

21/WCH/018/BL/JS/LR4

14th November 2024

FAO Elliot Lehman
Westchurch Homes
Kennedy House
31 Stamford Street
Altrincham
Cheshire
WA14 1ES



Dear Paul,

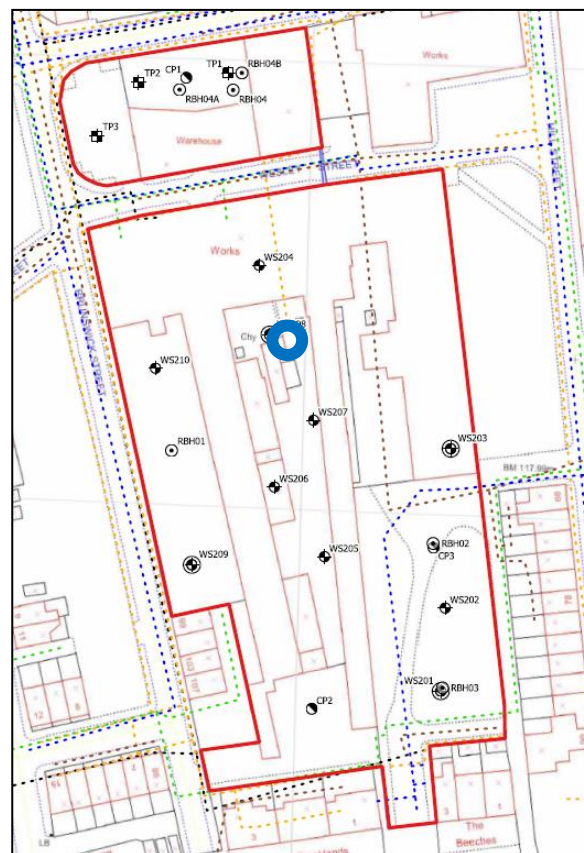
Brunswick Street – Removal of Gasometer & Delineation Work in Resultant Ground

Please find below a summary of the additional SI/delineation work that was undertaken at the site during the removal of the former gasometer. The gasometer and surrounding basement area was highlighted in the previous SI (21WCH018/GI dated November 2021 ref. A) as a hotspot, hydrocarbons were encountered in WS207.

1. Introduction

Betts Geo Ltd were commissioned by Westchurch Homes to supervise the removal of the former Gasometer at the above mentioned site and undertake delineation sampling in the resultant void to prove successful removal.

The location of the former gasometer can be seen on the extract below ringed in blue;



Old Marsh Farm Barns
Welsh Road, Sealand
Flintshire CH5 2LY
Telephone: 01244 288179
www.betts-associates.co.uk

The Betts Geo Remediation Strategy stated that an additional phase of site investigation was required post demolition to fully assess the extent of the contamination across site. This supervision of the removal of the former gasometer was part of this work.

2. Scope of Works

The work was undertaken between the 8th – 21st October 2024 and involved the part time supervision by a Geo-Environmental Engineer during the demolition and removal of the former gasometer area, as well as validation samples taken from the base/sides of any excavations in the area (thirteen samples taken in total).

3. Ground Conditions

The former gasometer area consisted of slabs of concrete and brick structures both above and below ground level. Below this was a mixture of Made Ground matrix's including a black sand & gravel with occasional ash and clinker, a reworked clay with cobbles and a black silty clay. A hydrocarbon stained made ground and possible tar product was encountered in the rounded brick structure circa 1.5mbgl-2mbgl (former gasometer) with a 450mm thick brick base. A basement was also encountered in the area which was dug out, no hydrocarbon staining was encountered in this area. Photographs of the ground conditions can be seen below;



Perched water was encountered in the former gasometer structure which had an oily sheen. This was pumped out of the excavation area and tankered off site for disposal (photographs below);





Any visibly contaminated material at the base of the gasometer was placed within visqueen lined skips for immediate disposal off site and any surrounding made ground material was placed in a separate stockpile on site which was placed next to the excavation.

Chemical analysis of the ashy made ground has been undertaken within the previously undertaken SI and is indicative of the made ground encountered elsewhere on site. It's understood that this material will be re-used on site beneath cover systems or where levels require uplifting where geotechnically suitable.

Below the made ground (once removed) was a firm greyish brown CLAY. This can be seen in the photographs below;

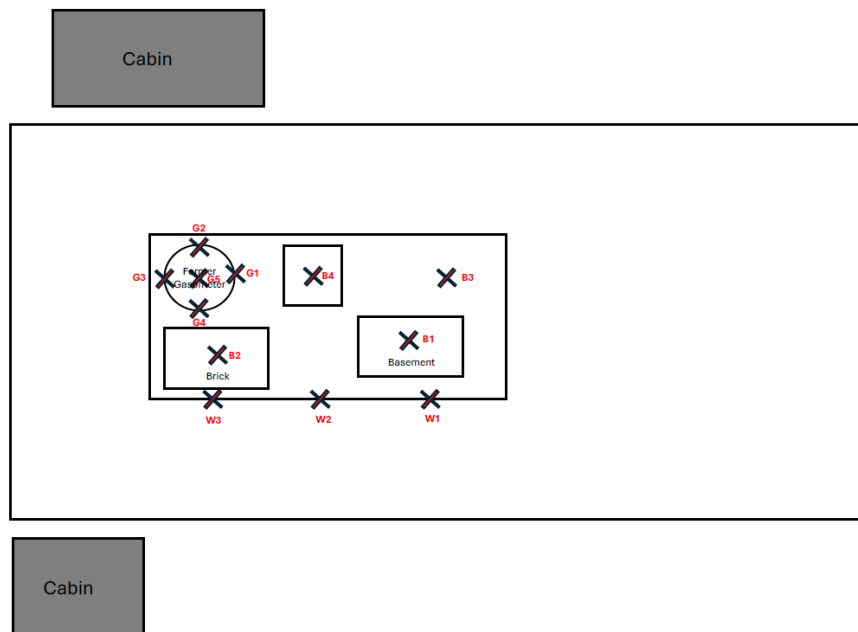


It is recommended that the resultant void is backfilled with geotechnically suitable sandy clay material from site, backfilled in layers with an imported 6f5 layer providing a piling mat for the proposed plots in this area.

4. Removal and Validation of Material

A Betts Geo Environmental engineer supervised the excavation of the former gasometer area. The MADE GROUND material was dug out until all evidence of possible contamination had been removed (aided by significant visual difference between MADE GROUND material and the hydrocarbon/tar contamination and odours).

Thirteen (13 No) chemical samples were taken from the base and the sides of the resultant void to prove all contaminated material had been removed. A drawing showing the sample locations can be seen below;



The samples were sent to a laboratory and analysed for heavy metals, PAH's, CWG TPH's and asbestos. All samples came back with no elevated determinants when compared against relevant screening values apart from two (2 No) slightly elevated occurrences of BTEX – Benzene in G1 & G5. The received Benzene values can be seen below:

- G1 – 0.12mg/kg (2.2% SOM) v guidance value of 0.0493mg/kg for 1% SOM
- G6 – 0.07mg/kg (2% SOM) v guidance value of 0.0493mg/kg for 1% SOM

It is important to note that the guidance value for 6% SOM is actually 0.33mg/kg and the DEFRA C4SL is 0.871mg/kg, of which both of the values received for G1 & G6 fall below.

Sample G1 was taken at a depth of 2.00mbgl and sample G5 was taken at a depth of 2.50mbgl, and therefore significant clean fill material will be placed above these slight elevations. As a result, the risk to site end users is deemed low as there is no pathway present between the source and the receptors resulting in an incomplete conceptual site model. Hydrocarbon resistant ground gas protection measures are required to the nearby plots to further mitigate the risk to site end users.

Clean cover systems as outlined in the Betts Geo remediation strategy reference 21WCH018/RS dated September 2022 should be applied to rear gardens and POS located on site.



5. Gas Membranes Required in Benzene Affected Plots (Plots 37 – 42)

Although the slightly elevated benzene identified in G1 & G6 has been risk assessed as low risk to site end users given the depth it was found at, and it being below the C4SL guidance values, there is still a possible vapour risk from this determinant.

