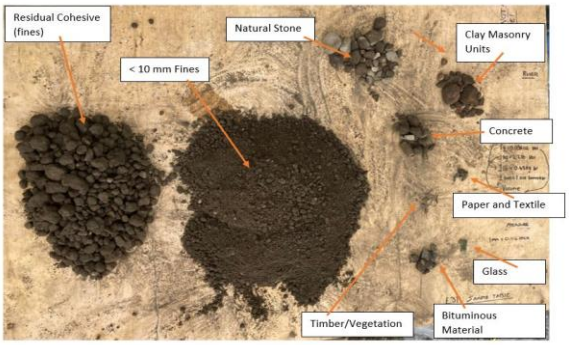
Volumes Acceptable Materials (Litres)		**Volumes Class X Unacceptable Materials (Litres)**	
Volume Passing 10mm Sieve (Fines)	6.1	**Carboard / Paper**	0.03
Residual Consisting of Cohesive Soil	2.5	**Plastic/Fibreglass/Rubber**	N/A
>10mm Clay Masonary Units (Brick, tile etc)	0.1	**Timber/Vegetation**	0.05
>10mm Bituminous Material	0.02	**Glass**	N/A
>10 mm Concrete/Concret Products	0.3		
>10 mm Natural Stone	0.6		
Total Volume Acceptable	**9.62**	**Total Volume Class X**	**0.08**
Total % Acceptable	**> 99%**	**Total % Unacceptable**	**< 1 %**
Pass / Fail	**Pass**		

e3p	Materials Forensic Constituents (Adopted RB17 method)		
Site Name:	Don Street	**Site Address:**	**Land off Don Street, Middleton, M24 2GG**
Stockpile Reference:	Stockpile 14	**Stockpile Volume (approx):**	**1000 m3**
Excavation Date(s)	19 - 21st June 2023	**Treament Date(s):**	**N/A**
Material Description:	**Brown slightly sandy slightly gravelly clay. Gravel is fine to coarse, angular to rounded, of mudstone, sandstone, with fragments of brick and concrete.**		
Photographs showing whole sample emptied out onto sheet and following sorting into constituent parts	**Sample -Pre Sorting** 		**Sample -Post Sorting** 
No Sub Samples (Min 10)	10	**Total Sample Volume Composite (Litres)**	**10.6 L**
Sampler	M. Dee/G. Calvert	**Tester**	**M. Dee/G. Calvert**

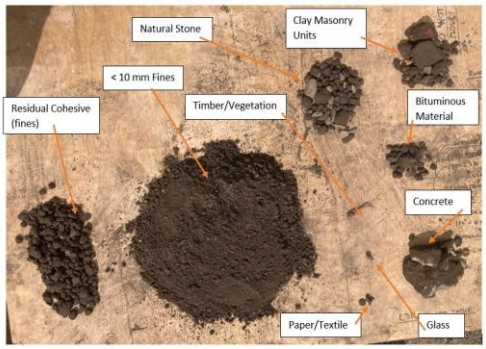
Volumes Acceptable Materials (Litres)		**Volumes Class X Unacceptable Materials (Litres)**	
Volume Passing 10mm Sieve (Fines)	6.6	**Carboard / Paper**	<0.1
Residual Consisting of Cohesive Soil	2.6	**Plastic/Fibreglass/Rubber**	N/A
>10mm Clay Masonary Units (Brick, tile etc)	0.1	**Timber/Vegetation**	0.1
>10mm Bituminous Material	N/A	**Glass**	<0.1
>10 mm Concrete/Concret Products	0.2		
>10 mm Natural Stone	1		
Total Volume Acceptable	**10.5**	**Total Volume Class X**	**0.1**
Total % Acceptable	**> 99%**	**Total % Unacceptable**	**< 1 %**
Pass / Fail	**Pass**		

e3p	Materials Forensic Constituents (Adopted RB17 method)		
Site Name:	Don Street	**Site Address:**	**Land off Don Street, Middleton, M24 2GG**
Stockpile Reference:	Stockpile 15	**Stockpile Volume (approx):**	**1000 m3**
Excavation Date(s)	16th - 21st June 2023	**Treament Date(s):**	**N/A**
Material Description:	**Brown slightly sandy slightly gravelly clay. Gravel is fine to coarse, angular to rounded, of mudstone, sandstone, with fragments of brick and concrete.**		
Photographs showing whole sample emptied out onto sheet and following sorting into constituent parts	**Sample -Pre Sorting** 		**Sample -Post Sorting** 
No Sub Samples (Min 10)	10	**Total Sample Volume Composite (Litres)**	**9.45 L**
Sampler	M. Dee/G. Calvert	**Tester**	**M. Dee/G. Calvert**

Volumes Acceptable Materials (Litres)		**Volumes Class X Unacceptable Materials (Litres)**	
Volume Passing 10mm Sieve (Fines)	4.6	**Carboard / Paper**	<0.1
Residual Consisting of Cohesive Soil	3.9	**Plastic/Fibreglass/Rubber**	N/A
>10mm Clay Masonary Units (Brick, tile etc)	0.3	**Timber/Vegetation**	0.01
>10mm Bituminous Material	N/A	**Glass**	<0.1
>10 mm Concrete/Concret Products	0.1		
>10 mm Natural Stone	0.5		
Total Volume Acceptable	**9.4**	**Total Volume Class X**	**0.05**
Total % Acceptable	**> 99%**	**Total % Unacceptable**	**< 1 %**
Pass / Fail	**Pass**		

e3p	Materials Forensic Constituents (Adopted RB17 method)		
Site Name:	Don Street	**Site Address:**	**Land off Don Street, Middleton, M24 2GG**
Stockpile Reference:	Stockpile 16	**Stockpile Volume (approx):**	**1000 m3**
Excavation Date(s)	21st - 23rd June 2023	**Treament Date(s):**	**N/A**
Material Description:	**Brown slightly sandy slightly gravelly clay. Gravel is fine to coarse, angular to rounded, of mudstone, sandstone, with fragments of brick and concrete.**		
Photographs showing whole sample emptied out onto sheet and following sorting into constituent parts	**Sample -Pre Sorting** 		**Sample -Post Sorting** 
No Sub Samples (Min 10)	10	**Total Sample Volume Composite (Litres)**	**7.88 L**
Sampler	M. Dee/G. Calvert	**Tester**	**M. Dee/G. Calvert**

