

15th December 2025

FAO Elliot Lehman - Westchurch
(Via Email: Elliot.lehman@westchurchhomes.co.uk)

Dear Elliot,

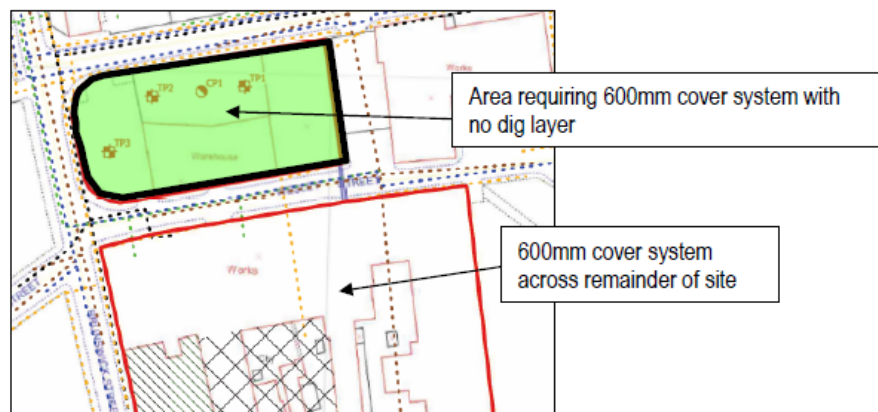
Brunswick Street, Heywood – Soil Cover System Assessment – Plots 17-21 & 23-26.

Please find below our clean-cover system validation data at the above-mentioned site / plots.

Overview

Betts Geo Ltd were instructed to validate the clean cover system applied within residential gardens at the above site as per the recommendations within the Remediation Statement undertaken by Betts Geo Ltd in September 2022 (Ref; 21WCH018/RS)

The report recommends:



Within Garden Areas (Northern Parcel)

150mm topsoil
450mm subsoil (free of coarse granular material in the upper 150mm) with no dig layer at base

Within Garden Areas (Rest of Site)

150mm topsoil
450mm subsoil (free of coarse granular material in the upper 150mm)

Plots in northern area requiring 600mm clean cover system plus no-dig layer are plots 1-8.
Remainder of site is 600mm clean cover system only.



Old Marsh Farm Barns
Welsh Road, Sealand
Flintshire CH5 2LY
Telephone: 01244 288179
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Suitability of the Topsoil and Subsoil

The composition of the topsoil and subsoil materials on site were visually inspected in-situ during sampling on 28th November 2025. Inspection confirms that the topsoil is debris free dark brown slightly sandy CLAY and subsoil material is red-brown clayey SAND, both topsoil and subsoil are physically suitable for their proposed end use.

Topsoil Source – Sandham House

Subsoil Source – Bacup Quarry

Cover System Depth Validation

Trial holes undertaken in the rear gardens of plots 18-21,23,25 on 28th November 2025 and plots 17, 24 & 26 on 12th December 2025 confirmed that the topsoil thickness was greater than 150mm; the subsoil was a typical thickness greater than 450mm completing the required 600mm clean cover system.

Chemical Validation of Topsoil

The topsoil was chemically tested in-situ at 0.10mbgl in the rear garden area of plots 18,21,24 and 26 on 28th November 2025 on a sample ratio of 1:3 garden basis in accordance with NHBC guidance.

Samples were taken in-situ at a sample rate of 1:3 garden areas per strata i.e. 4 samples were taken.

Analysis has been scheduled for the standard 'CLEA' Metals (including Chromium VI), speciated TPH to CWG and Speciated PAH's.

No visual or olfactory evidence of contamination was noted within any of the samples.

These results were screened against the same criteria i.e. EA/CIEH/LQM residential guidance for suitability.

All results fall below relevant standard guidance levels.

Chemical Validation of Subsoil

The subsoil was chemically tested in-situ in the rear garden area of plot 18 at 0.50mbgl, plot 21 at 0.45mbgl, plot 24 at 0.30mbgl and plot 26 at 0.30mbgl on 28th November 2025 on a sample ratio of 1:3 garden basis in accordance with NHBC guidance.

Samples were taken in-situ at a sample rate of 1:3 garden areas per strata i.e. 4 samples were taken.



Analysis has been scheduled for the standard 'CLEA' Metals (including Chromium VI), speciated TPH to CWG and Speciated PAH's.