As a result, it is recommended that a CS2 level hydrocarbon vapour resistant membrane is implemented in plots 37 – 42.

6. Conclusion

It can be concluded that the former gasometer and associated area has successfully been delineated, removed and validated.

It is advised that this letter report is submitted to the NHBC and Local Authority for approval.

We trust that this information is satisfactory and should you require any further clarification, please do not hesitate to contact me.

Yours sincerely

Beverley Lewis
Director
BETTS GEO ENVIRONMENTAL

Appended:
Verification Testing



Constructionline

SUMMARY OF CONTAMINATION ANALYSIS: METALS

Project Name Heywood Brunswal St
Project No 21WCH018
Date 11-Oct-24

SOIL TYPE					
SAMPLE LOCATION	W1	W2	W3	B1	B2
DEPTH (m)	1.00	1.00	1.00		
pH	5.52	8.21	8.25	7.68	8
Sulphate (water sol 2:1)	0.03	0.09	0.07	0.04	0.08
Organic matter	1.4	1.3	1.8	1.9	1.7
Arsenic	3	5	<1	3	2
Cadmium	<0.5	<0.5	<0.5	<0.5	<0.5
Copper	19	16	20	20	22
Chromium (hexavalent)	<1	<1	<1	<1	<1
Lead	11	19	11	11	13
Mercury	<0.17	<0.17	<0.17	<0.17	<0.17
Nickel	21	15	29	26	24
Selenium	<1	<1	2	<1	<1
Zinc	46	32	53	51	53
Asbestos in Soil	NAD	NAD	NAD	NAD	NAD
Asbestos Matrix	-	-	-	-	-
Quantification	-	-	-	-	-
Organic matter	1.4	1.3	1.8	1.9	1.7

Metals	Mean Value Test *	Range		LQM 2009	DEFRA C4SL 2017
	US ₉₅	Largest Value (mg/kg)	Smallest Value (mg/kg)	With Homegrown Produce (1% SOM)	
pH	8.63	8.25	5.52		-
Sulphate (water sol 2:1)	0.09	0.09	<0.01		-
Organic matter	1.87	1.90	1.30		
Arsenic	4.21	5.00	<1	37	37
Cadmium	0.50	<0.5	<0.5	11	22.1
Copper	21.49	22.00	16.00	2400	-
Chromium (hexavalent)	1.00	<1	<1	6	20.5
Lead	16.30	19.00	11.00		200
Mercury	0.17	<0.17	<0.17	11	-
Nickel	28.09	29.00	15.00	130	
Selenium	1.63	<1	<1	250	-
Zinc	55.45	53.00	32.00	3700	-

NOTE:

Any individual results and mean value tests above SGVs are shown RED highlighted.

Any outlier values which exceed relevant SGVs are shown in red

* - The calculations for the mean value test include outliers

** - Results for this determinand are assessed with no background levels taken into account

Results are expressed as mg/kg unless otherwise stated

ALL RESULTS PRESENTED ARE ASSESSED UNDER THE COMBINED CLEA ASSESSMENT CRITERION AS OUTLINED WITHIN SR4 ASSUMING NO FREE PRODUCT WAS OBSERVED DURING FIELDWORK- SEE 'GUIDANCE NOTES ON CONTAMINATION'.

LQM CIEH 2009 (+Nickel update 2105) guidance levels used. C4SL levels also referred to where necessary. LQM profiling tool should be used in order for Benzo(a)Pyrene to be used as a surrogate marker..

NAD - NO ASBESTOS DETECTED

TS - Topsoil, MG - Made Ground and N - Natural Ground

Methyl Mercury used for guidance purposes

SUMMARY OF CONTAMINATION ANALYSIS: TPH

Project Name Heywood Brunswal St
Project No 21WCH018
Date 11-Oct-24

SOIL TYPE					
SAMPLE LOCATION	W1	W2	W3	B1	B2
DEPTH (m)	1.00	1.00	1.00		
Ali >C5-C6	<0.01	<0.01	<0.01	<0.01	<0.01
Ali >C6-C8	<0.01	<0.01	<0.01	<0.01	<0.01
Ali >C8-C10	<1	<1	<1	<1	<1
Ali >C10-C12	<1	<1	<1	<1	<1
Ali >C12-C16	<1	<1	2	<1	<1
Ali >C16-C21	<1	<1	4	1	1
Ali >C21-C35	<1	2	6	4	4
Total Aliphatics	<1	2	12	5	5
Aro >C5-C7	<0.01	<0.01	<0.01	<0.01	<0.01
Aro >C7-C8	<0.01	<0.01	<0.01	<0.01	<0.01
Aro >C8-C10	<1	<1	<1	<1	<1
Aro >C10-C12	<1	<1	<1	<1	<1
Aro >C12-C16	<1	<1	2	1	<1
Aro >C16-C21	<1	<1	5	3	<1
Aro >C21-C35	<1	<1	8	4	2
Total Aromatics	<1	<1	15	8	2
TPH (Ali & Aro)	<1	2	27	13	7
BTEX - Benzene	<0.01	<0.01	<0.01	<0.01	<0.01
BTEX - Toluene	<0.01	<0.01	<0.01	<0.01	<0.01
BTEX - Ethyl Benzene	<0.01	<0.01	<0.01	<0.01	<0.01
BTEX - m & p Xylene	<0.01	<0.01	<0.01	<0.01	<0.01
BTEX - o Xylene	<0.01	<0.01	<0.01	<0.01	<0.01
MTBE	<0.01	<0.01	<0.01	<0.01	<0.01
Organic Matter	1.4	1.3	2.6	1.9	6

TPH	Mean Value Test *	Range		LQM SAUL 2009		
	US ₉₅	Largest Value (mg/kg)	Smallest Value (mg/kg)	1% SOM	2.5% SOM	6% SOM
Ali >C5-C6	0.01	<0.01	<0.01	42	78	160
Ali >C6-C8	0.01	<0.01	<0.01	100	230	530
Ali >C8-C10	1.00	<1	<1	27	35	150
Ali >C10-C12	1.00	<1	<1	130	330	760
Ali >C12-C16	1.63	2.00	<1	1100	2400	4300
Ali >C16-C21	2.88	4.00	<1	65000	92000	110000
Ali >C21-C35	5.26	6.00	<1			
Total Aliphatics	9.10	12.00	<1			
Aro >C5-C7	0.01	<0.01	<0.01	70	140	300
Aro >C7-C8	0.01	<0.01	<0.01	130	290	660
Aro >C8-C10	1.00	<1	<1	34	83	190
Aro >C10-C12	1.00	<1	<1	74	180	380
Aro >C12-C16	1.63	2.00	<1	140	330	660
Aro >C16-C21	3.91	5.00	<1	260	540	930
Aro >C21-C35	6.01	8.00	<1	1100	1500	1700
Total Aromatics	11.22	15.00	<1			
TPH (Ali & Aro)	20.13	27.00	<1			
BTEX - Benzene	0.01	<0.01	<0.01	0.087	0.17	0.37
BTEX - Toluene	0.01	<0.01	<0.01	130	290	660
BTEX - m & p Xylene	0.01	<0.01	<0.01	115	370	890
BTEX - o Xylene	0.01	<0.01	<0.01	60	140	330
MTBE (Ethylbenzene)	0.01	<0.01	<0.01	47	110	260

Results expressed as mg/kg air dried unless otherwise stated.

* - The calculations for the mean value test include outliers

NOTES:

LQM CIEH 2009 (+Nickel update 2105) guidance levels used. CASL levels also referred to where necessary. LQM profiling tool should be used in order for Benzo(a)Pyrene to be used as a surrogate marker.
NAD - NO ASBESTOS DETECTED

SEE 'GUIDANCE NOTES ON CONTAMINATION'.