Volumes Acceptable Materials (Litres)		**Volumes Class X Unacceptable Materials (Litres)**	
Volume Passing 10mm Sieve (Fines)	5.1	**Carboard / Paper**	0.01
Residual Consisting of Cohesive Soil	2.1	**Plastic/Fibreglass/Rubber**	N/A
>10mm Clay Masonary Units (Brick, tile etc)	0.2	**Timber/Vegetation**	0.01
>10mm Bituminous Material	0.05	**Glass**	0.01
>10 mm Concrete/Concreet Products	0.1		
>10 mm Natural Stone	0.3		
Total Volume Acceptable	**7.85**	**Total Volume Class X**	**0.03**
Total % Acceptable	**> 99%**	**Total % Unacceptable**	**< 1 %**
Pass / Fail	**Pass**		

e3p	Materials Forensic Constituents (Adopted RB17 method)		
Site Name:	Don Street	**Site Address:**	**Land off Don Street, Middleton, M24 2GG**
Stockpile Reference:	Stockpile 17	**Stockpile Volume (approx):**	**1000 m3**
Excavation Date(s)	16th - 21st June 2023	**Treament Date(s):**	**N/A**
Material Description:	**Brown slightly sandy slightly gravelly clay. Gravel is fine to coarse, angular to rounded, of mudstone, sandstone, with fragments of brick and concrete.**		
Photographs showing whole sample emptied out onto sheet and following sorting into constituent parts	**Sample -Pre Sorting** 		**Sample -Post Sorting** 
No Sub Samples (Min 10)	10	**Total Sample Volume Composite (Litres)**	**8.68 L**
Sampler	M. Dee/G. Calvert	**Tester**	**M. Dee/G. Calvert**

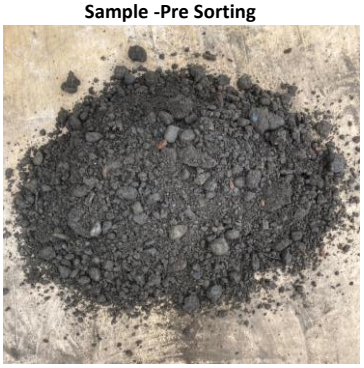
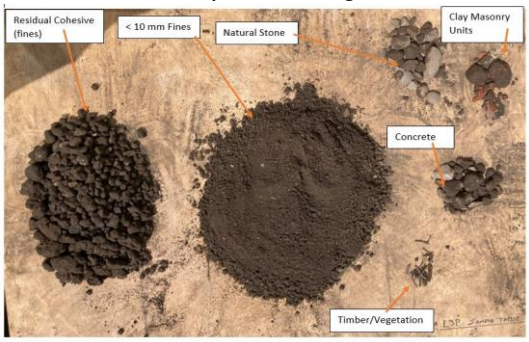
Volumes Acceptable Materials (Litres)		**Volumes Class X Unacceptable Materials (Litres)**	
Volume Passing 10mm Sieve (Fines)	5.2	**Carboard / Paper**	<0.1
Residual Consisting of Cohesive Soil	2.1	**Plastic/Fibreglass/Rubber**	N/A
>10mm Clay Masonary Units (Brick, tile etc)	0.5	**Timber/Vegetation**	0.02
>10mm Bituminous Material	0.1	**Glass**	0.01
>10 mm Concrete/Concreet Products	0.25		
>10 mm Natural Stone	0.5		
Total Volume Acceptable	**8.65**	**Total Volume Class X**	**0.03**
Total % Acceptable	**> 99%**	**Total % Unacceptable**	**< 1 %**
Pass / Fail	**Pass**		

e3p	Materials Forensic Constituents (Adopted RB17 method)		
Site Name:	Don Street	**Site Address:**	Land off Don Street, Middleton, M24 2GG
Stockpile Reference:	Stockpile 18	**Stockpile Volume (approx):**	1000 m3
Excavation Date(s)	16th - 26th June 2023	**Treament Date(s):**	N/A
Material Description:	Brown slightly sandy slightly gravelly clay. Gravel is fine to coarse, angular to rounded, of mudstone, sandstone, with fragments of brick and concrete. Rare glass, metal and timber.		
Photographs showing whole sample emptied out onto sheet and following sorting into constituent parts	**Sample -Pre Sorting** 		**Sample -Post Sorting** 
No Sub Samples (Min 10)	10	**Total Sample Volume Composite (Litres)**	8.74 L
Sampler	M. Dee	**Tester**	M. Dee