No visual or olfactory evidence of contamination was noted within any of the samples.

These results were screened against the same criteria i.e. EA/CIEH/LQM residential guidance for suitability.

All results fall below relevant standard guidance levels.

Summary

Betts Geo Environmental confirms that the soil is acceptable for use within gardens as such the capping requirements for plots 17-21 and 23-26 are complete.

We trust that this information is satisfactory for your further assessment to release the conditions.

Should you require any further clarification please do not hesitate in giving us a call.

Yours Sincerely,



Graham Clark
BETTS GEO ENVIRONMENTAL LIMITED

Encl –
Evidentiary Photographs
Plots 18,21,24 and 26 Screening





Plot 17



Plot 18



Plot 19



Plot 20



Plot 21



Plot 23



Plot 24



Plot 25



Plot 26



SUMMARY OF CONTAMINATION ANALYSIS: SOIL

SUMMARY OF CONTAMINATION ANALYSIS: METALS

Project Name Brunswick St
Project No 21WCH018
Date 28/11/2025

SOIL TYPE	TS	SS	TS	SS	TS	SS	TS	SS
SAMPLE LOCATION	Plot 18	Plot 18	Plot 21	Plot 21	Plot 24	Plot 24	Plot 26	Plot 26
DEPTH (m)	0.10	0.50	0.10	0.45	0.10	0.30	0.10	0.30
pH	6.47	7.17	7	7.67	7.16	8.11	7.43	7.69
Sulphate (water sol 2:1)	0.04	0.03	0.02	0.06	0.04	0.03	0.02	0.03
Organic matter	8.66	5.35	3.07	2.38	5.46	4.52	3.76	3.82
Arsenic	5	4	6	2	6	2	5	6
Cadmium	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Copper	20	34	15	11	21	67	22	45
Chromium (hexavalent)	<1	<1	<1	<1	<1	<1	<1	<1
Lead	33	37	32	21	36	29	36	69
Mercury	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Nickel	15	21	10	23	12	24	12	22
Selenium	<1	<1	<1	<1	<1	<1	<1	<1
Zinc	38	71	34	42	42	105	47	128
Asbestos in Soil	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD
Asbestos Matrix	-	-	-	-	-	-	-	-
Quantification	-	-	-	-	-	-	-	-
Organic matter	8.66	5.35	3.07	2.38	5.46	4.52	3.76	3.82

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	7.67	7.69	6.47		-
Sulphate (water sol 2:1)	0.04	0.06	0.02		-
Organic matter	5.93	8.66	2.38		
Arsenic	5.63	6.00	2.00	37	37
Cadmium	1.00	<1.0	<1.0	11	22.1
Copper	41.88	67.00	11.00	2400	-
Chromium (hexavalent)	1.00	<1	<1	6	20.5
Lead	46.05	69.00	21.00		200
Mercury	0.17	<0.17	<0.17	11	-
Nickel	21.20	24.00	10.00	130	
Selenium	1.00	<1	<1	250	-
Zinc	86.93	128.00	34.00	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: SOIL

SUMMARY OF CONTAMINATION ANALYSIS: TPH

Project Name Brunswick St
Project No 21WCH018
Date 28/11/2025

SOIL TYPE	TS	SS	TS	SS	TS	SS	TS	SS
SAMPLE LOCATION	Plot 18	Plot 18	Plot 21	Plot 21	Plot 24	Plot 24	Plot 26	Plot 26
DEPTH (m)	0.10	0.50	0.10	0.45	0.10	0.30	0.10	0.30
Alii>C5-C6	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Alii>C6-C8	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Alii>C8-C10	<1	<1	<1	<1	<1	<1	<1	<1
Alii>C10-C12	<1	<1	<1	<1	<1	<1	<1	<1
Alii>C12-C16	<1	<1	<1	<1	<1	<1	<1	1
Alii>C16-C21	<1	1	<1	1	3	<1	<1	7
Alii>C21-C35	6	28	3	5	60	6	8	155
Total Aliphatics	6	29	3	7	63	6	8	163
Aro >C5-C7	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Aro >C7-C8	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Aro >C8-C10	<1	1	<1	<1	1	<1	<1	1
Aro >C10-C12	<1	<1	<1	<1	<1	<1	<1	1
Aro >C12-C16	3	3	<1	2	3	2	2	5
Aro >C16-C21	1	5	<1	1	5	4	4	11
Aro >C21-C35	4	15	4	2	21	9	8	55
Total Aromatics	8	24	4	5	30	16	14	73
TPH (Alii & Aro)	14	53	6	12	93	22	23	236
BTEX - Benzene	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
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	8.66	5.35	3.07	2.38	5.46	4.52	3.76	3.82