UU Drinking Water Guidelines	
PE Threshold	
Total BTEX & MTBE	0.1
EC5-EC10 Ali-Aro	2
EC10-EC16 Ali-Aro	10
EC16-EC40 Ali-Aro	500

SUMMARY OF CONTAMINATION ANALYSIS: PAH

Project Name Heywood Brunswal St
Project No 21WCH018
Date 11-Oct-24

SOIL TYPE	0.00	0.00	0.00	0.00	0.00
SAMPLE LOCATION	W1	W2	W3	B1	B2
DEPTH (m)	1.00	1.00	1.00		
Acenaphthene	<0.01	<0.01	<0.01	<0.01	<0.01
Acenaphthylene	<0.01	<0.01	<0.01	<0.01	<0.01
Anthracene	<0.02	<0.02	<0.02	<0.02	<0.02
Benzo(a)anthracene	<0.04	0.06	<0.04	<0.04	<0.04
Benzo(a)pyrene	<0.04	<0.04	<0.04	<0.04	<0.04
Benzo(b)fluoranthene	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(ghi)perylene	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(k)fluoranthene	<0.07	<0.07	<0.07	<0.07	<0.07
Chrysene	<0.06	<0.06	<0.06	<0.06	<0.06
Dibenzo(ah)anthracene	<0.04	<0.04	<0.04	<0.04	<0.04
Fluoranthene	<0.08	<0.08	<0.08	<0.08	<0.08
Fluorene	<0.01	<0.01	<0.01	<0.01	<0.01
Indeno(123-cd)pyrene	<0.03	<0.03	<0.03	<0.03	<0.03
Naphthalene	<0.03	<0.03	<0.03	<0.03	<0.03
Phenanthrene	<0.03	0.03	0.06	<0.03	<0.03
Pyrene	<0.07	<0.07	<0.07	<0.07	<0.07
Organic Matter	1.4	1.3	1.8	1.9	1.7

PAH	Mean Value Test *	Range		LQM S4UL 2009			DEFRA's C4SL 2017
	US ₉₅	Largest Value (mg/kg)	Smallest Value (mg/kg)	1% SOM	2.5% SOM	6% SOM	6% SOM
Acenaphthene	0.01	<0.01	<0.01	210	510	1100	-
Acenaphthylene	0.01	<0.01	<0.01	170	420	920	-
Anthracene	0.02	<0.02	<0.02	2400	5400	11000	-
Benzo(a)anthracene	0.05	0.06	<0.04	7.2	11	13	-
Benzo(a)pyrene	0.04	<0.04	<0.04	2.2	2.7	3	4.95
Benzo(b)fluoranthene	0.05	<0.05	<0.05	2.6	3.3	3.7	-
Benzo(ghi)perylene	0.05	<0.05	<0.05	320	340	350	-
Benzo(k)fluoranthene	0.07	<0.07	<0.07	77	93	100	-
Chrysene	0.06	<0.06	<0.06	15	22	27	-
Dibenzo(ah)anthracene	0.04	<0.04	<0.04	0.24	0.28	0.3	-
Fluoranthene	0.08	<0.08	<0.08	280	560	890	-
Fluorene	0.01	<0.01	<0.01	170	400	860	-
Indeno(123-cd)pyrene	0.03	<0.03	<0.03	27	36	41	-
Naphthalene	0.03	<0.03	<0.03	2.3	5.6	13	-
Phenanthrene	0.05	0.06	<0.03	95	220	440	-
Pyrene	0.07	<0.07	<0.07	620	1200	2000	-

Results expressed as mg/kg air dried unless otherwise stated.

* - The calculations for the mean value test include outliers

NOTES:

LQM CIEH 2009 (+Nickel update 2105) guidance levels used. C4SL levels also referred to where necessary. LQM profiling tool should be used in order for Benzo(a)Pyrene to be used as a surrogate marker.
 NAD - NO ASBESTOS DETECTED

SEE 'GUIDANCE NOTES ON CONTAMINATION'.

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 24/09974
Issue Number: 1

Date: 23 October, 2024

Client: Betts Geo Environmental
Old Marsh Farm Barns
Welsh Road
Sealand
Flintshire
UK
CH5 2LY

Project Manager: Betts Geolab/Beverley Lewis
Project Name: Heywood Brunswal St
Project Ref: 21WCH018
Order No: BG5563
Date Samples Received: 15/10/24
Date Instructions Received: 15/10/24
Date Analysis Completed: 23/10/24

Approved by:



Richard Wong
Client Manager

Envirolab Job Number: 24/09974

Client Project Name: Heywood Brunswal St

Client Project Ref: 21WCH018

Lab Sample ID	24/09974/1	24/09974/2	24/09974/3	24/09974/4	24/09974/5			Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	W1	W2	W3	B1	B2					
Depth to Top	1.00	1.00	1.00							
Depth To Bottom										
Date Sampled	11-Oct-24	11-Oct-24	11-Oct-24	11-Oct-24	11-Oct-24					
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES					
Sample Matrix Code	5A	1A	3A	3	5					
% Stones >10mm _A	<0.1	2.1	<0.1	<0.1	<0.1			% w/w	0.1	A-T-044
pH _D ^{M#}	5.52	8.21	8.25	7.68	8.00			pH	0.01	A-T-031s
Sulphate (water sol 2:1) _D ^{M#}	0.03	0.09	0.07	0.04	0.08			g/l	0.01	A-T-026s
Cyanide (free) _A ^{M#}	<1	<1	<1	<1	<1			mg/kg	1	A-T-042sFCN
Cyanide (complex) _D ^{M#}	<1	<1	<1	<1	<1			mg/kg	1	Calc
Cyanide (total) _A ^{M#}	<1	<1	<1	<1	<1			mg/kg	1	A-T-042sTCN
Phenol _A	<0.2	<0.2	<0.2	<0.2	<0.2			mg/kg	0.2	A-T-050s
Organic Matter _D ^{M#}	1.4	1.3	1.8	1.9	1.7			% w/w	0.1	A-T-032s
Arsenic _D ^{M#}	3	5	<1	3	2			mg/kg	1	A-T-024s
Cadmium _D ^{M#}	<0.5	<0.5	<0.5	<0.5	<0.5			mg/kg	0.5	A-T-024s
Copper _D ^{M#}	19	16	20	20	22			mg/kg	1	A-T-024s
Chromium (hexavalent) _D	<1	<1	<1	<1	<1			mg/kg	1	A-T-040s
Lead _D ^{M#}	11	19	11	11	13			mg/kg	1	A-T-024s
Mercury _D	<0.17	<0.17	<0.17	<0.17	<0.17			mg/kg	0.17	A-T-024s
Nickel _D ^{M#}	21	15	29	26	24			mg/kg	1	A-T-024s
Selenium _D ^{M#}	<1	<1	2	<1	<1			mg/kg	1	A-T-024s
Zinc _D ^{M#}	46	32	53	51	53			mg/kg	5	A-T-024s
VPH total (>C5-C10)	<1.00	<1.00	<1.00	<1.00	<1.00			mg/kg	1	Calc-stone+mols

Envirolab Job Number: 24/09974

Client Project Name: Heywood Brunswal St

Client Project Ref: 21WCH018

Lab Sample ID	24/09974/1	24/09974/2	24/09974/3	24/09974/4	24/09974/5			Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	W1	W2	W3	B1	B2					
Depth to Top	1.00	1.00	1.00							
Depth To Bottom										
Date Sampled	11-Oct-24	11-Oct-24	11-Oct-24	11-Oct-24	11-Oct-24					
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES					
Sample Matrix Code	5A	1A	3A	3	5					
Asbestos in Soil (inc. matrix)										
Asbestos in soil _D [#]	NAD	NAD	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	N/A	N/A					A-T-045

