

# FACTUAL REPORT OF INVESTIGATION

AT: - Land at Shirley Close, Cheshunt, Herts. EN8 9PS

ON: - 2<sup>nd</sup> March 2022

FOR: - B3 Living

**REF: - Community Garden 66622** 

**JOB No: - BL3961** 

SOIL INVESTIGATION (EASTERN) LTD
Unit 8, Hill Farm, Church Lane, Ford End, Chelmsford, Essex, CM3 1LH.
TEL. 01245 237555

# INTERPRETIVE REPORT ON SITE INVESTIGATION **AT** LAND AT SHIRLEY CLOSE, **CHESHUNT, HERTS, EN8 9PS** CLIENT: SOIL INVESTIGATION (EASTERN) LIMITED SI(E) LTD JOB NO: BL3961 DATE: 23 MARCH 2022 REF: G/032285/001 K F GEOTECHNICAL 14 Sandhurst Lane Blackwater Surrey GU17 0DH CONSULTING GEOTECHNICAL **ENGINEERS** Email: info@kfgeotechnical.co.uk Consultant W. J. C. WALLACE B.Eng (Hons.) G. L. Martin B.Sc., M.Sc., C.Eng., M.I.C.E.

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Section 1 - Introduction

Section 2 - The Site

Section 3 - Site Work

Section 4 - Laboratory Work

Section 5 - Discussion

# **APPENDICES**

### 1. INTRODUCTION

- 1.1 We were instructed via email dated 16 March 2022 by Soil Investigation (Eastern) Limited to prepare an interpretive report following their site investigation and contamination testing at the above site carried out on the 2 March 2022.
- 1.2 The site forms part of a housing association's development and has until recently been a piece of wasteland. The housing association wish to utilise it for a community garden and for growing fruit and vegetables but we are advised that the site had become very overgrown and had been used for dumping household waste etc. The site was cleared prior to the site work.
- 1.3 We have not visited the site and our comments are based entirely on the information provided. This is a site plan showing the location of five trial pits for the sampling, the logs of these trial pits, laboratory soil testing by ELAB and some photographs of the site taken during the course of the site work.

### 2. THE SITE

- 2.1 Shirley Close forms part of a large residential area close to the centre of Cheshunt to the northwest. Shirley Close is a cul-de-sac leading to the south off Kingsley Avenue and the site is enclosed by gardens to existing properties, which in the main consist of terraced houses and flats.
- 2.2 The site is basically square in plan and basically level.
- 2.3 The Geology of Great Britain indicates that the naturally occurring subsoil is London Clay capped locally by Kempton Park Gravel and Enfield Silt Member.

### 3. <u>SITE WORK</u>

- 3.1 The layout of the site and location of the five sampling points, which are labelled TP1 to TP5 inclusive, is indicated on the site plan forming part of the Factual Report.
- 3.2 The sampling point trial pits can be summarised as revealing fill material to between 100mm and 600mm overlying a gravelly sandy silty clay typical of Enfield Silt Member, possibly mixed with sands and gravels.
- 3.3 Tub and jar samples were taken at 300mm in TP1, in the top 100mm in TP2, at 100mm in TP3, 150mm in TP4, and again at 150mm in TP5. Each of these was placed in a cool box and sent to ELAB for contamination analysis.

#### 4. LABORATORY WORK

- 4.1 ELAB carried out a standard range of tests for common contaminants plus BTEX and Speciated TPH.
- 4.2 The proposal, as we understand it, is to provide a communal area but also with the potential for growing vegetables and on this basis, the most likely Category 4 Screening Levels (C4SL) threshold will be Residential With the Potential for Plant Uptake.
- 4.3 Against this threshold, there are undue concentrations of:
  - **Lead.** The threshold is 200mg/kg. This is exceeded in each of the samples except for TP2.
- 4.4 There are high levels of Zinc in certain samples. Zinc is generally only injurious to plant growth and generally in acidic soils. This would appear to be the case here with most of the samples being below a pH of seven.
- 4.5 If the threshold is for allotments then all the samples including that from TP2 exceed the C4SL of 80mg/kg.