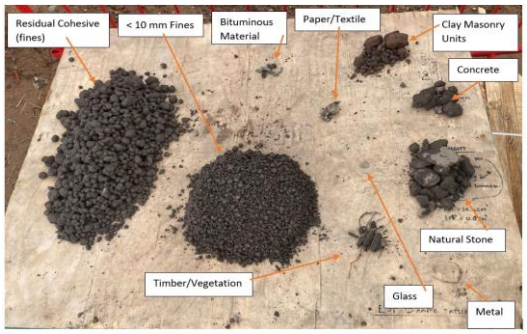
Volumes Acceptable Materials (Litres)		**Volumes Class X Unacceptable Materials (Litres)**	
Volume Passing 10mm Sieve (Fines)	7	**Carboard / Paper**	N/A
Residual Consisting of Cohesive Soil	0.1	**Plastic/Fibreglass/Rubber**	N/A
>10mm Clay Masonary Units (Brick, tile etc)	0.1	**Timber/Vegetation**	0.01
>10mm Bituminous Material	N/A	**Glass**	0.01
>10 mm Concrete/Concreet Products	0.2	**Metal**	0.02
>10 mm Natural Stone	1.3		
Total Volume Acceptable	**8.7**	**Total Volume Class X**	**0.04**
Total % Acceptable	**> 99%**	**Total % Unacceptable**	**< 1 %**
Pass / Fail	**Pass**		

e3p	Materials Forensic Constituents (Adopted RB17 method)		
Site Name:	Don Street	**Site Address:**	Land off Don Street, Middleton, M24 2GG
Stockpile Reference:	Stockpile 20	**Stockpile Volume (approx):**	1000 m3
Excavation Date(s)	21st - 28th June 2023	**Treament Date(s):**	N/A
Material Description:	Brown slightly sandy slightly gravelly clay. Gravel is fine to coarse, angular to rounded, of mudstone, sandstone, with fragments of brick and concrete. Rare glass and plastic.		
Photographs showing whole sample emptied out onto sheet and following sorting into constituent parts	**Sample -Pre Sorting** 		**Sample -Post Sorting** 
No Sub Samples (Min 10)	10	**Total Sample Volume Composite (Litres)**	10.02 L
Sampler	M. Dee	**Tester**	M. Dee

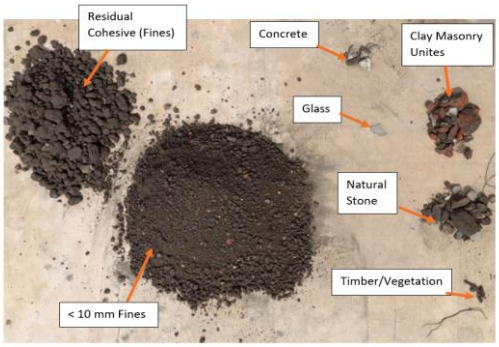
Volumes Acceptable Materials (Litres)		**Volumes Class X Unacceptable Materials (Litres)**	
Volume Passing 10mm Sieve (Fines)	5.2	**Carboard / Paper**	N/A
Residual Consisting of Cohesive Soil	3	**Plastic/Fibreglass/Rubber**	0.01
>10mm Clay Masonary Units (Brick, tile etc)	0.2	**Timber/Vegetation**	N/A
>10mm Bituminous Material	N/A	**Glass**	0.01
>10 mm Concrete/Concreet Products	0.1		
>10 mm Natural Stone	1.5		
Total Volume Acceptable	**10**	**Total Volume Class X**	**0.02**
Total % Acceptable	**> 99%**	**Total % Unacceptable**	**< 1 %**
Pass / Fail	**Pass**		

e3p	Materials Forensic Constituents (Adopted RB17 method)		
Site Name:	Don Street	**Site Address:**	**Land off Don Street, Middleton, M24 2GG**
Stockpile Reference:	Stockpile 21	**Stockpile Volume (approx):**	**1000 m3**
Excavation Date(s)	16th - 21st June 2023	**Treament Date(s):**	**N/A**
Material Description:	**Brown slightly sandy slightly gravelly clay. Gravel is fine to coarse, angular to rounded, of mudstone, sandstone, with fragments of brick and concrete.**		
Photographs showing whole sample emptied out onto sheet and following sorting into constituent parts	**Sample -Pre Sorting** 		**Sample -Post Sorting** 
No Sub Samples (Min 10)	10	**Total Sample Volume Composite (Litres)**	**9.05 L**
Sampler	M. Dee/G. Calvert	**Tester**	**M. Dee/G. Calvert**

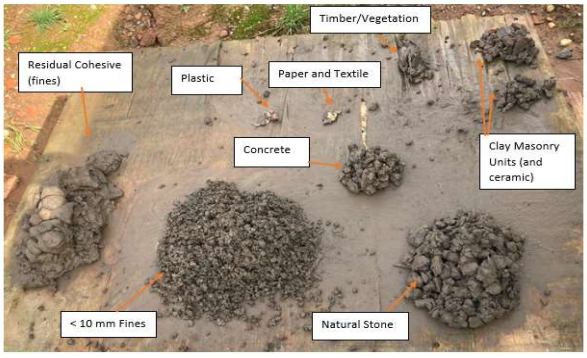
Volumes Acceptable Materials (Litres)		**Volumes Class X Unacceptable Materials (Litres)**	
Volume Passing 10mm Sieve (Fines)	5.6	**Carboard / Paper**	N/A
Residual Consisting of Cohesive Soil	2.6	**Plastic/Fibreglass/Rubber**	N/A
>10mm Clay Masonary Units (Brick, tile etc)	0.1	**Timber/Vegetation**	0.05
>10mm Bituminous Material	N/A	**Glass**	N/A
>10 mm Concrete/Concret Products	0.3		
>10 mm Natural Stone	0.4		
Total Volume Acceptable	**9**	**Total Volume Class X**	**0.05**
Total % Acceptable	**> 99%**	**Total % Unacceptable**	**< 1 %**
Pass / Fail	**Pass**		

e3p	Materials Forensic Constituents (Adopted RB17 method)		
Site Name:	Don Street	**Site Address:**	**Land off Don Street, Middleton, M24 2GG**
Stockpile Reference:	Stockpile 22	**Stockpile Volume (approx):**	**1000 m3**
Excavation Date(s)	12th - 15th July 2023	**Treament Date(s):**	**N/A**
Material Description:	**Brown slightly sandy slightly gravelly clay. Gravel is fine to coarse, angular to rounded, of mudstone, sandstone, with fragments of brick and concrete.**		
Photographs showing whole sample emptied out onto sheet and following sorting into constituent parts	**Sample -Pre Sorting** 		**Sample -Post Sorting** 
No Sub Samples (Min 10)	10	**Total Sample Volume Composite (Litres)**	**11.02 L**
Sampler	G. Calvert	**Tester**	**G. Calvert**