Envirolab Job Number: 24/09974

Client Project Name: Heywood Brunswal St

Client Project Ref: 21WCH018

Lab Sample ID	24/09974/1	24/09974/2	24/09974/3	24/09974/4	24/09974/5			Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	W1	W2	W3	B1	B2					
Depth to Top	1.00	1.00	1.00							
Depth To Bottom										
Date Sampled	11-Oct-24	11-Oct-24	11-Oct-24	11-Oct-24	11-Oct-24					
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES					
Sample Matrix Code	5A	1A	3A	3	5					
PAH-16MS										
Acenaphthene _A ^{M#}	<0.01	<0.01	<0.01	<0.01	<0.01			mg/kg	0.01	A-T-019s
Acenaphthylene _A ^{M#}	<0.01	<0.01	<0.01	<0.01	<0.01			mg/kg	0.01	A-T-019s
Anthracene _A ^{M#}	<0.02	<0.02	<0.02	<0.02	<0.02			mg/kg	0.02	A-T-019s
Benzo(a)anthracene _A ^{M#}	<0.04	0.06	<0.04	<0.04	<0.04			mg/kg	0.04	A-T-019s
Benzo(a)pyrene _A ^{M#}	<0.04	<0.04	<0.04	<0.04	<0.04			mg/kg	0.04	A-T-019s
Benzo(b)fluoranthene _A ^{M#}	<0.05	<0.05	<0.05	<0.05	<0.05			mg/kg	0.05	A-T-019s
Benzo(ghi)perylene _A ^{M#}	<0.05	<0.05	<0.05	<0.05	<0.05			mg/kg	0.05	A-T-019s
Benzo(k)fluoranthene _A ^{M#}	<0.07	<0.07	<0.07	<0.07	<0.07			mg/kg	0.07	A-T-019s
Chrysene _A ^{M#}	<0.06	<0.06	<0.06	<0.06	<0.06			mg/kg	0.06	A-T-019s
Dibenzo(ah)anthracene _A ^{M#}	<0.04	<0.04	<0.04	<0.04	<0.04			mg/kg	0.04	A-T-019s
Fluoranthene _A ^{M#}	<0.08	<0.08	<0.08	<0.08	<0.08			mg/kg	0.08	A-T-019s
Fluorene _A ^{M#}	<0.01	<0.01	<0.01	<0.01	<0.01			mg/kg	0.01	A-T-019s
Indeno(123-cd)pyrene _A ^{M#}	<0.03	<0.03	<0.03	<0.03	<0.03			mg/kg	0.03	A-T-019s
Naphthalene _A ^{M#}	<0.03	<0.03	<0.03	<0.03	<0.03			mg/kg	0.03	A-T-019s
Phenanthrene _A ^{M#}	<0.03	0.03	0.06	<0.03	<0.03			mg/kg	0.03	A-T-019s
Pyrene _A ^{M#}	<0.07	<0.07	<0.07	<0.07	<0.07			mg/kg	0.07	A-T-019s
Total PAH-16MS _A ^{M#}	<0.08	0.09	<0.08	<0.08	<0.08			mg/kg	0.01	A-T-019s

Envirolab Job Number: 24/09974

Client Project Name: Heywood Brunswal St

Client Project Ref: 21WCH018

Lab Sample ID	24/09974/1	24/09974/2	24/09974/3	24/09974/4	24/09974/5			Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	W1	W2	W3	B1	B2					
Depth to Top	1.00	1.00	1.00							
Depth To Bottom										
Date Sampled	11-Oct-24	11-Oct-24	11-Oct-24	11-Oct-24	11-Oct-24					
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES					
Sample Matrix Code	5A	1A	3A	3	5					
TPH CWG with Clean Up										
Ali >C5-C6 _A	<0.01	<0.01	<0.01	<0.01	<0.01			mg/kg	0.01	A-T-022s
Ali >C6-C8 _A	<0.01	<0.01	<0.01	<0.01	<0.01			mg/kg	0.01	A-T-022s
Ali >C8-C10 _A	<1	<1	<1	<1	<1			mg/kg	1	A-T-055s
Ali >C10-C12 _A ^{M#}	<1	<1	<1	<1	<1			mg/kg	1	A-T-055s
Ali >C12-C16 _A ^{M#}	<1	<1	2	<1	<1			mg/kg	1	A-T-055s
Ali >C16-C21 _A ^{M#}	<1	<1	4	1	1			mg/kg	1	A-T-055s
Ali >C21-C35 _A ^{M#}	<1	2	6	4	4			mg/kg	1	A-T-055s
Total Aliphatics _A	<1	2	12	5	5			mg/kg	1	Calc-As Recd
Aro >C5-C7 _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01			mg/kg	0.01	A-T-022s
Aro >C7-C8 _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01			mg/kg	0.01	A-T-022s
Aro >C8-C10 _A	<1	<1	<1	<1	<1			mg/kg	1	A-T-055s
Aro >C10-C12 _A	<1	<1	<1	<1	<1			mg/kg	1	A-T-055s
Aro >C12-C16 _A	<1	<1	2	1	<1			mg/kg	1	A-T-055s
Aro >C16-C21 _A ^{M#}	<1	<1	5	3	<1			mg/kg	1	A-T-055s
Aro >C21-C35 _A ^{M#}	<1	<1	8	4	2			mg/kg	1	A-T-055s
Total Aromatics _A	<1	<1	15	8	2			mg/kg	1	Calc-As Recd
TPH (Ali & Aro >C5-C35) _A	<1	2	27	13	7			mg/kg	1	Calc-As Recd
BTEX - Benzene _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01			mg/kg	0.01	A-T-022s
BTEX - Toluene _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01			mg/kg	0.01	A-T-022s
BTEX - Ethyl Benzene _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01			mg/kg	0.01	A-T-022s
BTEX - m & p Xylene _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01			mg/kg	0.01	A-T-022s
BTEX - o Xylene _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01			mg/kg	0.01	A-T-022s
MTBE _A [#]	<0.01	<0.01	<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
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.

Quantification: Generally a 2 stage process including visual identification, hand picking and weighing, and fibre counting. Where ACMs are found a percentage asbestos is assigned to each with reference to ‘HSG264, Asbestos: The survey guide’ and the calculated asbestos content is expressed as a percentage of the dried soil sample aliquot used. If asbestos is identified as being present but is not in a form that is suitable for analysis by hand picking and weighing (normally if the asbestos is present as free fibres). “TRACE” will be reported as a quantification result.

PLEASE INFORM THE LABORATORY IF YOU WOULD LIKE THE STAGE 3 SEDIMENTATION PROCESS CARRIED OUT. Note this will be subcontracted.

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: Betts Geo Environmental, Old Marsh Farm Barns, Welsh Road, Sealand,
Flintshire, UK, CH5 2LY

Project: Heywood Brunswal St

Clients Project No: 21WCH018

Project No: 24/09974

Date Received: 15/10/2024 (am)

Cool Box Temperatures (°C): 16.8

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	24/09974/1	24/09974/2	24/09974/3	24/09974/4	24/09974/5
Client Sample No					
Client Sample ID/Depth	W1 1.00m	W2 1.00m	W3 1.00m	B1	B2
Date Sampled	11/10/24	11/10/24	11/10/24	11/10/24	11/10/24
A-T-019s	23/10/2024	23/10/2024	23/10/2024	23/10/2024	23/10/2024
A-T-022s	17/10/2024	17/10/2024	17/10/2024	17/10/2024	17/10/2024
A-T-024s	21/10/2024	21/10/2024	21/10/2024	21/10/2024	21/10/2024
A-T-026s	18/10/2024	18/10/2024	18/10/2024	18/10/2024	18/10/2024
A-T-031s	18/10/2024	18/10/2024	18/10/2024	18/10/2024	18/10/2024
A-T-032s	18/10/2024	18/10/2024	18/10/2024	18/10/2024	18/10/2024
A-T-040s	18/10/2024	18/10/2024	18/10/2024	18/10/2024	18/10/2024
A-T-042sFCN	17/10/2024	17/10/2024	17/10/2024	17/10/2024	17/10/2024
A-T-042sTCN	17/10/2024	17/10/2024	17/10/2024	17/10/2024	17/10/2024
A-T-044	18/10/2024	18/10/2024	18/10/2024	18/10/2024	18/10/2024
A-T-045	16/10/2024	16/10/2024	16/10/2024	16/10/2024	16/10/2024
A-T-050s	17/10/2024	17/10/2024	17/10/2024	17/10/2024	17/10/2024
A-T-055s	17/10/2024	17/10/2024	17/10/2024	17/10/2024	17/10/2024
Calc	17/10/2024	17/10/2024	17/10/2024	17/10/2024	17/10/2024
Calc-As Recd	17/10/2024	17/10/2024	17/10/2024	17/10/2024	17/10/2024
Calc-stone+mois	17/10/2024	17/10/2024	17/10/2024	17/10/2024	17/10/2024