### 5. <u>DISCUSSION</u>

- 5.1 Each of the samples was taken from fill material across the site and this fill material appears to have excessive concentrations of Lead and possibly Zinc with regards to plant growth.
- 5.2 It is unlikely, in our view, that there would be contamination to the natural ground. The depth to the natural ground is nowhere more than 600mm and so our recommendation is that the fill material should be removed down to the natural ground and this should then be replaced by clean inert subsoil and topsoil to meet the requirements of an allotment and from a reliable source.
- 5.3 It is usual to get test certificates from the soil supplier to show that it meets requirements before it is delivered. It is then advisable to test that soil in-situ to ensure that the soil delivered meets the criteria of the test sample.
- 5.4 If there is no plan for vegetables to be grown and it will only be public open space, then no remediation is indicated based on the results of this testing.
- 5.5 The main contaminands are Lead and Zinc and certainly the former tends to form stable compounds in the soil and it is unlikely on this basis that there would be undue concentrations in the leachate. This means that the fill material taken off this site can probably taken away as inert but we would recommend carrying out some Waste Acceptance Criteria (WAC) sampling to confirm this.

W J C Wallace

# **Site Location Plan**

Sheet: 1 of 1

Job No: BL3961

Scale: Not to scale

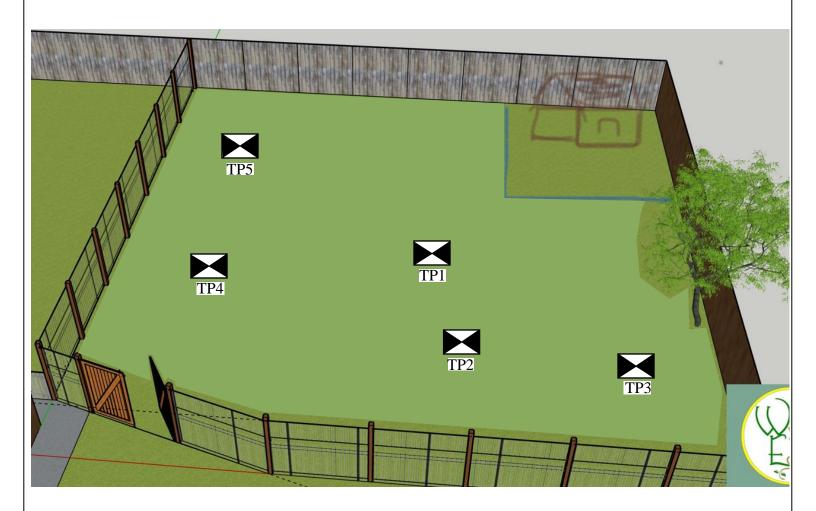
Date: 02/03/2022

Client: B3 Living

SOIL INVESTIGATION

Tel/Fax 01245 237555 Mobile 07810 820620

Site: Land at Shirley Close, Cheshunt, Herts. EN8 9PS



**Remarks:** ON SITE TREE IDENTIFICATION FOR GUIDANCE ONLY. NOT AUTHENTICATED

Key: MH

Trial Pit Man Hole

SVP Soil Vent Pipe RWP Rain Water Pipe



Borehole Gulley

Tree / Bush (approx. ht. in m)

BL3961 – Land at Shirley Close, Cheshunt, Herts EN8 9PS

Photos taken 2.3.2022



















Sample No: 1 Sheet: 1 of 1

Job No: BL3961

Boring Method: Hand Tools Date: 02/03/2022



Tel/Fax 01245 237555 Mobile 07810 820620

	ig meaned. Hand reele			Tel/Fax 01245 237555 Mobile 07810 820620				
Clier	t: B3 Living (			Site: Land at Shirley Close, Ch				
Depth (mm/m)	Description of Strata	Thick- Ness (mm/m)	Legend	Sample	Test Type Result	Depth (mm/m)	Field Records/ Comments	Depth to water (mm/m)
G.L.	MADE GROUND: Dark brown, gravelly, sandy, very silty, topsoily, CLAY, with brick & carbon fragments.	450		•	Tub & Jar	300	100 Numerous roots of live & dead appearance to 3mmø to 900mm.	
450	Orange brown, gravelly, sandy, very silty, CLAY. Thinly laminated with orange & brown silt & fine sand.	450						
900	——Trial Pit ends at 900mm.—		×_ ; ×_ ::					
Rem	arks: Trial pit moist on comple	etion.		К • В U W	ey: Small disturbe Bulk disturbed Undisturbed sa Water sample	l sample ample(U	I Mackintos	n Probe