Volumes Acceptable Materials (Litres)		**Volumes Class X Unacceptable Materials (Litres)**	
Volume Passing 10mm Sieve (Fines)	3.1	**Carboard / Paper**	0.05
Residual Consisting of Cohesive Soil	6.6	**Plastic/Fibreglass/Rubber**	N/A
>10mm Clay Masonary Units (Brick, tile etc)	0.3	**Timber/Vegetation**	0.1
>10mm Bituminous Material	0.05	**Glass**	0.01
>10 mm Concrete/Concret Products	0.2	**Metal**	0.01
>10 mm Natural Stone	0.7		
Total Volume Acceptable	**10.95**	**Total Volume Class X**	**0.07**
Total % Acceptable	**> 99%**	**Total % Unacceptable**	**< 1 %**
Pass / Fail	**Pass**		

e3p	Materials Forensic Constituents (Adopted RB17 method)		
Site Name:	Don Street	**Site Address:**	Land off Don Street, Middleton, M24 2GG
Stockpile Reference:	Stockpile 23	**Stockpile Volume (approx):**	1000 m3
Excavation Date(s)	28th June - 5th July 2023	**Treament Date(s):**	N/A
Material Description:	Brown slightly sandy slightly gravelly clay. Gravel is fine to coarse, angular to rounded, of mudstone, sandstone, with fragments of brick and concrete. Rare glass and timber.		
Photographs showing whole sample emptied out onto sheet and following sorting into constituent parts	**Sample -Pre Sorting** 		**Sample -Post Sorting** 
No Sub Samples (Min 10)	10	**Total Sample Volume Composite (Litres)**	8.22 L
Sampler	M. Dee	**Tester**	M. Dee

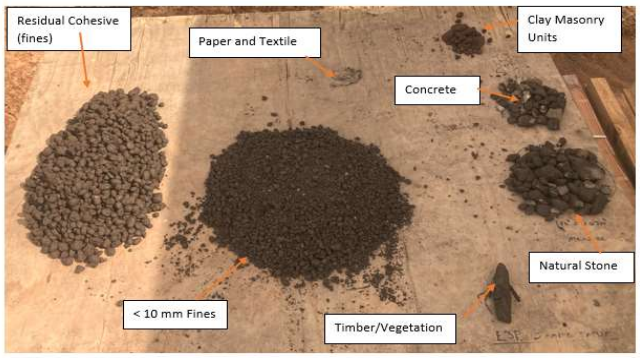
Volumes Acceptable Materials (Litres)		**Volumes Class X Unacceptable Materials (Litres)**	
Volume Passing 10mm Sieve (Fines)	5.5	**Carboard / Paper**	N/A
Residual Consisting of Cohesive Soil	2.2	**Plastic/Fibreglass/Rubber**	N/A
>10mm Clay Masonary Units (Brick, tile etc)	0.2	**Timber/Vegetation**	0.01
>10mm Bituminous Material	N/A	**Glass**	0.01
>10 mm Concrete/Concreet Products	0.1		
>10 mm Natural Stone	0.2		
Total Volume Acceptable	**8.2**	**Total Volume Class X**	**0.02**
Total % Acceptable	**> 99%**	**Total % Unacceptable**	**< 1 %**
Pass / Fail	**Pass**		

e3p	Materials Forensic Constituents (Adopted RB17 method)		
Site Name:	Don Street	**Site Address:**	Land off Don Street, Middleton, M24 2GG
Stockpile Reference:	Stockpile 24	**Stockpile Volume (approx):**	1000 m3
Excavation Date(s)	28th August -12th September 2023	**Treament Date(s):**	N/A
Material Description:	Brown slightly sandy slightly gravelly clay. Gravel is fine to coarse, angular to rounded, of mudstone, sandstone, with fragments of brick and concrete. Rare plastic and timber.		
Photographs showing whole sample emptied out onto sheet and following sorting into constituent parts	**Sample -Pre Sorting** 		**Sample -Post Sorting** 
No Sub Samples (Min 10)	10	**Total Sample Volume Composite (Litres)**	9.63 L
Sampler	G. Calvert	**Tester**	G. Calvert

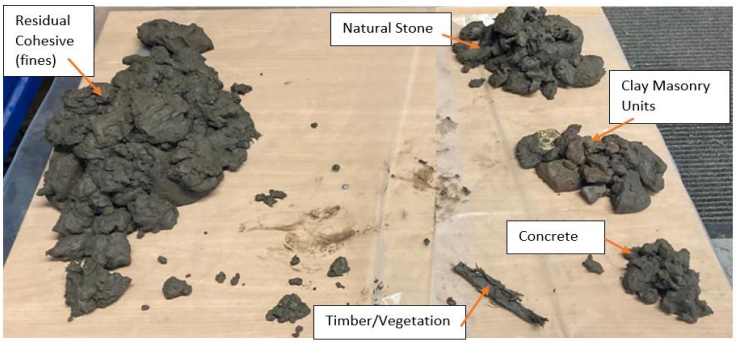
Volumes Acceptable Materials (Litres)		**Volumes Class X Unacceptable Materials (Litres)**	
Volume Passing 10mm Sieve (Fines)	3.2	**Carboard / Paper**	<0.01
Residual Consisting of Cohesive Soil	3.4	**Plastic/Fibreglass/Rubber**	0.03
>10mm Clay Masonary Units (Brick, tile etc)	0.5	**Timber/Vegetation**	0.05
>10mm Bituminous Material	0.05	**Glass**	N/A
>10 mm Concrete/Concreet Products	0.5		
>10 mm Natural Stone	1.9		
Total Volume Acceptable	**9.55**	**Total Volume Class X**	**0.08**
Total % Acceptable	**> 99%**	**Total % Unacceptable**	**< 1 %**
Pass / Fail	**Pass**		