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

SUMMARY OF CONTAMINATION ANALYSIS: SOIL

SUMMARY OF CONTAMINATION ANALYSIS: METALS

Project Name Brunswick St, Heywood
Project No 21WCH018
Date 21/10/2024

SOIL TYPE	-	-	-	-	-	-	-	-
SAMPLE LOCATION	B4	B5	B3	G1	G2	G3	G4	G5
DEPTH (m)				2.00	2.00	2.00	2.00	2.50
pH	8.7	7.67	8.68	9.25	8.48	7.94	8.58	9.32
Sulphate (water sol 2:1)	0.04	0.01	0.02	0.04	0.02	0.04	0.04	<0.01
Cyanide (free)	<1	<1	<1	<1	<1	<1	<1	<1
Cyanide (complex)	<1	<1	<1	<1	<1	<1	<1	<1
Cyanide (total)	<1	<1	<1	<1	<1	<1	<1	<1
Phenol	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Organic matter	1.9	1.8	2.1	2.2	1.4	1.9	2	2
Arsenic	5	3	<1	1	4	5	2	4
Cadmium	<0.5	0.6	0.5	0.7	<0.5	0.7	0.6	<0.5
Copper	24	24	24	26	23	25	24	19
Chromium (hexavalent)	<1	<1	<1	<1	<1	<1	<1	<1
Lead	20	14	12	13	12	19	13	10
Mercury	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Nickel	32	31	34	34	26	34	32	27
Selenium	<1	<1	<1	<1	<1	<1	<1	<1
Zinc	64	61	62	65	59	69	62	50
Asbestos in Soil	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD
Asbestos Matrix	-	-	-	-	-	-	-	-
Quantification	-	-	-	-	-	-	-	-
Organic matter	1.9	1.8	2.1	2.2	1.4	1.9	2	2

Metals	Mean Value Test *	Range		AtRisk 2017 (mg/kg)	AtRisk 2017 (mg/kg)	DEFRA C4SL 2017
	US ₉₅	Largest Value (mg/kg)	Smallest Value (mg/kg)	With Homegrown Produce (1% SOM)	With Homegrown Produce (6% SOM)	
pH	8.96	9.32	7.67			-
Sulphate (water sol 2:1)	0.04	0.04	0.01			-
Cyanide (free)	1.00	<1	<1			
Cyanide (complex)	1.00	<1	<1			
Cyanide (total)	1.00	<1	<1			
Phenol	0.20	<0.2	<0.2			
Organic matter	2.07	2.20	1.40			
Arsenic	4.22	5.00	<1	32	32	37
Cadmium	0.63	0.70	<0.5	10	10	22.1
Copper	25.01	26.00	19.00	4730	4790	-
Chromium (hexavalent)	1.00	<1	<1	3.62	3.63	20.5
Lead	16.48	20.00	10.00			200
Mercury	0.17	<0.17	<0.17	8.81	15.8	-
Nickel	33.36	34.00	26.00	EA/AtRisk withdrawn Aug 2015		
Selenium	1.00	<1	<1	375	375	-
Zinc	65.20	69.00	50.00	20000	20300	-

NOTE:

Any individual results and mean value tests above SGVs are shown RED highlighted.

Any outlier values which exceed relevant SGVs are shown in red

* - The calculations for the mean value test include outliers

** - Results for this determinand are assessed with no background levels taken into account

Results are expressed as mg/kg unless otherwise stated

ALL RESULTS PRESENTED ARE ASSESSED UNDER THE COMBINED CLEA ASSESSMENT CRITERION AS OUTLINED WITHIN SR4 ASSUMING NO FREE PRODUCT WAS OBSERVED DURING FIELDWORK- SEE 'GUIDANCE NOTES ON CONTAMINATION'.

SGVs are derived from the EA 2009 SGV's which are taken from AtRisk 2015. Category 4 screening levels have been adopted by the EA and have been included as new guidance.

Note: The SGV for elemental mercury has been used to assess total mercury concentrations at the site. The Environment Agency's Science Report SC050021 /Mercury SGV states that 'for general surface contamination and to simplify the assessment the SGV's for inorganic mercury can normally be compared with chemical analysis for total mercury content...'. Based on the latter, SGV for elemental mercury (170mg/kg) in the soil assessment is used

NAD - NO ASBESTOS DETECTED

TS - Topsoil, MG - Made Ground and N - Natural Ground

SUMMARY OF CONTAMINATION ANALYSIS: SOIL

SUMMARY OF CONTAMINATION ANALYSIS: TPH

Project Name Brunswick St, Heywood
 Project No 21WCH018
 Date 21/10/2024

SOIL TYPE	-	-	-	-	-	-	-	-
SAMPLE LOCATION	B4	B5	B3	G1	G2	G3	G4	G5
DEPTH (m)				2.00	2.00	2.00	2.00	2.50
Ali >C5-C6	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Ali >C6-C8	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.06
Ali >C8-C10	<1	<1	<1	<1	<1	<1	<1	2
Ali >C10-C12	<1	<1	<1	<1	<1	<1	<1	1
Ali >C12-C16	<1	1	<1	1	1	<1	2	3
Ali >C16-C21	<1	2	<1	1	1	<1	1	2
Ali >C21-C35	<1	4	<1	2	21	4	4	6
Total Aliphatics	<1	7	<1	5	24	4	7	15
Aro >C5-C7	<0.01	<0.01	<0.01	0.12	<0.01	<0.01	<0.01	0.07
Aro >C7-C8	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Aro >C8-C10	<1	2	<1	2	<1	2	<1	7
Aro >C10-C12	<1	2	<1	8	<1	2	<1	9
Aro >C12-C16	<1	11	<1	5	3	6	1	8
Aro >C16-C21	<1	13	<1	4	3	2	2	6
Aro >C21-C35	<1	6	<1	4	3	1	1	5
Total Aromatics	<1	34	<1	22	8	14	5	34
TPH (Ali & Aro)	<1	41	<1	27	31	18	12	49
BTEX - Benzene	<0.01	<0.01	<0.01	0.12	<0.01	<0.01	<0.01	0.07
BTEX - Toluene	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
BTEX - Ethyl Benzene	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
BTEX - m & p Xylene	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
BTEX - o Xylene	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
MTBE	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Organic Matter	1.9	1.8	2.1	2.2	1.4	1.9	2	2

TPH	Mean Value Test *	Range		AtRisk 2017 (mg/kg) Residential with Home Grown Produce	AtRisk 2017 (mg/kg) Residential with Home Grown Produce	DEFRA C4SL 2017
	US ₉₅	Largest Value (mg/kg)	Smallest Value (mg/kg)	1% SOM WITHOUT Free Product***	6% SOM WITHOUT Free Product***	6% SOM WITHOUT Free Product***
Ali >C5-C6	0.01	<0.01	<0.01	42.7	369	-
Ali >C6-C8	0.03	0.06	<0.01	99.3	1240	-
Ali >C8-C10	1.36	2.00	<1	13.9	204	-
Ali >C10-C12	1.00	1.00	<1	81.7	1180	-
Ali >C12-C16	1.87	3.00	<1	385	4130	-
Ali >C16-C21	1.56	2.00	<1			
Ali >C21-C35	9.76	21.00	<1	210000	210100	-
Total Aliphatics	13.25	24.00	<1			
Aro >C5-C7	0.06	0.12	<0.01	0.137	0.871	-
Aro >C7-C8	0.01	<0.01	<0.01	113	780	-
Aro >C8-C10	3.49	7.00	<1	20.5	232	-
Aro >C10-C12	5.37	9.00	<1	70	468	-
Aro >C12-C16	6.98	11.00	<1	165	830	-
Aro >C16-C21	6.68	13.00	<1	319	1040	-
Aro >C21-C35	4.13	6.00	<1	1120	1710	-
Total Aromatics	24.05	34.00	<1			
TPH (Ali & Aro)	34.35	49.00	<1			
BTEX - Benzene	0.06	0.12	<0.01	0.0493	0.33	0.871
BTEX - Toluene	0.01	<0.01	<0.01	113	780	-
BTEX - Ethyl Benzene	0.01	<0.01	<0.01	50.7	453	-
BTEX - m & p Xylene	0.01	<0.01	<0.01	24	312	-
BTEX - o Xylene	0.01	<0.01	<0.01	26.4	336	-
MTBE	0.01	<0.01	<0.01	27.6	220	-

Results expressed as mg/kg air dried unless otherwise stated.