Sample No: 2

Sheet: 1 of 1

Job No: BL3961

Boring Method: Hand Tools

Date: 02/03/2022



Tel/Fax 01245 237555 Mobile 07810 820620

Client: B3 Living

Site: Land at Shirley Close, Cheshunt

Cileii	t. B3 Living ,				Site: Land at Shirley Close, Cheshunt			
Depth (mm/m)	Description of Strata	Thick- Ness (mm/m)	Legend	Sample	Test Type Result	Depth (mm/m)	Field Records/ Comments	Depth to water (mm/m)
	MADE GROUND: Grey, gravelly, SILT, with numerous ash, clinker, charcoal, plastics, brick & block fragments.	100		•	Tub & Jar	G.L.	100	
900 Rem	Orange brown, gravelly, sandy, very silty, CLAY. Thinly laminated with orange & brown silt & fine sand.  ——Trial Pit ends at 900mm. —— arks: Trial pit moist on comple	800	X   0,0   X     X     X     0,0   X       X	K	ey:		Numerous roots of live & dead appearance to 3mmø to 900mm.	
Kem	arks: I rial pit moist on comple	tion.		K	ey:	d comp	lo V Dilgon Vor	a (kDa)

Small disturbed sample V Pilcon Vane (kPa)

B Bulk disturbed sample U Undisturbed sample(U100) ₹ Standard

Mackintosh Probe

W Water sample

penetration test

Jar sample

N SPT blow count

Sample No: 3 Sheet: 1 of 1

Job No: BL3961

Boring Method: Hand Tools Date: 02/03/2022



Borir	ng Method: Hand Tools	Date: 02	2/03/20	22	Tel/Fax 01245 237555 Mobile 07810 820620				
Clier	t: B3 Living				Site: Land at Shirley Close, Cheshunt				
Depth (mm/m)	Description of Strata	Thick- Ness (mm/m)	Legend	Sample	Test Type Result	Depth (mm/m)	Field Records/ Comments	Depth to water (mm/m)	
G.L. 150	MADE GROUND: Dark brow gravelly, sandy, very silty, topsoily, CLAY, with numero organic matter & brick, glass plastic fragments.	us 150 &		•	Tub & Jar	. 100	100 Numerous roots of live & dead appearance to		
	Orange brown, gravelly, sandy very silty, CLAY. Thinly laminated with orange & brow silt & fine sand.		X				3mmø to 800mm.		
		650	X						
800	—Trial Pit ends at 800mm.		×						
Dom	parks: Trial nit maint an nam	plotion		V					
Keir	arks: Trial pit moist on com	ipietion.		A M B	ey: Small disturbe Bulk disturbed Undisturbed s Water sample Jar sample	d sample ample(U	e I Mackintos	h Probe n test	

Sample No: 4 Sheet: 1 of 1 Job No: BL3961

SOIL INVESTIGATION

Borin	g Method: Hand Tools	Date: 02	2/03/20	22	Tel/Fax		EASTERN LIMIT 7555 Mobile 07810 820		
Clien	t: B3 Living				Site: Land at Shirley Close, Cheshu				
Depth (mm/m)	Description of Strata	Thick- Ness (mm/m)	Legend	Sample	Test Type Result	Depth (mm/m)	Field Records/ Comments	Depth to water (mm/m)	
	MADE GROUND: Dark brow gravelly, very silty, topsoily, CLAY, with brick, carbon, gla & plastics.			•	Tub & Jar	150	100 Numerous roots of live & dead appearance to 4mmø to		
300	MADE GROUND: Orange brown, slightly gravelly, sand very silty, CLAY, with brick a carbon fragments.						400 Numerous hair & fibrous roots to 850mm.		
600	Orange brown, gravelly, sandy very silty, CLAY. Thinly laminated with orange & brow silt & fine sand.		* × × · × · × · × · × · × · × · × · × ·						
850	—Trial Pit ends at 850mm.		0 <sub>0</sub> -X						
Rem	arks: Trial pit moist on com	pletion.		К • в и w	ey: Small disturbe Bulk disturbed Undisturbed s Water sample Jar sample	l sample ample(U	e I Mackintos	h Probe	

Sample No: 5 Sheet: 1 of 1

Job No: BL3961

Boring Method: Hand Tools Date: 02/03/2022



Tel/Fax 01245 237555 Mobile 07810 820620

Client: B3 Living

Site: Land at Shirley Clase Chachunt

Depth	Description of Strata	Thick-	Legend	Sample	Test	Depth	Field Records/	Depth to
nm/m)	Description of Strata	Ness (mm/m)		,	Type Result	(mm/m)	Comments	water (mm/m)
	MADE GROUND: Dark brown, gravelly, very silty, topsoily, CLAY, with brick, carbon, glass & plastics.	300		•	Tub & Jar	150	100 Numerous roots of live & dead appearance to 4mmø to	
300	MADE GROUND: Orange brown, slightly gravelly, sandy, very silty, CLAY, with brick & carbon fragments.	300					400 Numerous hair & fibrous roots to 850mm.	
500	Orange brown, gravelly, sandy, very silty, CLAY. Thinly laminated with orange & brown silt & fine sand.	250	× × × × × × × × × × × × × × × × × × ×					
350	——Trial Pit ends at 850mm.—		×					

Small disturbed sample

V Pilcon Vane (kPa) I Mackintosh Probe

B Bulk disturbed sample U Undisturbed sample(U100) ₹ Standard

W Water sample

penetration test

Jar sample

N SPT blow count



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TN38 9BY

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#### THE ENVIRONMENTAL LABORATORY LTD

**Analytical Report Number: 22-39134** 

Issue: 1

**Date of Issue:** 11/03/2022

Contact: Sandra Brown

Customer Details: Soil Investigation (Eastern) Ltd

Unit 8, Hill Farm Church Lane Chelmsford EssexCM3 1LH

Quotation No: Q19-01650

Order No: BL3961

Customer Reference: BL3961

**Date Received:** 04/03/2022

**Date Approved:** 11/03/2022

**Details:** Shirley Close, Cheshunt EN8 9PS

^ (

Mike Varley, General Manager

Approved by:

Any comments, opinions or interpretations expressed herein are outside the scope of UKAS accreditation (Accreditation Number 2683

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# **Sample Summary**

Report No.: 22-39134, issue number 1

Elab No.	Client's Ref.	<b>Date Sampled</b>	Date Scheduled	Description	Deviations
270313	TP1 0.30	02/03/2022	04/03/2022	Silty loam	
270314	TP2 GL	02/03/2022	04/03/2022	Silty loam	
270315	TP3 0.10	02/03/2022	04/03/2022	Silty loam	
270316	TP4 0.15	02/03/2022	04/03/2022	Silty loam	
270317	TP5 0.20	02/03/2022	04/03/2022	Silty loam	