TPH	Mean Value Test *	Range		LQM S4UL 2009		
	US ₉₅	Largest Value (mg/kg)	Smallest Value (mg/kg)	1% SOM	2.5% SOM	6% SOM
Alii>C5-C6	0.01	<0.01	<0.01	42	78	160
Alii>C6-C8	0.01	<0.01	<0.01	100	230	530
Alii>C8-C10	1.00	<1	<1	27	35	150
Alii>C10-C12	1.00	<1	<1	130	330	760
Alii>C12-C16	1.00	1.00	<1	1100	2400	4300
Alii>C16-C21	3.43	7.00	<1	65000	92000	110000
Alii>C21-C35	69.14	155.00	3.00			
Total Aliphatics	72.68	163.00	3.00			
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	1.00	<1	34	83	190
Aro >C10-C12	1.00	1.00	<1	74	180	380
Aro >C12-C16	3.42	5.00	<1	140	330	660
Aro >C16-C21	6.24	11.00	<1	260	540	930
Aro >C21-C35	26.44	55.00	2.00	1100	1500	1700
Total Aromatics	36.89	73.00	4.00			
TPH (Alii & Aro)	109.39	236.00	6.00			
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 - Ethyl Benzene	0.01	<0.01	<0.01	47	110	260
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	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 Alii-Aro	2
EC10-EC16 Alii-Aro	10
EC16-EC40 Alii-Aro	500

SUMMARY OF CONTAMINATION ANALYSIS: SOIL

SUMMARY OF CONTAMINATION ANALYSIS: PAH

Project Name Brunswick St
 Project No 21WCH018
 Date 28/11/2025

SOIL TYPE	TS	SS	TS	SS	TS	SS	TS	SS
SAMPLE LOCATION	Plot 18	Plot 18	Plot 21	Plot 21	Plot 24	Plot 24	Plot 26	Plot 26
DEPTH (m)	0.10	0.50	0.10	0.45	0.10	0.30	0.10	0.30
Acenaphthene	<0.01	0.03	<0.01	<0.01	0.07	0.02	<0.01	0.02
Acenaphthylene	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Anthracene	<0.02	0.06	<0.02	<0.02	0.1	0.04	<0.02	0.06
Benzo(a)anthracene	<0.04	0.15	<0.04	<0.04	0.22	0.07	<0.04	0.32
Benzo(a)pyrene	<0.04	0.14	<0.04	<0.04	0.22	0.08	<0.04	0.33
Benzo(b)fluoranthene	<0.05	0.23	<0.05	<0.05	0.31	0.1	<0.05	0.46
Benzo(ghi)perylene	<0.05	0.1	<0.05	<0.05	0.14	0.06	<0.05	0.2
Benzo(k)fluoranthene	<0.07	0.1	<0.07	<0.07	0.14	<0.07	<0.07	0.14
Chrysene	<0.06	0.22	<0.06	<0.06	0.31	0.11	<0.06	0.44
Dibenzo(ah)anthracene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Fluoranthene	0.11	0.47	<0.08	<0.08	0.62	0.25	<0.08	0.84
Fluorene	<0.01	0.03	<0.01	<0.01	0.07	0.01	<0.01	0.02
Indeno(123-cd)pyrene	<0.03	0.11	<0.03	<0.03	0.16	0.06	<0.03	0.22
Naphthalene	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Phenanthrene	0.04	0.23	<0.03	0.05	0.43	0.13	0.04	0.26
Pyrene	0.11	0.43	<0.07	<0.07	0.58	0.23	<0.07	0.89
Organic Matter	8.66	5.35	3.07	2.38	5.46	4.52	3.76	3.82