* - The calculations for the mean value test include outliers

*** THESE RESULTS PRESENTED ARE ASSESSED UNDER THE COMBINED CLEA ASSESSMENT CRITERION AS OUTLINED WITHIN SR4 ASSUMING NO FREE PRODUCT WAS OBSERVED DURING FIELDWORK- SEE 'GUIDANCE NOTES ON CONTAMINATION'.

NOTES:

For the Purpose of this investigation- results will be assessed against RESIDENTIAL GUIDELINES WITH HOMEGROWN PRODUCE WITH NO FREE PRODUCT.

UU Drinking Water Guidelines	
PE Threshold	
Total BTEX & MTBE	0.1
EC5-EC10 Ali-Aro	2
EC10-EC16 Ali-Aro	10
EC16-EC40 Ali-Aro	500

SUMMARY OF CONTAMINATION ANALYSIS: SOIL

SUMMARY OF CONTAMINATION ANALYSIS: PAH

Project Name Brunswick St, Heywood
Project No 21WCH018
Date 21/10/24

SOIL TYPE	-	-	-	-	-	-	-	-
SAMPLE LOCATION	B4	B5	B3	G1	G2	G3	G4	G5
DEPTH (m)				2.00	2.00	2.00	2.00	2.50
Acenaphthene	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Acenaphthylene	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Anthracene	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Benzo(a)anthracene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Benzo(a)pyrene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Benzo(b)fluoranthene	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(ghi)perylene	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(k)fluoranthene	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07
Chrysene	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06
Dibenzo(ah)anthracene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Fluoranthene	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08
Fluorene	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	0.01
Indeno(123-cd)pyrene	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Naphthalene	<0.03	0.22	<0.03	<0.03	<0.03	0.05	<0.03	<0.03
Phenanthrene	0.08	<0.03	0.04	<0.03	<0.03	0.12	0.05	0.08
Pyrene	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07
Organic Matter	1.9	1.8	2.1	2.2	1.4	1.9	2	2

PAH	Mean Value Test *	Range		AtRisk 2017 (mg/kg) Residential with Home Grown Produce	AtRisk 2017 (mg/kg) Residential with Home Grown Produce	DEFRA's C4SL 2017
	US ₉₅	Largest Value (mg/kg)	Smallest Value (mg/kg)	1% SOM WITHOUT Free Product***	6% SOM WITHOUT Free Product***	6% SOM WITHOUT Free Product***
Acenaphthene	0.01	0.02	<0.01	608	2760	-
Acenaphthylene	0.01	<0.01	<0.01			-
Anthracene	0.02	<0.02	<0.02	10200	26200	-
Benzo(a)anthracene	0.04	<0.04	<0.04	4.52	8.54	-
Benzo(a)pyrene	0.04	<0.04	<0.04	1.51	2.05	4.95
Benzo(b)fluoranthene	0.05	<0.05	<0.05	7.72	9.86	-
Benzo(ghi)perylene	0.05	<0.05	<0.05	96.2	103	-
Benzo(k)fluoranthene	0.07	<0.07	<0.07	84.4	100	-
Chrysene	0.06	<0.06	<0.06	585	927	-
Dibenzo(ah)anthracene	0.04	<0.04	<0.04	0.838	1	-
Fluoranthene	0.08	<0.08	<0.08	983	2980	-
Fluorene	0.01	0.02	<0.01	735	2610	-
Indeno(123-cd)pyrene	0.03	<0.03	<0.03	7.31	9.75	-
Naphthalene	0.10	0.22	<0.03	0.829	12.2	-
Phenanthrene	0.08	0.12	<0.03			-
Pyrene	0.07	<0.07	<0.07	668	2120	-

Results expressed as mg/kg air dried unless otherwise stated.

* - The calculations for the mean value test include outliers

*** THESE RESULTS PRESENTED ARE ASSESSED UNDER THE COMBINED CLEA ASSESSMENT CRITERION AS OUTLINED WITHIN SR4 ASSUMING NO FREE PRODUCT WAS OBSERVED DURING FIELDWORK- SEE 'GUIDANCE NOTES ON CONTAMINATION'.

NOTES:

For the Purpose of this investigation- results will be assessed against **RESIDENTIAL GUIDELINES WITH HOMEGROWN PRODUCE WITH NO FREE PRODUCT.**

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 24/10282
Issue Number: 1

Date: 30 October, 2024

Client: Betts Geo Environmental
Old Marsh Farm Barns
Welsh Road
Sealand
Flintshire
UK
CH5 2LY

Project Manager: Betts Geolab/Beverley Lewis
Project Name: Brunswick St, Heywood
Project Ref: 21Way018
Order No: BG5567
Date Samples Received: 23/10/24
Date Instructions Received: 24/10/24
Date Analysis Completed: 30/10/24

Approved by:



Richard Wong
Client Manager

Envirolab Job Number: 24/10282

Client Project Name: Brunswick St, Heywood

Client Project Ref: 21Way018

Lab Sample ID	24/10282/1	24/10282/2	24/10282/3	24/10282/4	24/10282/5	24/10282/6	24/10282/7	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	B4	B5	B3	G1	G2	G3	G4			
Depth to Top				2.00	2.00	2.00	2.00			
Depth To Bottom										
Date Sampled	21-Oct-24	21-Oct-24	21-Oct-24	21-Oct-24	21-Oct-24	21-Oct-24	21-Oct-24			
Sample Type	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL			
Sample Matrix Code	6A	6A	6A	6A	6A	6A	6A			
% Stones >10mm _A	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	% w/w	0.1	A-T-044
pH _D ^{M#}	8.70	7.67	8.68	9.25	8.48	7.94	8.58	pH	0.01	A-T-031s
Sulphate (water sol 2:1) _D ^{M#}	0.04	0.01	0.02	0.04	0.02	0.04	0.04	g/l	0.01	A-T-026s
Cyanide (free) _A ^{M#}	<1	<1	<1	<1	<1	<1	<1	mg/kg	1	A-T-042sFCN
Cyanide (complex) ^{M#}	<1	<1	<1	<1	<1	<1	<1	mg/kg	1	Calc
Cyanide (total) _A ^{M#}	<1	<1	<1	<1	<1	<1	<1	mg/kg	1	A-T-042sTCN
Phenol _A	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	0.2	A-T-050s
Organic Matter _D ^{M#}	1.9	1.8	2.1	2.2	1.4	1.9	2.0	% w/w	0.1	A-T-032s
Arsenic _D ^{M#}	5	3	<1	1	4	5	2	mg/kg	1	A-T-024s
Cadmium _D ^{M#}	<0.5	0.6	0.5	0.7	<0.5	0.7	0.6	mg/kg	0.5	A-T-024s
Copper _D ^{M#}	24	24	24	26	23	25	24	mg/kg	1	A-T-024s
Chromium (hexavalent) _D	<1	<1	<1	<1	<1	<1	<1	mg/kg	1	A-T-040s
Lead _D ^{M#}	20	14	12	13	12	19	13	mg/kg	1	A-T-024s
Mercury _D	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	mg/kg	0.17	A-T-024s
Nickel _D ^{M#}	32	31	34	34	26	34	32	mg/kg	1	A-T-024s
Selenium _D ^{M#}	<1	<1	<1	<1	<1	<1	<1	mg/kg	1	A-T-024s
Zinc _D ^{M#}	64	61	62	65	59	69	62	mg/kg	5	A-T-024s
VPH total (>C5-C10)	<1.00	2.36	<1.00	2.47	<1.00	2.41	<1.00	mg/kg	1	Calc-stone+mols