Determinand

Metals
Arsenic
Cadmium
Chromium
Copper
Lead
Mercury
Nickel
Selenium
Zinc

Moisture Content
Material removed

Inorganics
Elemental Sulphur
Hexavalent Chromium

Soil Organic Matter

Acid Soluble Sulphate (SO4)
Water Soluble Boron
Miscellaneous

Thiocyanate
Total Cyanide





U

0.1

**Results Summary** 

Description of Inert material removed

Report No.: 22-39134, issue number 1

Soil sample preparation parameters

	ELAB	Reference	270313	270314	270315	270316	270317
С	Customer Reference						
	9	Sample ID					
		mple Type	SOIL	SOIL	SOIL	SOIL	SOIL
	•	e Location	TP1	TP2	TP3	TP4	TP5
	Sample	Depth (m)	0.30	GL	0.10	0.15	0.20
	Sam	pling Date	02/03/2022	02/03/2022	02/03/2022	02/03/2022	02/03/2022
Codes	Units	LOD					
N	%	0.1	22.8	44.2	34.9	23.7	27.2
N	%	0.1	18.8	27.5	17.3	25.9	17.2
N		0	Stones/Glass/Wood	Stones/Clinker/Wood/Metal	Stones/Brick/Clinker	Stones/Brick/Clinker	Stones/Clinker/Wood
М	mg/kg	1	16.4	7.2	13.2	17.2	13.6
М	mg/kg	0.5	< 0.5	< 0.5	0.6	0.6	0.5
М	mg/kg	5	23.1	24.3	30.0	25.3	23.5
М	mg/kg	5	34.6	499	48.0	52.4	44.2
М	mg/kg	5	301	147	333	322	258
М	mg/kg	0.5	< 0.5	< 0.5	< 0.5	0.6	< 0.5
М	mg/kg	5	18.6	22.4	15.6	21.3	19.4
М	mg/kg	1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
М	mg/kg	5	196	742	225	211	285
М	mg/kg	20	< 20	< 20	< 20	< 20	< 20
N	mg/kg	0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8
N	mg/kg	4	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
М	mg/kg	1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
U	%	0.02	0.07	0.19	0.05	0.03	0.04
N	mg/kg	0.5	1.3	3.3	3.5	2.3	1.8
М	pH units	0.1	6.0	6.9	6.7	7.1	6.6

2.2

10

5.1

4.6

7.1



Determinand

Phenols
Phenol
M,P-Cresol
O-Cresol

3,4-Dimethylphenol 2,3-Dimethylphenol 1-Naphthol

2,3,5-trimethylphenol
Total Phenols

Benzo(a)anthracene

Benzo(b)fluoranthene
Benzo(k)fluoranthene
Benzo(a)pyrene
Indeno(1,2,3-cd)pyrene
Dibenzo(a,h)anthracene
Benzo[g,h,i]perylene

Chrysene

Total PAH(16)

Naphthalene
Acenaphthylene
Acenaphthene
Fluorene
Phenanthrene
Anthracene
Fluoranthene
Pyrene

Polyaromatic hydrocarbons





М

mg/kg

0.4

# **Results Summary**

Report No.: 22-39134, issue number 1

		ELAB	Reference	270313	270314	270315	270316	270317
	С	Customer Reference						
		;	Sample ID					
			mple Type	SOIL	SOIL	SOIL	SOIL	SOIL
			e Location	TP1	TP2	TP3	TP4	TP5
			Depth (m)	0.30	GL	0.10	0.15	0.20
		•						
_			pling Date	02/03/2022	02/03/2022	02/03/2022	02/03/2022	02/03/2022
	Codes	Units	LOD					
	М	mg/kg	1	< 1	< 1	< 1	< 1	< 1
	N	mg/kg	1	< 1	< 1	< 1	< 1	< 1
	N	mg/kg	1	< 1	< 1	< 1	< 1	< 1
	N	mg/kg	1	< 1	< 1	< 1	< 1	< 1
	M	mg/kg	1	< 1	< 1	< 1	< 1	< 1
	N	mg/kg	1	< 1	< 1	< 1	< 1	< 1
	М	mg/kg	1	< 1	< 1	< 1	< 1	< 1
	N	mg/kg	6	< 6	< 6	< 6	< 6	< 6
	М	mg/kg	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
	М	mg/kg	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
	М	mg/kg	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
	М	mg/kg	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
	М	mg/kg	0.1	< 0.1	< 0.1	0.2	< 0.1	0.2
	М	mg/kg	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
	М	mg/kg	0.1	< 0.1	< 0.1	0.9	0.3	1.3
	М	mg/kg	0.1	< 0.1	< 0.1	0.7	0.3	1.1
	М	mg/kg	0.1	< 0.1	< 0.1	0.4	0.1	0.8
	М	mg/kg	0.1	< 0.1	< 0.1	0.5	0.2	1.0
	М	mg/kg	0.1	< 0.1	< 0.1	0.3	0.2	0.8
	М	mg/kg	0.1	< 0.1	< 0.1	0.3	0.1	0.9
	М	mg/kg	0.1	< 0.1	< 0.1	0.4	0.2	1.3
	М	mg/kg	0.1	< 0.1	< 0.1	0.2	0.1	0.4
	М	mg/kg	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
	М	mg/kg	0.1	< 0.1	< 0.1	0.2	0.1	0.4
٦		//	0.4	0.4	0.4	4.0	4 7	0.4

< 0.4

4.2

1.7

< 0.4

8.4



Determinand

**TPH CWG** 

>C5-C6 Aliphatic (HS\_1D\_MS) >C6-C8 Aliphatic (HS\_1D\_MS)

>C5-C7 Aromatic (HS\_1D\_MS)
>C7-C8 Aromatic (HS\_1D\_MS)

>C8-C10 Aliphatic (HS\_1D\_MS+EH\_2D\_AL)
>C10-C12 Aliphatic (EH\_2D\_AL)
>C12-C16 Aliphatic (EH\_2D\_AL)
>C16-C21 Aliphatic (EH\_2D\_AL)
>C21-C35 Aliphatic (EH\_2D\_AL)
>C35-C40 Aliphatic (EH\_2D\_AL)

>C8-C10 Aromatic (HS\_1D\_MS+EH\_2D\_AR)
>C10-C12 Aromatic (EH\_2D\_AR)
>C12-C16 Aromatic (EH\_2D\_AR)
>C16-C21 Aromatic (EH\_2D\_AR)
>C21-C35 Aromatic (EH\_2D\_AR)
>C35-C40 Aromatic (EH\_2D\_AR)

Total aliphatic hydrocarbons (>C5 - C40) (HS\_1D\_MS+EH\_2D\_AL)

Total aromatic hydrocarbons (>C5 - C40) (HS\_1D\_MS+EH\_2D\_AR)

Total petroleum hydrocarbons (>C5 - C40) (HS\_1D\_MS+EH\_2D\_Total)

BTEX
Benzene
Toluene
Ethylbenzene
Xylenes
MTBE





# **Results Summary**

Report No.: 22-39134, issue number 1

		ELAB	Reference	270313	270314	270315	270316	270317
	C	Customer Reference						
		;	Sample ID					
			mple Type	SOIL	SOIL	SOIL	SOIL	SOIL
			e Location	TP1	TP2	TP3	TP4	TP5
			Depth (m)	0.30	GL	0.10	0.15	0.20
		•	pling Date	02/03/2022	02/03/2022	02/03/2022	02/03/2022	02/03/2022
	0-1			02/03/2022	02/03/2022	02/03/2022	02/03/2022	02/03/2022
_	Codes	Units	LOD					
	М	ug/kg	10	< 10.0	11.5	< 10.0	< 10.0	< 10.0
	M	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
	M	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
	M	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
	N	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
	N	mg/kg	1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	М	mg/kg	1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	М	mg/kg	1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	М	mg/kg	1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	М	mg/kg	1	< 1.0	2.3	2.3	2.6	< 1.0
	М	mg/kg	1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	N	mg/kg	1	1.3	3.7	3.7	4.2	< 1.0
	N	mg/kg	0.01	< 0.01	0.01	< 0.01	< 0.01	< 0.01
	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
	N	mg/kg	1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	М	mg/kg	1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	М	mg/kg	1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	М	mg/kg	1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	М	mg/kg	1	1.2	1.6	3.8	2.2	< 1.0
	М	mg/kg	1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	N	mg/kg	1	2.5	3.7	6.5	4.3	< 1.0
-		5 5				10.0		

7.4

10.2

8.5

3.8

mg/kg

< 1.0





Unit A2, Windmill Road, Ponswood Industrial Estate, St Leonards on Sea, East Sussex, TN38 9BY Tel: +44 (0)1424 718618, Email: info@elab-uk.co.uk, Web: www.elab-uk.co.uk

# **Results Summary**

Report No.: 22-39134, issue number 1

#### **Asbestos Results**

Analytical result only applies to the sample as submitted by the client. Any comments, opinions or interpretations (marked #) in this report are outside UKAS accreditation (Accreditation No2683). They are subjective comments only which must be verified by the client.

Elab No	Depth (m)	Clients Reference	Description of Sample Matrix #	Asbestos Identification	Gravimetric	Gravimetric	Free Fibre	Total
					Analysis Total	Analysis by ACM	Analysis	Asbestos
					(%)	Type (%)	(%)	(%)
270313	0.30	TP1	Brown sandy soil, stones, clinker, glass, organics	No asbestos detected	n/t	n/t	n/t	n/t
270314	GL	TP2	Grey soil, stones, clinker, metal, organics	No asbestos detected	n/t	n/t	n/t	n/t
270315	0.10	TP3	Brown sandy soil, stones, brick, clinker, organics	No asbestos detected	n/t	n/t	n/t	n/t
270316	0.15	TP4	Brown sandy soil, stones, clinker, organics	No asbestos detected	n/t	n/t	n/t	n/t
270317	0.20	TP5	Brown sandy soil, stones, clinker, glass, organics	No asbestos detected	n/t	n/t	n/t	n/t







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Parameter	Codes	Analysis Undertaken On	Date Tested	Method Number	Technique
Soil					
Hexavalent chromium	N	As submitted sample	07/03/2022	110	Colorimetry
рН	M	Air dried sample	10/03/2022	113	Electromeric
Acid Soluble Sulphate	U	Air dried sample	09/03/2022	115	Ion Chromatography
Aqua regia extractable metals	M	Air dried sample	07/03/2022	118	ICPMS
Phenols in solids	M	As submitted sample	07/03/2022	121	HPLC
Elemental Sulphur	M	Air dried sample	07/03/2022	122	HPLC
PAH (GC-FID)	M	As submitted sample	07/03/2022	133	GC-FID
Thiocyanate	N	As submitted sample	10/03/2022	146	Colorimetry
Low range Aliphatic hydrocarbons soil	N	As submitted sample	09/03/2022	181	GC-MS
Low range Aromatic hydrocarbons soil	N	As submitted sample	09/03/2022	181	GC-MS
BTEX in solids	M	As submitted sample	09/03/2022	181A	GC-MS
Water soluble boron	N	Air dried sample	07/03/2022	202	Colorimetry
Total cyanide	М	As submitted sample	07/03/2022	204	Colorimetry
TPH CWG soil by gc-gc	М	As submitted sample	04/03/2022	271	
Asbestos identification	U	Air dried sample	09/03/2022	280	Microscopy
Soil organic matter	U	Air dried sample	10/03/2022	BS1377:P3	Titrimetry

Tests marked N are not UKAS accredited







## **Report Information**

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Key	
U	hold UKAS accreditation
M	hold MCERTS and UKAS accreditation
Ν	do not currently hold UKAS accreditation
٨	MCERTS accreditation not applicable for sample matrix
*	UKAS accreditation not applicable for sample matrix
S	Subcontracted to approved laboratory UKAS Accredited for the test
SM	Subcontracted to approved laboratory MCERTS/UKAS Accredited for the test
NS	Subcontracted to approved laboratory. UKAS accreditation is not applicable.
I/S	Insufficient Sample
U/S	Unsuitable sample
n/t	Not tested
<	means "less than"
>	means "greater than"

LOD refers to limit of detection, except in the case of pH soils and pH waters where it LOD means limit of discrimination.

Soil sample results are expressed on an air dried basis (dried at < 30°C), and are uncorrected for inert material removed.

ELAB are unable to provide an interpretation or opinion on the content of this report.

The results relate only to the sample received.

PCB congener results may include any coeluting PCBs

Uncertainty of measurement for the determinands tested are available upon request Unless otherwise stated, sample information has been provided by the client. This may affect the validity of the results.

### **Deviation Codes**

- а No date of sampling supplied b No time of sampling supplied (Waters Only) С Sample not received in appropriate containers d Sample not received in cooled condition е The container has been incorrectly filled
- f Sample age exceeds stability time (sampling to receipt)
- Sample age exceeds stability time (sampling to analysis)

Where a sample has a deviation code, the applicable test result may be invalid.

### **Sample Retention and Disposal**

All soil samples will be retained for a period of one month

All water samples will be retained for 7 days following the date of the test report

Charges may apply to extended sample storage

#### TPH Classification - HWOL Acronym System

PH Classification - HWOL Acronym System	
HS	Headspace analysis
EH	Extractable Hydrocarbons - i.e. everything extracted by the solvent
CU	Clean-up - e.g. by florisil, silica gel
1D	GC - Single coil gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics only
AR	Aromatics only
2D	GC-GC - Double coil gas chromatography
#1	EH_Total but with humics mathematically subtracted
#2	EH_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total
MS	Mass Spectrometry