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	0.04	<0.01	<0.01	210	510	1100	-
Acenaphthylene	0.01	<0.01	<0.01	170	420	920	-
Anthracene	0.06	0.10	<0.02	2400	5400	11000	-
Benzo(a)anthracene	0.19	0.32	<0.04	7.2	11	13	-
Benzo(a)pyrene	0.19	0.33	<0.04	2.2	2.7	3	4.95
Benzo(b)fluoranthene	0.27	0.46	<0.05	2.6	3.3	3.7	-
Benzo(ghi)perylene	0.13	0.20	<0.05	320	340	350	-
Benzo(k)fluoranthene	0.11	0.14	<0.07	77	93	100	-
Chrysene	0.26	0.44	<0.06	15	22	27	-
Dibenzo(ah)anthracene	0.04	<0.04	<0.04	0.24	0.28	0.3	-
Fluoranthene	0.51	0.84	<0.08	280	560	890	-
Fluorene	0.04	0.07	<0.01	170	400	860	-
Indeno(123-cd)pyrene	0.13	0.22	<0.03	27	36	41	-
Naphthalene	0.03	<0.03	<0.03	2.3	5.6	13	-
Phenanthrene	0.25	0.43	<0.03	95	220	440	-
Pyrene	0.51	0.89	<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. 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'.

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 25/14128
Issue Number: 1

Date: 11 December, 2025

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

Project Manager: Betts Geolab/sebastian Armour
Project Name: Brunswick St
Project Ref: 21WCH018
Order No: BG6064
Date Samples Received: 03/12/25
Date Instructions Received: 04/12/25
Date Analysis Completed: 11/12/25

Approved by:



Amy Riding
Client Manager

Envirolab Job Number: 25/14128

Client Project Name: Brunswick St

Client Project Ref: 21WCH018

Lab Sample ID	25/14128/1	25/14128/2	25/14128/3	25/14128/4	25/14128/5	25/14128/6	25/14128/7	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	Plot 18	Plot 18	Plot 21	Plot 21	Plot 24	Plot 24	Plot 26			
Depth to Top	0.10	0.50	0.10	0.45	0.10	0.30	0.10			
Depth To Bottom										
Date Sampled	28-Nov-25	28-Nov-25	28-Nov-25	28-Nov-25	28-Nov-25	28-Nov-25	28-Nov-25			
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES			
Sample Matrix Code	5AE	5A	6AE	5A	5AE	4A	6AE			
% Stones >10mm _A	<0.1	<0.1	<0.1	8.3	<0.1	8.4	4.7	% w/w	0.1	A-T-044
pH _D ^{M#}	6.47	7.17	7.00	7.67	7.16	8.11	7.43	pH	0.01	A-T-031s
Sulphate (water sol 2:1) _D ^{M#}	0.04	0.03	0.02	0.06	0.04	0.03	0.02	g/l	0.01	A-T-026s
Organic Matter _D ^{M#}	8.66	5.35	3.07	2.38	5.46	4.52	3.76	% w/w	0.14	A-T-032s
Arsenic _D ^{M#}	5	4	6	2	6	2	5	mg/kg	1	A-T-024s
Cadmium _D	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	mg/kg	1	A-T-024s
Copper _D ^{M#}	20	34	15	11	21	67	22	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#}	33	37	32	21	36	29	36	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#}	15	21	10	23	12	24	12	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#}	38	71	34	42	42	105	47	mg/kg	1	A-T-024s
VPH total (>C5-C10)	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	mg/kg	1	Calc-stone+mols

Envirolab Job Number: 25/14128

Client Project Name: Brunswick St

Client Project Ref: 21WCH018

Lab Sample ID	25/14128/1	25/14128/2	25/14128/3	25/14128/4	25/14128/5	25/14128/6	25/14128/7	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	Plot 18	Plot 18	Plot 21	Plot 21	Plot 24	Plot 24	Plot 26			
Depth to Top	0.10	0.50	0.10	0.45	0.10	0.30	0.10			
Depth To Bottom										
Date Sampled	28-Nov-25	28-Nov-25	28-Nov-25	28-Nov-25	28-Nov-25	28-Nov-25	28-Nov-25			
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES			
Sample Matrix Code	5AE	5A	6AE	5A	5AE	4A	6AE			
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: 25/14128