Envirolab Job Number: 24/10282

Client Project Name: Brunswick St, Heywood

Client Project Ref: 21Way018

Lab Sample ID	24/10282/1	24/10282/2	24/10282/3	24/10282/4	24/10282/5	24/10282/6	24/10282/7	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	B4	B5	B3	G1	G2	G3	G4			
Depth to Top				2.00	2.00	2.00	2.00			
Depth To Bottom										
Date Sampled	21-Oct-24	21-Oct-24	21-Oct-24	21-Oct-24	21-Oct-24	21-Oct-24	21-Oct-24			
Sample Type	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL			
Sample Matrix Code	6A	6A	6A	6A	6A	6A	6A			
Asbestos in Soil (inc. matrix)										
Asbestos in soil _D [#]	NAD	NAD	NAD	NAD	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	N/A	N/A	N/A	N/A			A-T-045

Envirolab Job Number: 24/10282

Client Project Name: Brunswick St, Heywood

Client Project Ref: 21Way018

Lab Sample ID	24/10282/1	24/10282/2	24/10282/3	24/10282/4	24/10282/5	24/10282/6	24/10282/7	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	B4	B5	B3	G1	G2	G3	G4			
Depth to Top				2.00	2.00	2.00	2.00			
Depth To Bottom										
Date Sampled	21-Oct-24	21-Oct-24	21-Oct-24	21-Oct-24	21-Oct-24	21-Oct-24	21-Oct-24			
Sample Type	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL			
Sample Matrix Code	6A	6A	6A	6A	6A	6A	6A			
PAH-16MS										
Acenaphthene _A ^{M#}	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-019s
Acenaphthylene _A ^{M#}	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-019s
Anthracene _A ^{M#}	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	mg/kg	0.02	A-T-019s
Benzo(a)anthracene _A ^{M#}	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	0.04	A-T-019s
Benzo(a)pyrene _A ^{M#}	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	0.04	A-T-019s
Benzo(b)fluoranthene _A ^{M#}	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	mg/kg	0.05	A-T-019s
Benzo(ghi)perylene _A ^{M#}	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	mg/kg	0.05	A-T-019s
Benzo(k)fluoranthene _A ^{M#}	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	mg/kg	0.07	A-T-019s
Chrysene _A ^{M#}	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	mg/kg	0.06	A-T-019s
Dibenzo(ah)anthracene _A ^{M#}	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	0.04	A-T-019s
Fluoranthene _A ^{M#}	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	mg/kg	0.08	A-T-019s
Fluorene _A ^{M#}	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-019s
Indeno(123-cd)pyrene _A ^{M#}	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	mg/kg	0.03	A-T-019s
Naphthalene _A ^{M#}	<0.03	0.22	<0.03	<0.03	<0.03	0.05	<0.03	mg/kg	0.03	A-T-019s
Phenanthrene _A ^{M#}	0.08	<0.03	0.04	<0.03	<0.03	0.12	0.05	mg/kg	0.03	A-T-019s
Pyrene _A ^{M#}	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	mg/kg	0.07	A-T-019s
Total PAH-16MS _A ^{M#}	0.08	0.26	<0.08	<0.08	<0.08	0.17	<0.08	mg/kg	0.01	A-T-019s

Envirolab Job Number: 24/10282

Client Project Name: Brunswick St, Heywood

Client Project Ref: 21Way018

Lab Sample ID	24/10282/1	24/10282/2	24/10282/3	24/10282/4	24/10282/5	24/10282/6	24/10282/7	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	B4	B5	B3	G1	G2	G3	G4			
Depth to Top				2.00	2.00	2.00	2.00			
Depth To Bottom										
Date Sampled	21-Oct-24	21-Oct-24	21-Oct-24	21-Oct-24	21-Oct-24	21-Oct-24	21-Oct-24			
Sample Type	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL			
Sample Matrix Code	6A	6A	6A	6A	6A	6A	6A			
TPH CWG with Clean Up										
Ali >C5-C6 _A	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-022s
Ali >C6-C8 _A	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-022s
Ali >C8-C10 _A	<1	<1	<1	<1	<1	<1	<1	mg/kg	1	A-T-055s
Ali >C10-C12 _A ^{M#}	<1	<1	<1	<1	<1	<1	<1	mg/kg	1	A-T-055s
Ali >C12-C16 _A ^{M#}	<1	1	<1	1	1	<1	2	mg/kg	1	A-T-055s
Ali >C16-C21 _A ^{M#}	<1	2	<1	1	1	<1	1	mg/kg	1	A-T-055s
Ali >C21-C35 _A ^{M#}	<1	4	<1	2	21	4	4	mg/kg	1	A-T-055s
Total Aliphatics _A	<1	7	<1	5	24	4	7	mg/kg	1	Calc-As Recd
Aro >C5-C7 _A [#]	<0.01	<0.01	<0.01	0.12	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-022s
Aro >C7-C8 _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-022s
Aro >C8-C10 _A	<1	2	<1	2	<1	2	<1	mg/kg	1	A-T-055s
Aro >C10-C12 _A	<1	2	<1	8	<1	2	<1	mg/kg	1	A-T-055s
Aro >C12-C16 _A	<1	11	<1	5	3	6	1	mg/kg	1	A-T-055s
Aro >C16-C21 _A ^{M#}	<1	13	<1	4	3	2	2	mg/kg	1	A-T-055s
Aro >C21-C35 _A ^{M#}	<1	6	<1	4	3	1	1	mg/kg	1	A-T-055s
Total Aromatics _A	<1	34	<1	22	8	14	5	mg/kg	1	Calc-As Recd
TPH (Ali & Aro >C5-C35) _A	<1	41	<1	27	31	18	12	mg/kg	1	Calc-As Recd
BTEX - Benzene _A [#]	<0.01	<0.01	<0.01	0.12	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-022s
BTEX - Toluene _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-022s
BTEX - Ethyl Benzene _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-022s
BTEX - m & p Xylene _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-022s
BTEX - o Xylene _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-022s
MTBE _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-022s

Envirolab Job Number: 24/10282

Client Project Name: Brunswick St, Heywood

Client Project Ref: 21Way018

Lab Sample ID	24/10282/8							Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	G5									
Depth to Top	2.50									
Depth To Bottom										
Date Sampled	21-Oct-24									
Sample Type	SOIL									
Sample Matrix Code	6A									
% Stones >10mm _A	3.3							% w/w	0.1	A-T-044
pH _D ^{M#}	9.32							pH	0.01	A-T-031s
Sulphate (water sol 2:1) _D ^{M#}	<0.01							g/l	0.01	A-T-026s
Cyanide (free) _A ^{M#}	<1							mg/kg	1	A-T-042sFCN
Cyanide (complex) _D ^{M#}	<1							mg/kg	1	Calc
Cyanide (total) _A ^{M#}	<1							mg/kg	1	A-T-042sTCN
Phenol _A	<0.2							mg/kg	0.2	A-T-050s
Organic Matter _D ^{M#}	2.0							% w/w	0.1	A-T-032s
Arsenic _D ^{M#}	4							mg/kg	1	A-T-024s
Cadmium _D ^{M#}	<0.5							mg/kg	0.5	A-T-024s
Copper _D ^{M#}	19							mg/kg	1	A-T-024s
Chromium (hexavalent) _D	<1							mg/kg	1	A-T-040s
Lead _D ^{M#}	10							mg/kg	1	A-T-024s
Mercury _D	<0.17							mg/kg	0.17	A-T-024s
Nickel _D ^{M#}	27							mg/kg	1	A-T-024s
Selenium _D ^{M#}	<1							mg/kg	1	A-T-024s
Zinc _D ^{M#}	50							mg/kg	5	A-T-024s
VPH total (>C5-C10)	9.17							mg/kg	1	Calc-stone+mols

Envirolab Job Number: 24/10282

Client Project Name: Brunswick St, Heywood

Client Project Ref: 21Way018

Lab Sample ID	24/10282/8							Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	G5									
Depth to Top	2.50									
Depth To Bottom										
Date Sampled	21-Oct-24									
Sample Type	SOIL									
Sample Matrix Code	6A									
Asbestos in Soil (inc. matrix)										
Asbestos in soil _D [#]	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									A-T-045