e3p	Materials Forensic Constituents (Adopted RB17 method)		
Site Name:	Don Street	**Site Address:**	**Land off Don Street, Middleton, M24 2GG**
Stockpile Reference:	Stockpile 25	**Stockpile Volume (approx):**	**1000 m3**
Excavation Date(s)	20th - 25th July 2023	**Treament Date(s):**	**N/A**
Material Description:	**Brown slightly sandy slightly gravelly clay. Gravel is fine to coarse, angular to rounded, of mudstone, sandstone, with fragments of brick and concrete.**		
Photographs showing whole sample emptied out onto sheet and following sorting into constituent parts	**Sample -Pre Sorting** 		**Sample -Post Sorting** 
No Sub Samples (Min 10)	10	**Total Sample Volume Composite (Litres)**	**9.73 L**
Sampler	G. Calvert	**Tester**	**G. Calvert**

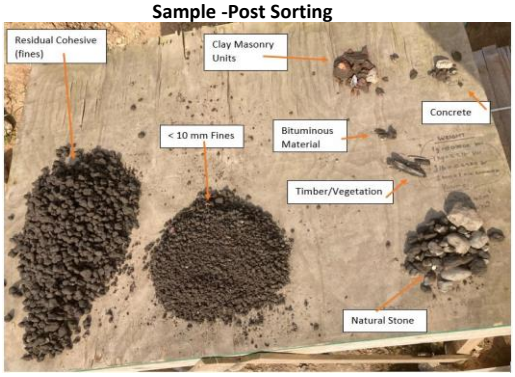
Volumes Acceptable Materials (Litres)		**Volumes Class X Unacceptable Materials (Litres)**	
Volume Passing 10mm Sieve (Fines)	3.4	**Carboard / Paper**	0.05
Residual Consisting of Cohesive Soil	5.1	**Plastic/Fibreglass/Rubber**	0.01
>10mm Clay Masonary Units (Brick, tile etc)	0.2	**Timber/Vegetation**	0.01
>10mm Bituminous Material	0.05	**Glass**	0.01
>10 mm Concrete/Concret Products	0.3		
>10 mm Natural Stone	0.6		
Total Volume Acceptable	**9.65**	**Total Volume Class X**	**0.08**
Total % Acceptable	**> 99%**	**Total % Unacceptable**	**< 1 %**
Pass / Fail	**Pass**		

e3p	Materials Forensic Constituents (Adopted RB17 method)		
Site Name:	Don Street	**Site Address:**	Land off Don Street, Middleton, M24 2GG
Stockpile Reference:	Stockpile 26	**Stockpile Volume (approx):**	1000 m3
Excavation Date(s)	4th - 8th August 2023	**Treament Date(s):**	N/A
Material Description:	Brown slightly sandy slightly gravelly clay. Gravel is fine to coarse, angular to rounded, of mudstone, sandstone, with fragments of brick and concrete. Rare paper and timber.		
Photographs showing whole sample emptied out onto sheet and following sorting into constituent parts	**Sample -Pre Sorting** 		**Sample -Post Sorting** 
No Sub Samples (Min 10)	10	**Total Sample Volume Composite (Litres)**	11.10 L
Sampler	G. Calvert	**Tester**	G. Calvert

Volumes Acceptable Materials (Litres)		**Volumes Class X Unacceptable Materials (Litres)**	
Volume Passing 10mm Sieve (Fines)	4.5	**Carboard / Paper**	<0.05
Residual Consisting of Cohesive Soil	5.2	**Plastic/Fibreglass/Rubber**	N/A
>10mm Clay Masonary Units (Brick, tile etc)	0.2	**Timber/Vegetation**	0.1
>10mm Bituminous Material	N/A	**Glass**	N/A
>10 mm Concrete/Concreet Products	0.4		
>10 mm Natural Stone	0.7		
Total Volume Acceptable	**11**	**Total Volume Class X**	**0.1**
Total % Acceptable	**> 99%**	**Total % Unacceptable**	**< 1 %**
Pass / Fail	**Pass**		

e3p	Materials Forensic Constituents (Adopted RB17 method)		
Site Name:	Don Street	**Site Address:**	**Land off Don Street, Middleton, M24 2GG**
Stockpile Reference:	Stockpile 27	**Stockpile Volume (approx):**	**1000 m3**
Excavation Date(s)	21st October -1st November 2023	**Treament Date(s):**	**N/A**
Material Description:	**Brown slightly sandy slightly gravelly clay. Gravel is fine to coarse, angular to rounded, of mudstone, sandstone, with fragments of brick and concrete.**		
Photographs showing whole sample emptied out onto sheet and following sorting into constituent parts	**Sample -Pre Sorting** 		**Sample -Post Sorting** 
No Sub Samples (Min 10)	10	**Total Sample Volume Composite (Litres)**	**7.55 L**
Sampler	G. Calvert	**Tester**	**G. Calvert**