Client Project Name: Brunswick St

Client Project Ref: 21WCH018

Lab Sample ID	25/14128/1	25/14128/2	25/14128/3	25/14128/4	25/14128/5	25/14128/6	25/14128/7	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	Plot 18	Plot 18	Plot 21	Plot 21	Plot 24	Plot 24	Plot 26			
Depth to Top	0.10	0.50	0.10	0.45	0.10	0.30	0.10			
Depth To Bottom										
Date Sampled	28-Nov-25	28-Nov-25	28-Nov-25	28-Nov-25	28-Nov-25	28-Nov-25	28-Nov-25			
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES			
Sample Matrix Code	5AE	5A	6AE	5A	5AE	4A	6AE			
PAH-16MS										
Acenaphthene _A ^{M#}	<0.01	0.03	<0.01	<0.01	0.07	0.02	<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	0.06	<0.02	<0.02	0.10	0.04	<0.02	mg/kg	0.02	A-T-019s
Benzo(a)anthracene _A ^{M#}	<0.04	0.15	<0.04	<0.04	0.22	0.07	<0.04	mg/kg	0.04	A-T-019s
Benzo(a)pyrene _A ^{M#}	<0.04	0.14	<0.04	<0.04	0.22	0.08	<0.04	mg/kg	0.04	A-T-019s
Benzo(b)fluoranthene _A ^{M#}	<0.05	0.23	<0.05	<0.05	0.31	0.10	<0.05	mg/kg	0.05	A-T-019s
Benzo(ghi)perylene _A ^{M#}	<0.05	0.10	<0.05	<0.05	0.14	0.06	<0.05	mg/kg	0.05	A-T-019s
Benzo(k)fluoranthene _A ^{M#}	<0.07	0.10	<0.07	<0.07	0.14	<0.07	<0.07	mg/kg	0.07	A-T-019s
Chrysene _A ^{M#}	<0.06	0.22	<0.06	<0.06	0.31	0.11	<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#}	0.11	0.47	<0.08	<0.08	0.62	0.25	<0.08	mg/kg	0.08	A-T-019s
Fluorene _A ^{M#}	<0.01	0.03	<0.01	<0.01	0.07	0.01	<0.01	mg/kg	0.01	A-T-019s
Indeno(123-cd)pyrene _A ^{M#}	<0.03	0.11	<0.03	<0.03	0.16	0.06	<0.03	mg/kg	0.03	A-T-019s
Naphthalene _A ^{M#}	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	mg/kg	0.03	A-T-019s
Phenanthrene _A ^{M#}	0.04	0.23	<0.03	0.05	0.43	0.13	0.04	mg/kg	0.03	A-T-019s
Pyrene _A ^{M#}	0.11	0.43	<0.07	<0.07	0.58	0.23	<0.07	mg/kg	0.07	A-T-019s
Total PAH-16MS _A ^{M#}	0.26	2.30	<0.08	<0.08	3.37	1.16	<0.08	mg/kg	0.01	A-T-019s

Envirolab Job Number: 25/14128

Client Project Name: Brunswick St

Client Project Ref: 21WCH018

Lab Sample ID	25/14128/1	25/14128/2	25/14128/3	25/14128/4	25/14128/5	25/14128/6	25/14128/7	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	Plot 18	Plot 18	Plot 21	Plot 21	Plot 24	Plot 24	Plot 26			
Depth to Top	0.10	0.50	0.10	0.45	0.10	0.30	0.10			
Depth To Bottom										
Date Sampled	28-Nov-25	28-Nov-25	28-Nov-25	28-Nov-25	28-Nov-25	28-Nov-25	28-Nov-25			
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES			
Sample Matrix Code	5AE	5A	6AE	5A	5AE	4A	6AE			
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	<1	mg/kg	1	A-T-055s
Ali >C16-C21 _A ^{M#}	<1	1	<1	1	3	<1	<1	mg/kg	1	A-T-055s
Ali >C21-C35 _A ^{M#}	6	28	3	5	60	6	8	mg/kg	1	A-T-055s
Total Aliphatics _A	6	29	3	7	63	6	8	mg/kg	1	Calc-As Recd
Aro >C5-C7 _A [#]	<0.01	<0.01	<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	<0.01	<0.01	mg/kg	0.01	A-T-022s
Aro >C8-C10 _A	<1	1	<1	<1	1	<1	<1	mg/kg	1	A-T-055s
Aro >C10-C12 _A	<1	<1	<1	<1	<1	<1	<1	mg/kg	1	A-T-055s
Aro >C12-C16 _A	3	3	<1	2	3	2	2	mg/kg	1	A-T-055s
Aro >C16-C21 _A ^{M#}	1	5	<1	1	5	4	4	mg/kg	1	A-T-055s
Aro >C21-C35 _A ^{M#}	4	15	4	2	21	9	8	mg/kg	1	A-T-055s
Total Aromatics _A	8	24	4	5	30	16	14	mg/kg	1	Calc-As Recd
TPH (Ali & Aro >C5-C35) _A	14	53	6	12	93	22	23	mg/kg	1	Calc-As Recd
BTEX - Benzene _A [#]	<0.01	<0.01	<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	<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: 25/14128/8

