



Geo2 Remediation Ltd Coniston House
Louisa Street, Idle, BD10 8NE

0113 257 5397
info@geo2.co.uk
geo2.co.uk

Contaminated Land Officer
Rochdale Borough Council
Floor 3, Number One Riverside
Smith Street,
Rochdale,
OL16 1XU

15.09.2026

Geo² Ref: 26/5504A.1

To Whom it May Concern,

**RE: Validation of Imported Topsoil for Areas of Soft Landscaping
Starbucks, St Mary's Gate, Rochdale.
Planning Ref: 23/01279/FUL**

Background

Geo² Remediation Ltd were instructed by McFaddens Building and Civil Engineering Ltd to undertake validation works with respect to the areas of soft landscaping created as a part of the construction and development of a Drive Thru Café (Class E), located within the northern extent of the Dunelm car park, located off Whitworth Rd, Rochdale, OL12 0TY.

The topsoil has been imported from Vistry Homes, Mill Lane, Warrington. Laboratory analysis of a sample of the topsoil at the source site was undertaken by Tim O'Hare Associates in line with BS3882:2015 – Specification for Topsoil – Table 1, Multipurpose Topsoil.

Further soil testing is required by Rochdale Council in line with YALPAG's Verification Requirements for Cover Systems (Version 4.1, June 2021).

Site Works

A Geo² engineer visited site on 8th September 2026 and collected three soil samples from the areas of soft landscaping across the site. A copy of the landscape drawing with the locations of the sampling points is appended to this letter report for reference. Photographs of the completed landscaping and the hand excavated trial pits are appended to this report.

The topsoil was described as *brown sandy CLAY with rootlets*.

The three soil samples were placed in laboratory provided containers and stored in a cool box prior to being transported to the laboratory under the laboratory's chain of custody documentation. The laboratory used for the soil testing on this occasion was Envirolab, a UKAS and MCERTS accredited laboratory.

The three soil samples (referenced Topsoil 1, Topsoil 2 and Topsoil 3) were analysed for a broad suite of contaminants in line with Appendix 1a of the YALPAG guidance, with the source of the topsoil agreed to be a Greenfield site. Analysis included metals, PAHs, asbestos ID, TPHs and soil organic matter. The analysis was undertaken to confirm that the topsoil imported to site and placed in areas of soft landscaping presents a low risk to human health and the local environment.

Hand excavated trial pits were undertaken at the three sampling points in order to record the depth of the clean capping layer placed in the areas of soft landscaping across the development.

Hand Pitting

The table below summarises the depths of topsoil recorded at each of the sampling locations. All hand pits were terminated upon a gravel break-layer.

Location	Depth of Topsoil
Topsoil 1	230mm
Topsoil 2	230mm
Topsoil 3	240mm

Laboratory Testing Results

The results of the environmental chemical analysis are appended to the end of this report.

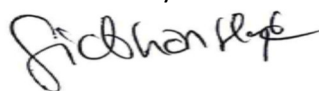
The results have been compared to the conservative 'Residential with plant uptake' Generic Assessment Criteria (GAC) thresholds. Soil organic matter (SOM) for the three topsoil samples has ranged from 2.65 to 3.6 % w/w , consequently, the analysis results have been compared to GAC thresholds associated with a 2.5% SOM.

No asbestos was identified within the three soil samples. No GAC threshold exceedances have been recorded, indicating the soil imported to site is suitable for use as a clean and inert capping and the soils present a Low risk to human health and the local environment.

The testing results are included at the end of this report, Envirolab ref. 26/11031

If you require any further information, please contact Geo2.