Envirolab Job Number: 24/10282

Client Project Name: Brunswick St, Heywood

Client Project Ref: 21Way018

Lab Sample ID	24/10282/8							Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	G5									
Depth to Top	2.50									
Depth To Bottom										
Date Sampled	21-Oct-24									
Sample Type	SOIL									
Sample Matrix Code	6A									
PAH-16MS										
Acenaphthene _A ^{M#}	<0.01							mg/kg	0.01	A-T-019s
Acenaphthylene _A ^{M#}	<0.01							mg/kg	0.01	A-T-019s
Anthracene _A ^{M#}	<0.02							mg/kg	0.02	A-T-019s
Benzo(a)anthracene _A ^{M#}	<0.04							mg/kg	0.04	A-T-019s
Benzo(a)pyrene _A ^{M#}	<0.04							mg/kg	0.04	A-T-019s
Benzo(b)fluoranthene _A ^{M#}	<0.05							mg/kg	0.05	A-T-019s
Benzo(ghi)perylene _A ^{M#}	<0.05							mg/kg	0.05	A-T-019s
Benzo(k)fluoranthene _A ^{M#}	<0.07							mg/kg	0.07	A-T-019s
Chrysene _A ^{M#}	<0.06							mg/kg	0.06	A-T-019s
Dibenzo(ah)anthracene _A ^{M#}	<0.04							mg/kg	0.04	A-T-019s
Fluoranthene _A ^{M#}	<0.08							mg/kg	0.08	A-T-019s
Fluorene _A ^{M#}	0.01							mg/kg	0.01	A-T-019s
Indeno(123-cd)pyrene _A ^{M#}	<0.03							mg/kg	0.03	A-T-019s
Naphthalene _A ^{M#}	<0.03							mg/kg	0.03	A-T-019s
Phenanthrene _A ^{M#}	0.08							mg/kg	0.03	A-T-019s
Pyrene _A ^{M#}	<0.07							mg/kg	0.07	A-T-019s
Total PAH-16MS _A ^{M#}	0.09							mg/kg	0.01	A-T-019s

Envirolab Job Number: 24/10282

Client Project Name: Brunswick St, Heywood

Client Project Ref: 21Way018

Lab Sample ID	24/10282/8									
Client Sample No										
Client Sample ID	G5									
Depth to Top	2.50									
Depth To Bottom										
Date Sampled	21-Oct-24									
Sample Type	SOIL									
Sample Matrix Code	6A									
TPH CWG with Clean Up										
Ali >C5-C6 _A	<0.01							mg/kg	0.01	A-T-022s
Ali >C6-C8 _A	0.06							mg/kg	0.01	A-T-022s
Ali >C8-C10 _A	2							mg/kg	1	A-T-055s
Ali >C10-C12 _A ^{M#}	1							mg/kg	1	A-T-055s
Ali >C12-C16 _A ^{M#}	3							mg/kg	1	A-T-055s
Ali >C16-C21 _A ^{M#}	2							mg/kg	1	A-T-055s
Ali >C21-C35 _A ^{M#}	6							mg/kg	1	A-T-055s
Total Aliphatics _A	15							mg/kg	1	Calc-As Recd
Aro >C5-C7 _A [#]	0.07							mg/kg	0.01	A-T-022s
Aro >C7-C8 _A [#]	<0.01							mg/kg	0.01	A-T-022s
Aro >C8-C10 _A	7							mg/kg	1	A-T-055s
Aro >C10-C12 _A	9							mg/kg	1	A-T-055s
Aro >C12-C16 _A	8							mg/kg	1	A-T-055s
Aro >C16-C21 _A ^{M#}	6							mg/kg	1	A-T-055s
Aro >C21-C35 _A ^{M#}	5							mg/kg	1	A-T-055s
Total Aromatics _A	34							mg/kg	1	Calc-As Recd
TPH (Ali & Aro >C5-C35) _A	49							mg/kg	1	Calc-As Recd
BTEX - Benzene _A [#]	0.07							mg/kg	0.01	A-T-022s
BTEX - Toluene _A [#]	<0.01							mg/kg	0.01	A-T-022s
BTEX - Ethyl Benzene _A [#]	<0.01							mg/kg	0.01	A-T-022s
BTEX - m & p Xylene _A [#]	<0.01							mg/kg	0.01	A-T-022s
BTEX - o Xylene _A [#]	<0.01							mg/kg	0.01	A-T-022s
MTBE _A [#]	<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
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.

Quantification: Generally a 2 stage process including visual identification, hand picking and weighing, and fibre counting. Where ACMs are found a percentage asbestos is assigned to each with reference to ‘HSG264, Asbestos: The survey guide’ and the calculated asbestos content is expressed as a percentage of the dried soil sample aliquot used. If asbestos is identified as being present but is not in a form that is suitable for analysis by hand picking and weighing (normally if the asbestos is present as free fibres). “TRACE” will be reported as a quantification result.

PLEASE INFORM THE LABORATORY IF YOU WOULD LIKE THE STAGE 3 SEDIMENTATION PROCESS CARRIED OUT. Note this will be subcontracted.

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: Betts Geo Environmental, Old Marsh Farm Barns, Welsh Road, Sealand,
Flintshire, UK, CH5 2LY

Project: Brunswick St, Heywood

Clients Project No: 21Way018

Project No: 24/10282

Date Received: 24/10/2024 (am)

Cool Box Temperatures (°C): 16.1

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	24/10282/1	24/10282/2	24/10282/3	24/10282/4	24/10282/5	24/10282/6	24/10282/7	24/10282/8
Client Sample No								
Client Sample ID/Depth	B4	B5	B3	G1 2.00m	G2 2.00m	G3 2.00m	G4 2.00m	G5 2.50m
Date Sampled	21/10/24	21/10/24	21/10/24	21/10/24	21/10/24	21/10/24	21/10/24	21/10/24
A-T-019s	29/10/2024	29/10/2024	29/10/2024	29/10/2024	29/10/2024	29/10/2024	29/10/2024	29/10/2024
A-T-022s	28/10/2024	28/10/2024	28/10/2024	28/10/2024	28/10/2024	28/10/2024	28/10/2024	28/10/2024
A-T-024s	30/10/2024	30/10/2024	30/10/2024	30/10/2024	30/10/2024	30/10/2024	30/10/2024	30/10/2024
A-T-026s	29/10/2024	29/10/2024	29/10/2024	29/10/2024	29/10/2024	29/10/2024	29/10/2024	29/10/2024
A-T-031s	28/10/2024	28/10/2024	28/10/2024	28/10/2024	28/10/2024	28/10/2024	28/10/2024	28/10/2024
A-T-032s	29/10/2024	29/10/2024	29/10/2024	29/10/2024	29/10/2024	29/10/2024	29/10/2024	29/10/2024
A-T-040s	29/10/2024	29/10/2024	29/10/2024	29/10/2024	29/10/2024	29/10/2024	29/10/2024	29/10/2024
A-T-042sFCN	28/10/2024	28/10/2024	28/10/2024	28/10/2024	28/10/2024	28/10/2024	28/10/2024	28/10/2024
A-T-042sTCN	28/10/2024	28/10/2024	28/10/2024	28/10/2024	28/10/2024	28/10/2024	28/10/2024	28/10/2024
A-T-044	28/10/2024	28/10/2024	28/10/2024	28/10/2024	28/10/2024	28/10/2024	28/10/2024	28/10/2024
A-T-045	25/10/2024	25/10/2024	25/10/2024	25/10/2024	25/10/2024	25/10/2024	25/10/2024	25/10/2024
A-T-050s	29/10/2024	29/10/2024	29/10/2024	29/10/2024	29/10/2024	29/10/2024	29/10/2024	29/10/2024
A-T-055s	28/10/2024	28/10/2024	28/10/2024	28/10/2024	28/10/2024	28/10/2024	28/10/2024	28/10/2024
Calc	28/10/2024	28/10/2024	28/10/2024	28/10/2024	28/10/2024	28/10/2024	28/10/2024	28/10/2024
Calc-As Recd	28/10/2024	28/10/2024	28/10/2024	28/10/2024	28/10/2024	28/10/2024	28/10/2024	28/10/2024
Calc-stone+mois	28/10/2024	28/10/2024	28/10/2024	28/10/2024	28/10/2024	28/10/2024	28/10/2024	28/10/2024

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