Volumes Acceptable Materials (Litres)		**Volumes Class X Unacceptable Materials (Litres)**	
Volume Passing 10mm Sieve (Fines)	0	**Carboard / Paper**	N/A
Residual Consisting of Cohesive Soil	5.2	**Plastic/Fibreglass/Rubber**	N/A
>10mm Clay Masonary Units (Brick, tile etc)	0.7	**Timber/Vegetation**	0.05
>10mm Bituminous Material	0		
>10 mm Concrete/Concreet Products	0.2		
>10 mm Natural Stone	1.4		
Total Volume Acceptable	**7.5**	**Total Volume Class X**	**0.05**
Total % Acceptable	**> 99%**	**Total % Unacceptable**	**< 1 %**
Pass / Fail	**Pass**		

e3p	Materials Forensic Constituents (Adopted RB17 method)		
Site Name:	Don Street	**Site Address:**	**Land off Don Street, Middleton, M24 2GG**
Stockpile Reference:	Stockpile 28	**Stockpile Volume (approx):**	**1000 m3**
Excavation Date(s)	28th - 4th September 2023	**Treament Date(s):**	**N/A**
Material Description:	**Brown slightly sandy slightly gravelly clay. Gravel is fine to coarse, angular to rounded, of mudstone, sandstone, with fragments of brick and concrete.**		
Photographs showing whole sample emptied out onto sheet and following sorting into constituent parts	**Sample -Pre Sorting** 		**Sample -Post Sorting** 
No Sub Samples (Min 10)	10	**Total Sample Volume Composite (Litres)**	**9.25 L**
Sampler	G. Calvert	**Tester**	**G. Calvert**

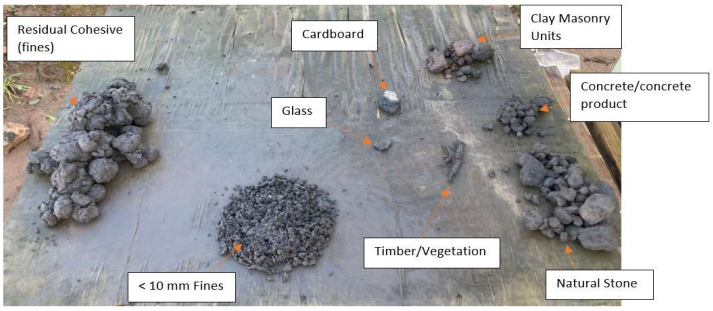
Volumes Acceptable Materials (Litres)		**Volumes Class X Unacceptable Materials (Litres)**	
Volume Passing 10mm Sieve (Fines)	2.4	**Carboard / Paper**	N/A
Residual Consisting of Cohesive Soil	5.3	**Plastic/Fibreglass/Rubber**	N/A
>10mm Clay Masonary Units (Brick, tile etc)	0.4	**Timber/Vegetation**	0.05
>10mm Bituminous Material	0.1		
>10 mm Concrete/Concret Products	0.3		
>10 mm Natural Stone	0.7		
Total Volume Acceptable	**9.2**	**Total Volume Class X**	**0.05**
Total % Acceptable	**> 99%**	**Total % Unacceptable**	**< 1 %**
Pass / Fail	**Pass**		

e3p	Materials Forensic Constituents (Adopted RB17 method)		
Site Name:	Don Street	**Site Address:**	Land off Don Street, Middleton, M24 2GG
Stockpile Reference:	Stockpile 29	**Stockpile Volume (approx):**	1000 m3
Excavation Date(s)	11th - 28th September 2023	**Treament Date(s):**	N/A
Material Description:	Brown slightly sandy slightly gravelly clay. Gravel is fine to coarse, angular to rounded, of mudstone, sandstone, with fragments of brick and concrete. Rare timber.		
Photographs showing whole sample emptied out onto sheet and following sorting into constituent parts	**Sample -Pre Sorting** 		**Sample -Post Sorting** 
No Sub Samples (Min 10)	10	**Total Sample Volume Composite (Litres)**	10.75 L
Sampler	G. Calvert	**Tester**	G. Calvert

Volumes Acceptable Materials (Litres)		**Volumes Class X Unacceptable Materials (Litres)**	
Volume Passing 10mm Sieve (Fines)	5.4	**Carboard / Paper**	N/A
Residual Consisting of Cohesive Soil	3.7	**Plastic/Fibreglass/Rubber**	N/A
>10mm Clay Masonary Units (Brick, tile etc)	0.1	**Timber/Vegetation**	0.05
>10mm Bituminous Material	N/A	**Glass**	N/A
>10 mm Concrete/Concreet Products	0.5		
>10 mm Natural Stone	1		
Total Volume Acceptable	**10.7**	**Total Volume Class X**	**0.05**
Total % Acceptable	**> 99%**	**Total % Unacceptable**	**< 1 %**
Pass / Fail	**Pass**		

e3p	Materials Forensic Constituents (Adopted RB17 method)		
Site Name:	Don Street	**Site Address:**	Land off Don Street, Middleton, M24 2GG
Stockpile Reference:	Stockpile 30	**Stockpile Volume (approx):**	1000 m3
Excavation Date(s)	28th August -12th September 2023	**Treament Date(s):**	N/A
Material Description:	Brown slightly sandy slightly gravelly clay. Gravel is fine to coarse, angular to rounded, of mudstone, sandstone, with fragments of brick and concrete. Rare textile and timber.		
Photographs showing whole sample emptied out onto sheet and following sorting into constituent parts	**Sample -Pre Sorting** 		**Sample -Post Sorting** 
No Sub Samples (Min 10)	10	**Total Sample Volume Composite (Litres)**	10.41 L
Sampler	G. Calvert	**Tester**	G. Calvert

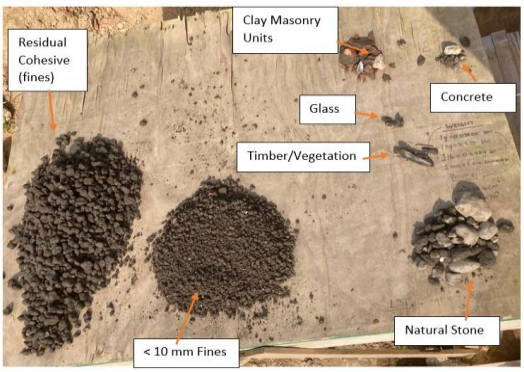
Volumes Acceptable Materials (Litres)		**Volumes Class X Unacceptable Materials (Litres)**	
Volume Passing 10mm Sieve (Fines)	4.1	**Carboard / Paper**	0.01
Residual Consisting of Cohesive Soil	4.5	**Plastic/Fibreglass/Rubber**	N/A
>10mm Clay Masonary Units (Brick, tile etc)	0.5	**Timber/Vegetation**	0.05
>10mm Bituminous Material	0.05	**Glass**	N/A
>10 mm Concrete/Concreet Products	0.4		
>10 mm Natural Stone	0.8		
Total Volume Acceptable	**10.35**	**Total Volume Class X**	**0.06**
Total % Acceptable	**> 99%**	**Total % Unacceptable**	**< 1 %**
Pass / Fail	**Pass**		

e3p	Materials Forensic Constituents (Adopted RB17 method)		
Site Name:	Don Street	**Site Address:**	Land off Don Street, Middleton, M24 2GG
Stockpile Reference:	Stockpile 31	**Stockpile Volume (approx):**	1000 m3
Excavation Date(s)	4th - 11th September 2023	**Treament Date(s):**	N/A
Material Description:	Brown slightly sandy slightly gravelly clay. Gravel is fine to coarse, angular to rounded, of mudstone, sandstone, with fragments of brick and concrete. Rare timber, paper and glass.		
Photographs showing whole sample emptied out onto sheet and following sorting into constituent parts	**Sample -Pre Sorting** 		**Sample -Post Sorting** 
No Sub Samples (Min 10)	10	**Total Sample Volume Composite (Litres)**	8.26 L
Sampler	G. Calvert	**Tester**	G. Calvert

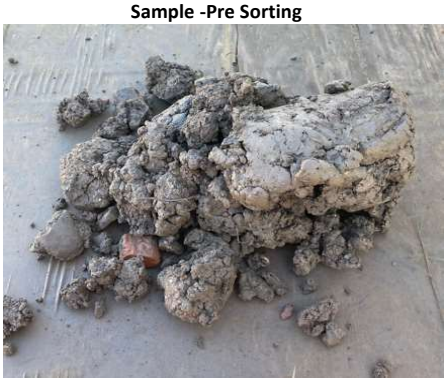
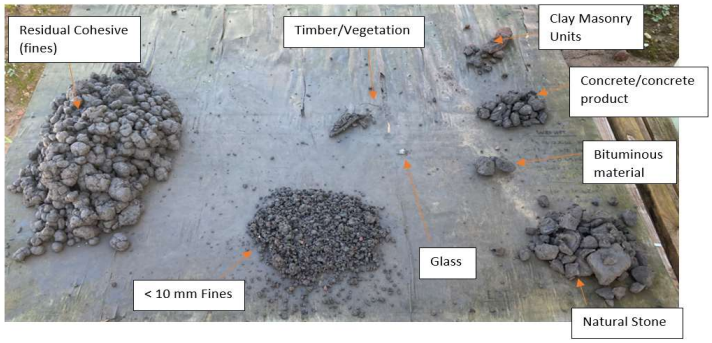
Volumes Acceptable Materials (Litres)		**Volumes Class X Unacceptable Materials (Litres)**	
Volume Passing 10mm Sieve (Fines)	1.1	**Carboard / Paper**	0.03
Residual Consisting of Cohesive Soil	5.2	**Plastic/Fibreglass/Rubber**	N/A
>10mm Clay Masonary Units (Brick, tile etc)	0.4	**Timber/Vegetation**	0.02
>10mm Bituminous Material	N/A	**Glass**	<0.01
>10 mm Concrete/Concreet Products	0.3		
>10 mm Natural Stone	1.2		
Total Volume Acceptable	**8.2**	**Total Volume Class X**	**0.06**
Total % Acceptable	**> 99%**	**Total % Unacceptable**	**< 1 %**
Pass / Fail	**Pass**		

e3p	Materials Forensic Constituents (Adopted RB17 method)		
Site Name:	Don Street	**Site Address:**	Land off Don Street, Middleton, M24 2GG
Stockpile Reference:	Stockpile 32	**Stockpile Volume (approx):**	1000 m3
Excavation Date(s)	18th - 29th September 2023	**Treament Date(s):**	N/A
Material Description:	Brown slightly sandy slightly gravelly clay. Gravel is fine to coarse, angular to rounded, of mudstone, sandstone, with fragments of brick.		
Photographs showing whole sample emptied out onto sheet and following sorting into constituent parts	**Sample -Pre Sorting** 		**Sample -Post Sorting** 
No Sub Samples (Min 10)	10	**Total Sample Volume Composite (Litres)**	11.1 L
Sampler	G. Calvert	**Tester**	G. Calvert

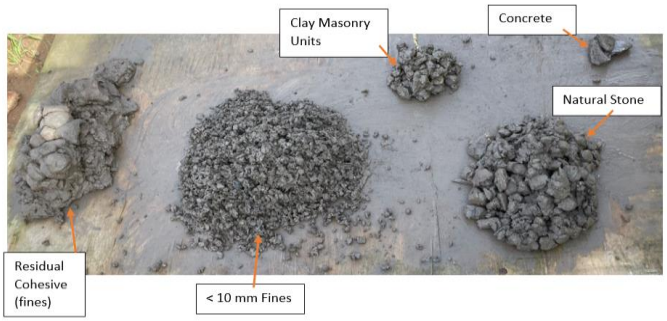
Volumes Acceptable Materials (Litres)		**Volumes Class X Unacceptable Materials (Litres)**	
Volume Passing 10mm Sieve (Fines)	3.5	**Carboard / Paper**	N/A
Residual Consisting of Cohesive Soil	6.4	**Plastic/Fibreglass/Rubber**	N/A
>10mm Clay Masonary Units (Brick, tile etc)	0.2	**Timber/Vegetation**	N/A
>10mm Bituminous Material	N/A	**Glass**	N/A
>10 mm Concrete/Concreet Products	N/A		
>10 mm Natural Stone	1		
Total Volume Acceptable	**11.1**	**Total Volume Class X**	**0**
Total % Acceptable	**> 99%**	**Total % Unacceptable**	**< 1 %**
Pass / Fail	**Pass**		

e3p	Materials Forensic Constituents (Adopted RB17 method)		
Site Name:	Don Street	**Site Address:**	Land off Don Street, Middleton, M24 2GG
Stockpile Reference:	Stockpile 33	**Stockpile Volume (approx):**	1000 m3
Excavation Date(s)	20th - 29th September 2023	**Treament Date(s):**	N/A
Material Description:	Brown slightly sandy slightly gravelly clay. Gravel is fine to coarse, angular to rounded, of mudstone, sandstone, with fragments of brick, concrete and glass.		
Photographs showing whole sample emptied out onto sheet and following sorting into constituent parts	**Sample -Pre Sorting** 		**Sample -Post Sorting** 
No Sub Samples (Min 10)	10	**Total Sample Volume Composite (Litres)**	12.1 L
Sampler	G. Calvert	**Tester**	G. Calvert

Volumes Acceptable Materials (Litres)		**Volumes Class X Unacceptable Materials (Litres)**	
Volume Passing 10mm Sieve (Fines)	3.9	**Carboard / Paper**	N/A
Residual Consisting of Cohesive Soil	5.9	**Plastic/Fibreglass/Rubber**	N/A
>10mm Clay Masonary Units (Brick, tile etc)	0.8	**Timber/Vegetation**	0.05
>10mm Bituminous Material	N/A	**Glass**	0.05
>10 mm Concrete/Concreet Products	0.1		
>10 mm Natural Stone	1.3		
Total Volume Acceptable	**12**	**Total Volume Class X**	**0.1**
Total % Acceptable	**> 99%**	**Total % Unacceptable**	**< 1 %**
Pass / Fail	**Pass**		

e3p	Materials Forensic Constituents (Adopted RB17 method)		
Site Name:	Don Street	**Site Address:**	Land off Don Street, Middleton, M24 2GG
Stockpile Reference:	Stockpile 34	**Stockpile Volume (approx):**	1000 m3
Excavation Date(s)	18th - 29th September 2023	**Treament Date(s):**	N/A
Material Description:	Brown slightly sandy slightly gravelly clay. Gravel is fine to coarse, angular to rounded, of mudstone, sandstone, with fragments of brick and concrete. Rare timber and glass.		
Photographs showing whole sample emptied out onto sheet and following sorting into constituent parts	**Sample -Pre Sorting** 		**Sample -Post Sorting** 
No Sub Samples (Min 10)	10	**Total Sample Volume Composite (Litres)**	9.41 L
Sampler	G. Calvert	**Tester**	G. Calvert

Volumes Acceptable Materials (Litres)		**Volumes Class X Unacceptable Materials (Litres)**	
Volume Passing 10mm Sieve (Fines)	0.8	**Carboard / Paper**	N/A
Residual Consisting of Cohesive Soil	7	**Plastic/Fibreglass/Rubber**	N/A
>10mm Clay Masonary Units (Brick, tile etc)	0.2	**Timber/Vegetation**	0.05
>10mm Bituminous Material	0.05	**Glass**	<0.01
>10 mm Concrete/Concreet Products	0.3		
>10 mm Natural Stone	1		
Total Volume Acceptable	**9.35**	**Total Volume Class X**	**0.06**
Total % Acceptable	**> 99%**	**Total % Unacceptable**	**< 1 %**
Pass / Fail	**Pass**		

e3p	Materials Forensic Constituents (Adopted RB17 method)		
Site Name:	Don Street	**Site Address:**	Land off Don Street, Middleton, M24 2GG
Stockpile Reference:	Stockpile 37	**Stockpile Volume (approx):**	1000 m3
Excavation Date(s)	1st - 19th December 2023	**Treament Date(s):**	N/A
Material Description:	Brown slightly sandy slightly gravelly clay. Gravel is fine to coarse, angular to rounded, of mudstone, sandstone, with fragments of brick and concrete.		
Photographs showing whole sample emptied out onto sheet and following sorting into constituent parts	**Sample -Pre Sorting** 		**Sample -Post Sorting** 
No Sub Samples (Min 10)	10	**Total Sample Volume Composite (Litres)**	12.5 L
Sampler	G. Calvert	**Tester**	G. Calvert

Volumes Acceptable Materials (Litres)		**Volumes Class X Unacceptable Materials (Litres)**	
Volume Passing 10mm Sieve (Fines)	4.3	**Carboard / Paper**	N/A
Residual Consisting of Cohesive Soil	3.4	**Plastic/Fibreglass/Rubber**	N/A
>10mm Clay Masonary Units (Brick, tile etc)	1.8	**Timber/Vegetation**	N/A
>10mm Bituminous Material	N/A	**Glass**	N/A
>10 mm Concrete/Concreet Products	0.2		
>10 mm Natural Stone	2.8		
Total Volume Acceptable	**9.35**	**Total Volume Class X**	**<0.1**
Total % Acceptable	**> 99%**	**Total % Unacceptable**	**< 1 %**
Pass / Fail	**Pass**		