Yours sincerely



Siobhán Hyde
Principal

Geo² Remediation Limited

Included:

- Proposed landscape plan
- Envirolab lab results, ref. 26/11031
- Photographic record

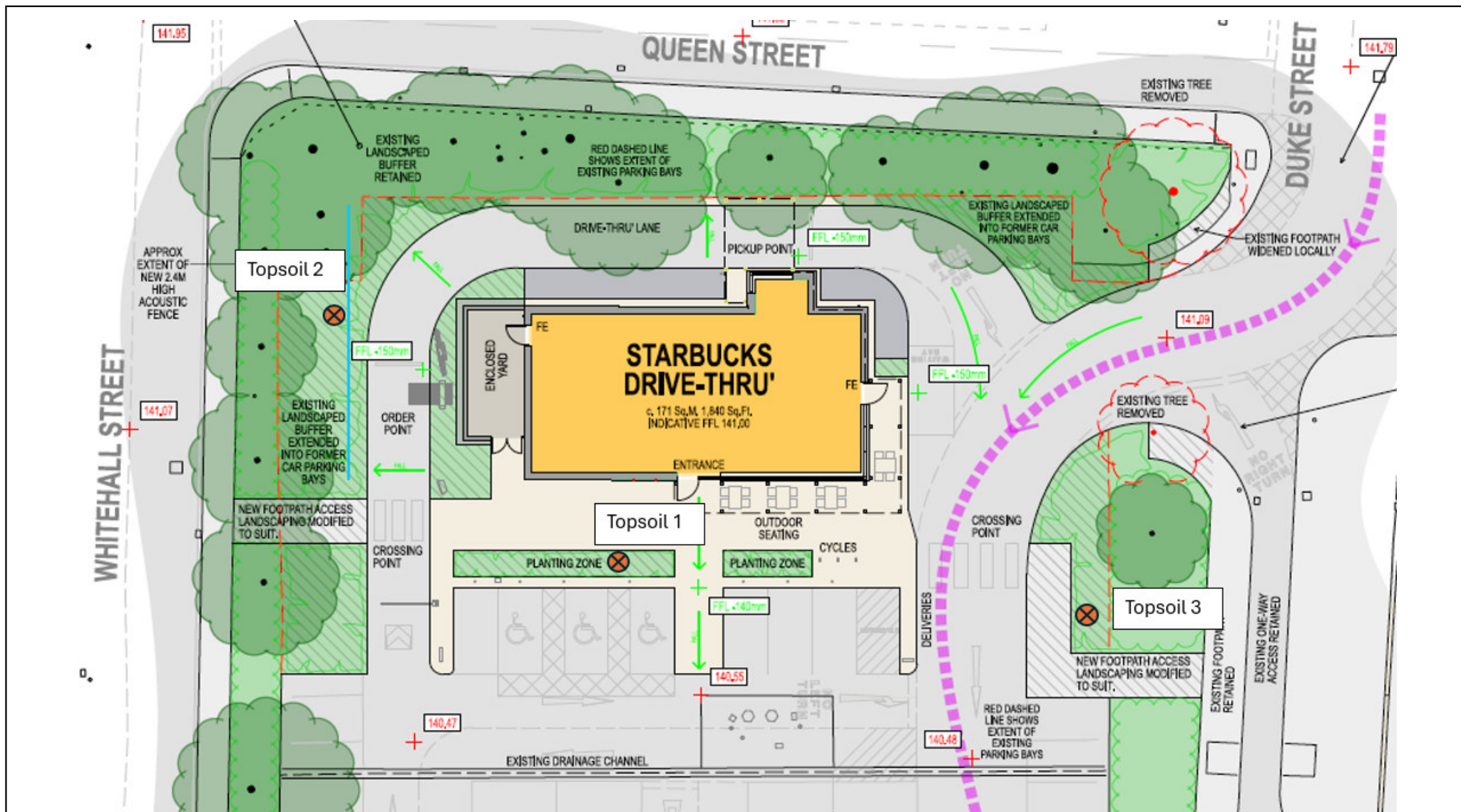


Figure 1 Approximate sampling / hand pitting locations

5504 Starbucks, Rochdale

Not to Scale

Geo2 Remediation Limited, Coniston House Louisa Street, Idle, W. Yorks, BD10 8NE

Tel: (0113) 2575397 www.geo2.co.uk

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 26/11031
Issue Number: 1

Date: 15 September, 2026

Client: Geo2 Remediation Ltd
Coniston House,
Louisa Street
Bradford
BD10 8NE

Project Manager: Siobhán Hyde
Project Name: Starbucks, St Mary's Gate, Rochdale
Project Ref: 5504
Order No: 5827
Date Samples Received: 08/09/26
Date Instructions Received: 08/09/26
Date Analysis Completed: 15/09/26