Client Project Name: Brunswick St

Client Project Ref: 21WCH018

Lab Sample ID	25/14128/8							Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	Plot 26									
Depth to Top	0.30									
Depth To Bottom										
Date Sampled	28-Nov-25									
Sample Type	SOIL - ES									
Sample Matrix Code	5AE									
% Stones >10mm _A	<0.1							% w/w	0.1	A-T-044
pH _D ^{M#}	7.69							pH	0.01	A-T-031s
Sulphate (water sol 2:1) _D ^{M#}	0.03							g/l	0.01	A-T-026s
Organic Matter _D ^{M#}	3.82							% w/w	0.14	A-T-032s
Arsenic _D ^{M#}	6							mg/kg	1	A-T-024s
Cadmium _D	<1.0							mg/kg	1	A-T-024s
Copper _D ^{M#}	45							mg/kg	1	A-T-024s
Chromium (hexavalent) _D	<1							mg/kg	1	A-T-040s
Lead _D ^{M#}	69							mg/kg	1	A-T-024s
Mercury _D	<0.17							mg/kg	0.17	A-T-024s
Nickel _D ^{M#}	22							mg/kg	1	A-T-024s
Selenium _D ^{M#}	<1							mg/kg	1	A-T-024s
Zinc _D ^{M#}	128							mg/kg	1	A-T-024s
VPH total (>C5-C10)	<1.00							mg/kg	1	Calc-stone+mols

Envirolab Job Number: 25/14128/8

Client Project Name: Brunswick St

Client Project Ref: 21WCH018

Lab Sample ID	25/14128/8							Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	Plot 26									
Depth to Top	0.30									
Depth To Bottom										
Date Sampled	28-Nov-25									
Sample Type	SOIL - ES									
Sample Matrix Code	5AE									
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: 25/14128/8

Client Project Name: Brunswick St

Client Project Ref: 21WCH018

Lab Sample ID	25/14128/8							Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	Plot 26									
Depth to Top	0.30									
Depth To Bottom										
Date Sampled	28-Nov-25									
Sample Type	SOIL - ES									
Sample Matrix Code	5AE									
PAH-16MS										
Acenaphthene _A ^{M#}	0.02							mg/kg	0.01	A-T-019s
Acenaphthylene _A ^{M#}	<0.01							mg/kg	0.01	A-T-019s
Anthracene _A ^{M#}	0.06							mg/kg	0.02	A-T-019s
Benzo(a)anthracene _A ^{M#}	0.32							mg/kg	0.04	A-T-019s
Benzo(a)pyrene _A ^{M#}	0.33							mg/kg	0.04	A-T-019s
Benzo(b)fluoranthene _A ^{M#}	0.46							mg/kg	0.05	A-T-019s
Benzo(ghi)perylene _A ^{M#}	0.20							mg/kg	0.05	A-T-019s
Benzo(k)fluoranthene _A ^{M#}	0.14							mg/kg	0.07	A-T-019s
Chrysene _A ^{M#}	0.44							mg/kg	0.06	A-T-019s
Dibenzo(ah)anthracene _A ^{M#}	<0.04							mg/kg	0.04	A-T-019s
Fluoranthene _A ^{M#}	0.84							mg/kg	0.08	A-T-019s
Fluorene _A ^{M#}	0.02							mg/kg	0.01	A-T-019s
Indeno(123-cd)pyrene _A ^{M#}	0.22							mg/kg	0.03	A-T-019s
Naphthalene _A ^{M#}	<0.03							mg/kg	0.03	A-T-019s
Phenanthrene _A ^{M#}	0.26							mg/kg	0.03	A-T-019s
Pyrene _A ^{M#}	0.89							mg/kg	0.07	A-T-019s
Total PAH-16MS _A ^{M#}	4.20							mg/kg	0.01	A-T-019s

Envirolab Job Number: 25/14128/8

Client Project Name: Brunswick St

Client Project Ref: 21WCH018

Lab Sample ID	25/14128/8									
Client Sample No										
Client Sample ID	Plot 26									
Depth to Top	0.30									
Depth To Bottom										
Date Sampled	28-Nov-25									
Sample Type	SOIL - ES									
Sample Matrix Code	5AE									
TPH CWG with Clean Up										
Ali >C5-C6 _A	<0.01							mg/kg	0.01	A-T-022s
Ali >C6-C8 _A	<0.01							mg/kg	0.01	A-T-022s
Ali >C8-C10 _A	<1							mg/kg	1	A-T-055s
Ali >C10-C12 _A ^{M#}	<1							mg/kg	1	A-T-055s
Ali >C12-C16 _A ^{M#}	1							mg/kg	1	A-T-055s
Ali >C16-C21 _A ^{M#}	7							mg/kg	1	A-T-055s
Ali >C21-C35 _A ^{M#}	155							mg/kg	1	A-T-055s
Total Aliphatics _A	163							mg/kg	1	Calc-As Recd
Aro >C5-C7 _A [#]	<0.01							mg/kg	0.01	A-T-022s
Aro >C7-C8 _A [#]	<0.01							mg/kg	0.01	A-T-022s
Aro >C8-C10 _A	1							mg/kg	1	A-T-055s
Aro >C10-C12 _A	1							mg/kg	1	A-T-055s
Aro >C12-C16 _A	5							mg/kg	1	A-T-055s
Aro >C16-C21 _A ^{M#}	11							mg/kg	1	A-T-055s
Aro >C21-C35 _A ^{M#}	55							mg/kg	1	A-T-055s
Total Aromatics _A	73							mg/kg	1	Calc-As Recd
TPH (Ali & Aro >C5-C35) _A	236							mg/kg	1	Calc-As Recd
BTEX - Benzene _A [#]	<0.01							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.

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
Clients Project No: 21WCH018

Project No: 25/14128

Date Received: 04/12/2025 (am)

Cool Box Temperatures (°C): 5.6, 5.7

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	25/14128/1	25/14128/2	25/14128/3	25/14128/4	25/14128/5	25/14128/6	25/14128/7	25/14128/8
Client Sample No								
Client Sample ID/Depth	Plot 18 0.10m	Plot 18 0.50m	Plot 21 0.10m	Plot 21 0.45m	Plot 24 0.10m	Plot 24 0.30m	Plot 26 0.10m	Plot 26 0.30m
Date Sampled	28/11/25	28/11/25	28/11/25	28/11/25	28/11/25	28/11/25	28/11/25	28/11/25
A-T-019s	09/12/2025	09/12/2025	09/12/2025	09/12/2025	09/12/2025	09/12/2025	09/12/2025	09/12/2025
A-T-022s	09/12/2025	09/12/2025	09/12/2025	09/12/2025	09/12/2025	09/12/2025	09/12/2025	09/12/2025
A-T-024s	10/12/2025	10/12/2025	10/12/2025	10/12/2025	10/12/2025	10/12/2025	10/12/2025	10/12/2025
A-T-026s	10/12/2025	10/12/2025	10/12/2025	10/12/2025	10/12/2025	10/12/2025	10/12/2025	10/12/2025
A-T-031s	10/12/2025	10/12/2025	10/12/2025	10/12/2025	10/12/2025	10/12/2025	10/12/2025	10/12/2025
A-T-032s	11/12/2025	11/12/2025	11/12/2025	11/12/2025	11/12/2025	11/12/2025	11/12/2025	11/12/2025
A-T-040s	10/12/2025	10/12/2025	10/12/2025	10/12/2025	10/12/2025	10/12/2025	10/12/2025	10/12/2025
A-T-044	09/12/2025	09/12/2025	09/12/2025	09/12/2025	09/12/2025	09/12/2025	09/12/2025	09/12/2025
A-T-045	05/12/2025	05/12/2025	05/12/2025	05/12/2025	05/12/2025	05/12/2025	05/12/2025	05/12/2025
A-T-055s	09/12/2025	09/12/2025	09/12/2025	09/12/2025	09/12/2025	09/12/2025	09/12/2025	09/12/2025
Calc-As Recd	09/12/2025	09/12/2025	09/12/2025	09/12/2025	09/12/2025	09/12/2025	09/12/2025	09/12/2025
Calc-stone+mois	09/12/2025	09/12/2025	09/12/2025	09/12/2025	09/12/2025	09/12/2025	09/12/2025	09/12/2025

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