Approved by:



Richard Wong
Client Manager

Envirolab Job Number: 26/11031

Client Project Name: Starbucks, St Mary's Gate, Rochdale

Client Project Ref: 5504

Lab Sample ID	26/11031/1	26/11031/2	26/11031/3					Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	Topsoil 1	Topsoil 2	Topsoil 3							
Depth to Top										
Depth To Bottom										
Date Sampled	08-Sep-26	08-Sep-26	08-Sep-26							
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES							
Sample Matrix Code	4AE	6AE	6AE							
% Stones >10mm _A	<0.1	<0.1	<0.1					% w/w	0.1	A-T-044
Organic Matter _D ^{M#}	2.65	3.25	3.60					% w/w	0.14	A-T-032s
pH _D ^{M#}	7.50	7.29	7.83					pH	0.01	A-T-031s
Sulphate (water sol 2:1) _D ^{M#}	<0.01	<0.01	<0.01					g/l	0.01	A-T-026s
Arsenic _D ^{M#}	6	6	10					mg/kg	1	A-T-024s
Cadmium _D ^{M#}	<1.0	<1.0	<1.0					mg/kg	1	A-T-024s
Copper _D ^{M#}	20	24	28					mg/kg	1	A-T-024s
Chromium _D ^{M#}	15	17	16					mg/kg	1	A-T-024s
Chromium (hexavalent) _D	<1	<1	<1					mg/kg	1	A-T-040s
Chromium (trivalent)	15	17	16					mg/kg	1	Calc
Lead _D ^{M#}	32	36	46					mg/kg	1	A-T-024s
Mercury _D	<0.17	<0.17	<0.17					mg/kg	0.17	A-T-024s
Nickel _D ^{M#}	11	15	13					mg/kg	1	A-T-024s
Zinc _D ^{M#}	41	44	50					mg/kg	1	A-T-024s

Envirolab Job Number: 26/11031

Client Project Name: Starbucks, St Mary's Gate, Rochdale

Client Project Ref: 5504

Lab Sample ID	26/11031/1	26/11031/2	26/11031/3					Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	Topsoil 1	Topsoil 2	Topsoil 3							
Depth to Top										
Depth To Bottom										
Date Sampled	08-Sep-26	08-Sep-26	08-Sep-26							
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES							
Sample Matrix Code	4AE	6AE	6AE							
Asbestos in Soil (inc. matrix)										
Asbestos in soil [#]	NAD	NAD	NAD							A-T-045
Asbestos Matrix (visual) _D	-	-	-							A-T-045
Asbestos Matrix (microscope) _D	-	-	-							A-T-045
Asbestos ACM - Suitable for Water Absorption Test? _D	N/A	N/A	N/A							A-T-045

Envirolab Job Number: 26/11031

Client Project Name: Starbucks, St Mary's Gate, Rochdale

Client Project Ref: 5504

Lab Sample ID	26/11031/1	26/11031/2	26/11031/3					Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	Topsoil 1	Topsoil 2	Topsoil 3							
Depth to Top										
Depth To Bottom										
Date Sampled	08-Sep-26	08-Sep-26	08-Sep-26							
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES							
Sample Matrix Code	4AE	6AE	6AE							
PAH-16MS										
Acenaphthene _A ^{M#}	<0.01	0.05	0.02					mg/kg	0.01	A-T-019s
Acenaphthylene _A ^{M#}	<0.01	<0.01	<0.01					mg/kg	0.01	A-T-019s
Anthracene _A ^{M#}	<0.02	0.07	0.04					mg/kg	0.02	A-T-019s
Benzo(a)anthracene _A ^{M#}	<0.04	0.20	0.13					mg/kg	0.04	A-T-019s
Benzo(a)pyrene _A ^{M#}	<0.04	0.12	0.11					mg/kg	0.04	A-T-019s
Benzo(b)fluoranthene _A ^{M#}	<0.05	0.16	0.13					mg/kg	0.05	A-T-019s
Benzo(ghi)perylene _A ^{M#}	<0.05	<0.05	0.07					mg/kg	0.05	A-T-019s
Benzo(k)fluoranthene _A ^{M#}	<0.07	<0.07	<0.07					mg/kg	0.07	A-T-019s
Chrysene _A ^{M#}	<0.06	0.22	0.17					mg/kg	0.06	A-T-019s
Dibenzo(ah)anthracene _A ^{M#}	<0.04	<0.04	<0.04					mg/kg	0.04	A-T-019s
Fluoranthene _A ^{M#}	<0.08	0.48	0.29					mg/kg	0.08	A-T-019s
Fluorene _A ^{M#}	<0.01	0.02	0.01					mg/kg	0.01	A-T-019s
Indeno(123-cd)pyrene _A ^{M#}	<0.03	0.07	0.07					mg/kg	0.03	A-T-019s
Naphthalene _A ^{M#}	<0.03	<0.03	<0.03					mg/kg	0.03	A-T-019s
Phenanthrene _A ^{M#}	0.04	0.34	0.17					mg/kg	0.03	A-T-019s
Pyrene _A ^{M#}	<0.07	0.42	0.27					mg/kg	0.07	A-T-019s
Total PAH-16MS _A ^{M#}	<0.08	2.15	1.48					mg/kg	0.01	A-T-019s
TPH UKCWG GCxGC + GC Trace										
Ali >C5-C6 _A	<0.01	<0.01	<0.01					mg/kg	0.01	A-T-022s
Ali >C6-C8 _A	<0.01	<0.01	<0.01					mg/kg	0.01	A-T-022s
Ali >C8-C10 _A	<1	<1	<1					mg/kg	1	A-T-055s
Ali >C10-C12 _A ^{M#}	<1	<1	<1					mg/kg	1	A-T-055s
Ali >C12-C16 _A ^{M#}	<1	<1	<1					mg/kg	1	A-T-055s
Ali >C16-C21 _A ^{M#}	<1	<1	<1					mg/kg	1	A-T-055s
Ali >C21-C35 _A ^{M#}	4	4	21					mg/kg	1	A-T-055s
Ali >C35-C44 _A	<1	<1	8					mg/kg	1	A-T-055s
Total Aliphatics _A	4	4	29					mg/kg	1	Calc-As Recd
Aro >C5-C7 _A [#]	<0.01	<0.01	<0.01					mg/kg	0.01	A-T-022s
Aro >C7-C8 _A [#]	<0.01	<0.01	<0.01					mg/kg	0.01	A-T-022s
Aro >C8-C10 _A	<1	<1	1					mg/kg	1	A-T-055s
Aro >C10-C12 _A	<1	<1	<1					mg/kg	1	A-T-055s

Envirolab Job Number: 26/11031

Client Project Name: Starbucks, St Mary's Gate, Rochdale

Client Project Ref: 5504

Lab Sample ID	26/11031/1	26/11031/2	26/11031/3					Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	Topsoil 1	Topsoil 2	Topsoil 3							
Depth to Top										
Depth To Bottom										
Date Sampled	08-Sep-26	08-Sep-26	08-Sep-26							
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES							
Sample Matrix Code	4AE	6AE	6AE							
Aro >C12-C16 _A	1	1	2					mg/kg	1	A-T-055s
Aro >C16-C21 _A ^{M#}	<1	2	5					mg/kg	1	A-T-055s
Aro >C21-C35 _A ^{M#}	4	6	17					mg/kg	1	A-T-055s
Aro >C35-C44 _A	<1	<1	8					mg/kg	1	A-T-055s
Total Aromatics _A	5	10	34					mg/kg	1	Calc-As Recd
TPH (Ali & Aro >C5-C44) _A	8	13	63					mg/kg	1	Calc-As Recd
EPH CWG GCxGC FID Chromatogram _A	Appended	Appended	Appended							A-T-055s
BTEX - Benzene _A [#]	<0.01	<0.01	<0.01					mg/kg	0.01	A-T-022s
BTEX - Toluene _A [#]	<0.01	<0.01	<0.01					mg/kg	0.01	A-T-022s
BTEX - Ethyl Benzene _A [#]	<0.01	<0.01	<0.01					mg/kg	0.01	A-T-022s
BTEX - m & p Xylene _A [#]	<0.01	<0.01	<0.01					mg/kg	0.01	A-T-022s
BTEX - o Xylene _A [#]	<0.01	<0.01	<0.01					mg/kg	0.01	A-T-022s
MTBE _A [#]	<0.01	<0.01	<0.01					mg/kg	0.01	A-T-022s

Report Notes

General

- This report shall not be reproduced, except in full, without written approval from Envirolab.
- The client Sample No, Client Sample ID, Depth to top, Depth to Bottom and Date Sampled are all provided by the client and can affect the validity of results.
- The results reported herein relate only to the material supplied to the laboratory.
- The residue of any samples contained within this report, and any received within the same delivery, will be disposed of **four weeks** after the initial scheduling. For samples tested for Asbestos we will retain a portion of the dried sample for a minimum of **six months** after the initial Asbestos testing is completed.
- Analytical results reflect the quality of the sample at the time of analysis only.
- Opinions and Interpretations expressed are outside our scope of accreditation.
- A deviating sample report is appended and will indicate if samples or tests have been found to be deviating. Any test results affected may not be an accurate record of the concentration at the time of sampling and, as a result, may be invalid.
- If a sample is outside of the calibration range or affected by interferences then it may need diluting. This will result in the limit of detection (LOD) being raised.
- Subcontracted Analysis: Please see the appended report for any deviations, current LODs and accreditation status of the test.

Key

Superscript “#”	Accredited to ISO 17025
Superscript “M”	Accredited to MCertS
Superscript “U”	Individual result not accredited
None of the above symbols	Analysis unaccredited
Subscript “A”	Analysis performed on as-received Sample
Subscript “D”	Analysis performed on the dried sample, crushed to pass 2mm sieve.
Subscript “D” on Asbestos	Analysis performed on a dried aliquot of sample provided.
Subscript “A”	Analysis has dependant options against results. Details appear in the comments of your Sample receipt
Subscript “@”	Result is an opinion
IS	Insufficient Sample for analysis
US	Unsuitable Sample for analysis
NDP	No Determination Possible
NAD	No Asbestos Detected
Trace	Asbestos found not suitable for Gravimetric Quantification – not enough to accurately weigh.
N/A	Not applicable

Asbestos

Identification: Asbestos in soil analysis is performed on a dried aliquot of the submitted sample and cannot guarantee to identify asbestos if only present in small numbers as discrete fibres/fragments in the original sample.

Stones etc. are not removed from the sample prior to analysis

“Trace Asbestos Identified” will be reported if there is not enough present to verify the type.

Assigned Matrix Codes

1	SAND	6	CLAY/LOAM	A	Contains Stones
2	LOAM	7	OTHER	B	Contains Construction Rubble
3	CLAY	8	Asbestos Bulk (Only Asbestos ID accredited)	C	Contains visible hydrocarbons
4	LOAM/SAND	9	Incinerator Ash (some Metals accredited)	D	Contains glass / metal
5	SAND/CLAY			E	Contains roots / twigs

Note: 7,8,9 matrices are not covered by our ISO 17025 or MCertS accreditation, unless stated above.

Soil Chemical Analysis:

All results are reported as dry weight (<40°C).

For samples with Matrix Codes 1 - 6 natural stones, brick and concrete fragments >10mm and any extraneous material (visible glass, metal or twigs) are removed and excluded from the sample prior to analysis and reported results corrected to a whole sample basis. This is reported as '% stones >10mm'.

For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis and this supersedes any “A” subscripts

All analysis is performed on the sample as received for soil samples which are positive for asbestos or the client has informed asbestos may be present and/or if they are from outside the European Union and this supersedes any “D” subscripts.

TPH by method A-T-007:

For waters, free and visible oils are excluded from the sample used for analysis, so the reported result represents the dissolved phase only.

Results “with Clean up” indicates samples cleaned up with Silica during extraction.

EPH CWG (method A-T-055) from TPH CWG:

EPH CWG results have humics mathematically subtracted through instrument calculation.

Where these humic substances have been identified in any IDs from “TPH CWG with clean up” please note that the concentration is **NOT** included in the quantified results but present in the ID for information.

Electrical Conductivity of water by method A-T-037:

Results greater than 12900µS/cm @ 25°C / 11550µS/cm @ 20°C fall outside the calibration range and as such are unaccredited.

Please contact your client manager if you require any further information.

Envirolab Deviating Samples Report

Hattersley Science & Technology Park, Stockport Road, Hattersley, SK14 3QU
Tel. 0161 368 4921 email. ask@envlab.co.uk

Client:	Geo2 Remediation Ltd, Coniston House,, Louisa Street, Bradford, BD10 8NE	Project No:	26/11031
Project:	Starbucks, St Mary's Gate, Rochdale	Date Received:	08/09/2026 (am)
Clients Project No:	5504	Cool Box Temperatures (°C):	16.2

NO DEVIATIONS IDENTIFIED

If, at any point before reaching the laboratory, the temperature of the samples has breached those set in published standards, e.g. BS-EN 5667-3, ISO 18400-102:2017, then the concentration of any affected analytes may differ from that at the time of sampling.

Envirolab Analysis Dates

Lab Sample ID	26/11031/1	26/11031/2	26/11031/3
Client Sample No			
Client Sample ID/Depth	Topsoil 1	Topsoil 2	Topsoil 3
Date Sampled	08/09/26	08/09/26	08/09/26
A-T-019s	11/09/2026	11/09/2026	11/09/2026
A-T-022s	14/09/2026	14/09/2026	14/09/2026
A-T-024s	15/09/2026	15/09/2026	15/09/2026
A-T-026s	14/09/2026	14/09/2026	14/09/2026
A-T-031s	11/09/2026	11/09/2026	11/09/2026
A-T-032s	14/09/2026	14/09/2026	14/09/2026
A-T-040s	14/09/2026	14/09/2026	14/09/2026
A-T-044	15/09/2026	15/09/2026	15/09/2026
A-T-045	09/09/2026	09/09/2026	09/09/2026
A-T-055s	11/09/2026	11/09/2026	11/09/2026
Calc	15/09/2026	15/09/2026	15/09/2026
Calc-As Recd	14/09/2026	14/09/2026	14/09/2026

The above dates are the analysis completion dates, please note that these are not necessarily the date that the analysis was weighed/extracted.

End of Report

5504 – Starbucks, Rochdale – Photographic Survey

Image 1: Western site boundary at entrance to drive-thru



Image 2: Landscaping located in front of the new unit



Image 3: Landscaping at eastern boundary at entrance from Whitworth Rd



Image 4: Location of Topsoil 1 hand pit and sampling location, in front of new unit



Image 5: Thin cover of bark over 230mm of brown sandy clay topsoil



Image 6: 230mm topsoil recorded



5504 – Starbucks, Rochdale – Photographic Survey

Image 7: Image of the topsoil: sandy clay topsoil with rootlets



Image 8: Location of Topsoil 2 hand pit and sampling point, NW corner of the site



Image 9: Topsoil with stone observed at the base of the hand pit



Image 10: Topsoil 2 location = 230mm depth



Image 11: Location of Topsoil 3 sampling point and hand pit, eastern boundary



Image 12: Topsoil 3 location – woodchip / bark over topsoil



5504 – Starbucks, Rochdale – Photographic Survey

Image 13: Topsoil 3 location = 240mm topsoil	Image 14: Landscaping at the northeastern corner of the site at the exit of the drive-thru	Image 15:
		
Image 16:	Image 17:	Image 18: