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SEP Properties Limited

THE BLACKS HEAD
HIGH STREET, TEAN

Report on Tank Removal & Validation

July 2021

Report No P20072/04

Issued By:

Date Issued: 6th July 2021

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1.0 INTRODUCTION

Spilman Associates Limited have been appointed by SEP Properties Limited to prepare a report on the removal of former underground fuel tanks and associated validation testing for a proposed retail development with residential properties above at the Blacks Head Public House, 15 High Street, Tean, Stoke-on-Trent, Staffordshire, ST10 4DY.

The proposed development layout is shown on the Architect's drawings reproduced at Appendix A.

2.0 BACKGROUND

The following reports have been previously prepared for the site and reference to these should be made as necessary:

1. Spilman Associates Limited (12th October 2020) Report on Desk Study & Ground Investigation (Report No: P20072/02)

2. Spilman Associates Limited (12th October 2020) Environmental Database Search (Report No: P20072/03)

Report 1 above recommended that all former underground fuel tanks be removed from the site together with any hydrocarbon impacted soils. Following removal of the tanks the sides and base of excavations should be inspected to assess the potential presence of residual hydrocarbons in soil. This would entail a visual inspection and associated sampling and testing to determine the concentrations of any residual hydrocarbon contaminants.

The current report presents details of the tank removal works and associated validation testing.

3.0 TANK IDENTIFCATION

Following demolition works two underground tanks were identified at approximate locations shown on Figure 1.

Contrary to hearsay evidence neither tank had been infilled, however, both tanks were empty with no residual traces of fuel.

A site visit was made by Spilman Associates Limited on 4th June 2021 to inspect the exposed but still insitu tanks and to obtain soil samples for contamination testing so as to provide information for pricing of disposal options for any hydrocarbon impacted soils.

Soils immediately adjacent to both tanks showed some evidence of having been impacted by hydrocarbons in the form of grey/black staining and a noticeable hydrocarbon odour. At locations inspected the width of impacted soil was generally less than 300mm. Samples of impacted soil were taken at locations shown on Figure 1 for contamination testing. The test results are reproduced at Appendix B.

TPH concentrations were 519mg/kg in the sample from adjacent to Tank 1 at 1.80m depth and 3959mg/kg in the sample adjacent to Tank 2 at 1.10m depth.

4.0 TANK REMOVAL

The tanks were dug out on 21st June 2021 and were temporarily stored at the site on an area of plastic sheeting pending off-site disposal. Photographs of the removed tanks are reproduced at Appendix C.

Spilman Associates Limited attended site on 22nd June 2021 to inspect the excavations and ensure that any visually hydrocarbon impacted soil had been removed. Contaminated soils were temporarily stored on an area of plastic sheeting prior to off-site disposal.

5.0 EXCAVATION VALIDATION

Following removal of the tanks and any visually impacted soils the excavation was inspected and appropriate validation samples were taken for laboratory analyses. The locations of the samples are indicated on Figure 2. Slight groundwater ingress occurred in both tank excavations at depths between 1.00m and 1.50m. In both excavations the water appeared unimpacted by hydrocarbons with no visible oil sheen or odour. Record photographs of the completed excavations are reproduced at Appendix C.

The validation laboratory test results are reproduced at Appendix D. TPH concentrations are summarised below:

Tank	Sample	Depth (m)	TPH (mg/kg)
1	S1	1.60	150
	S2	1.00	23.5
	S3	1.40	17.7
	S4	1.00	59.6
	B1	2.50	1.2
2	S1	1.20	4.3
	S2	1.40	14.5
	S3	1.20	<1.0
	S4	1.10	5.4
	B1	1.70	<1.0

An initial TPH screening value of 500mg/kg is often used when assessing the removal of hydrocarbon impacted soils associated with former underground fuel tanks. All results fall significantly below this screening value. Concentration of BTEX compounds and MTBE were below the laboratory detection limit of 10ug/kg in all samples.

6.0 CONCLUSIONS

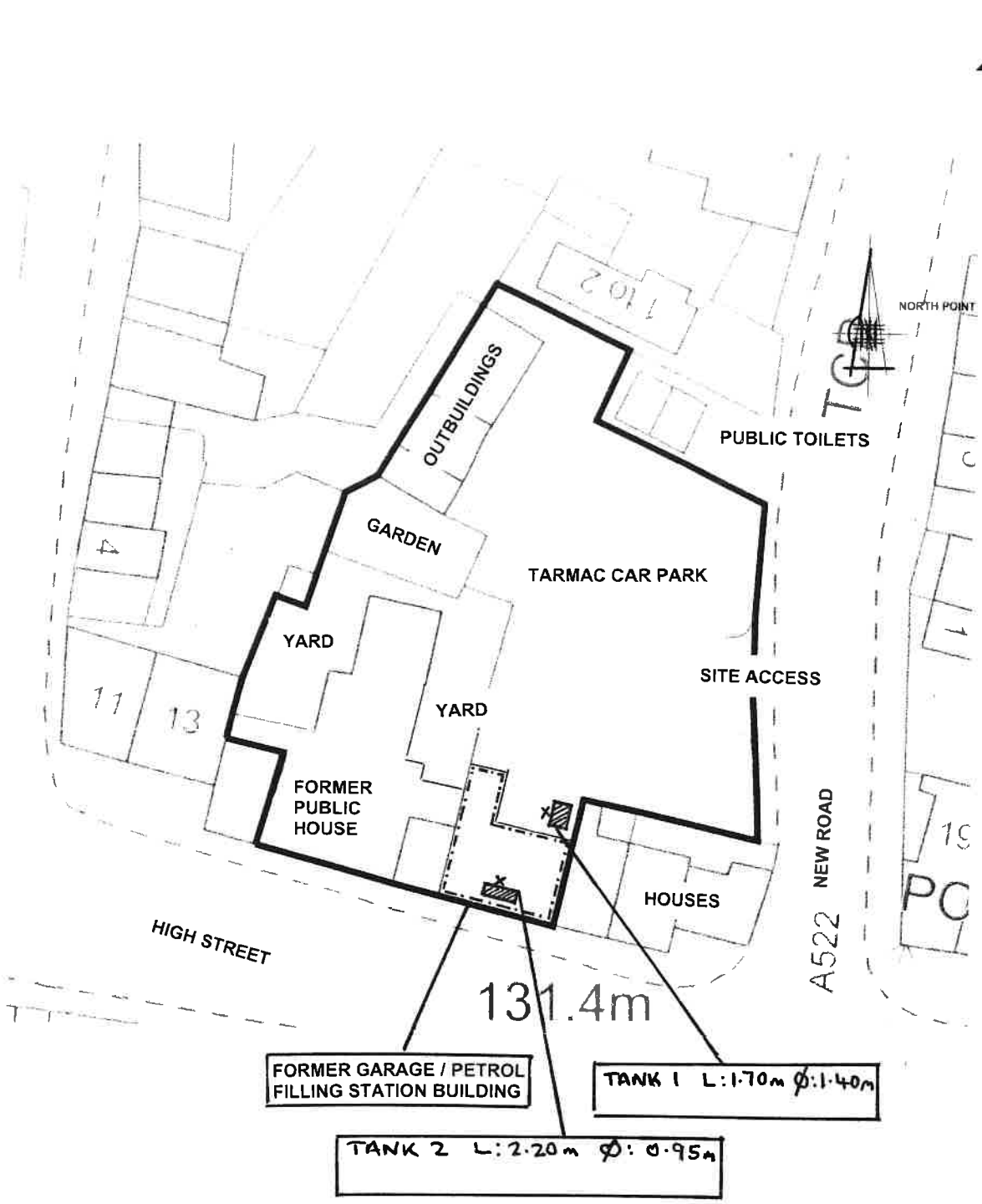
Two former underground fuel tanks have been removed from the site together with approximately 45 tonnes of hydrocarbon impacted soils.

Testing of the sides and bases of the tank excavations have demonstrated that residual hydrocarbon levels are low and significantly below the initial screening value of 500mg/kg.

The residual hydrocarbon concentrations are not considered to pose an unacceptable risk to controlled waters, site end-users or the wider environment.

However, as previously recommended, basic ground gas protection measures should be incorporated into the development comprising sub-slab passive ventilation and a proprietary gas resistant membrane.

FIGURES



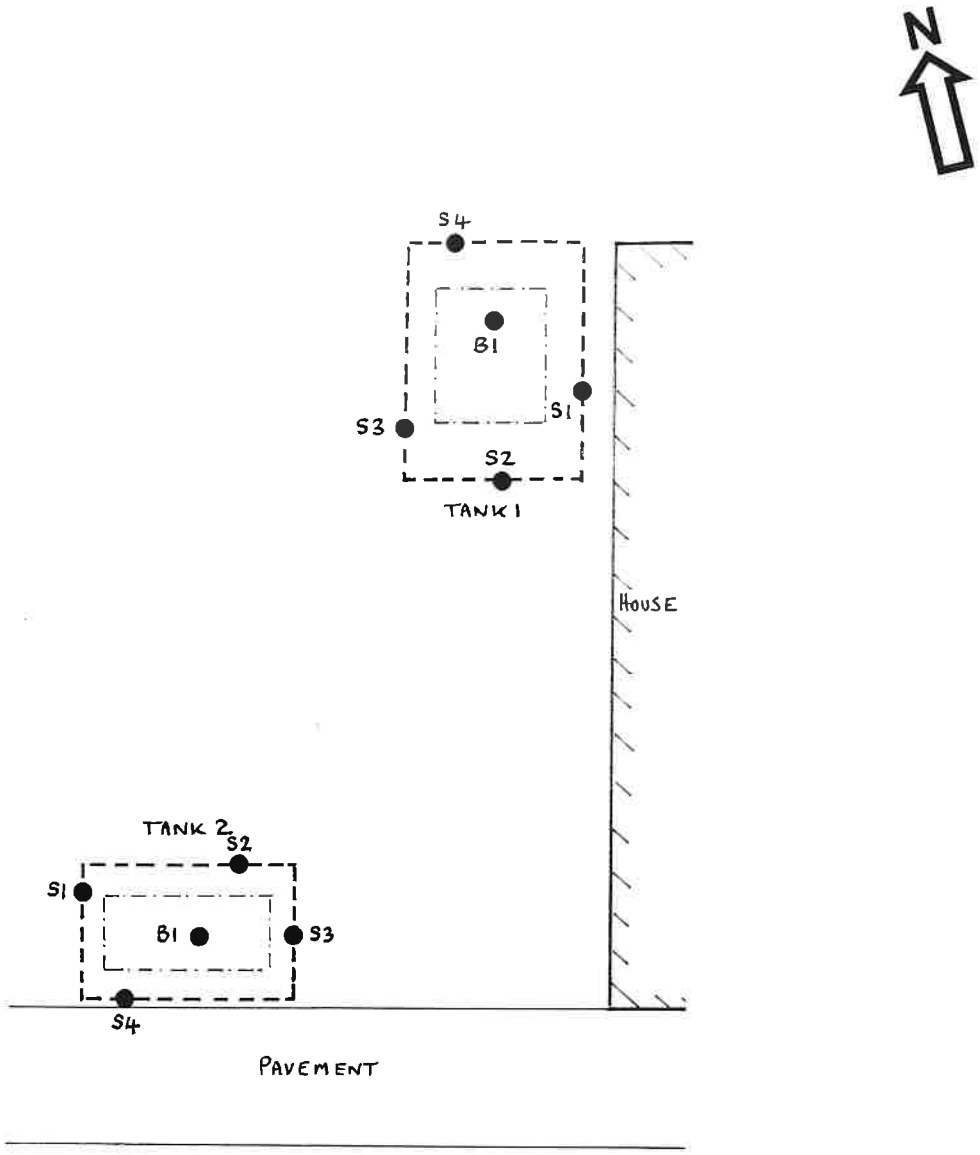
KEY

EXTENT OF GARAGE / PETROL FILLING STATION BUILDING

UNDERGROUND FUEL TANKS

X CONTAMINATION SAMPLE LOCATIONS

SPILMAN ASSOCIATES Geotechnical & Environmental Engineers Tel: 01384 820578	Client SEP Properties Limited		Title Tank Location Plan	
	Scheme High Street, Tean			
	Date July 2021	Ref P20072/04	Scale 1:500	Fig 1



KEY

OUTLINE OF TANK (REMOVED)

OUTLINE OF EXCAVATION

SAMPLE LOCATION

S : SIDE OF EXCAVATION

B : BASE OF EXCAVATION

SPILMAN ASSOCIATES Geotechnical & Environmental Engineers Tel: 01384 820578	Client SEP Properties Limited		Title Tank Validation Sample Locations	
	Scheme High Street, Tean			
	Date July 2021	Ref P20072/04	Scale 1:200	Fig 2

APPENDIX A

CONCEPT ARCHITECTURAL DESIGN ARE TO BE NOTIFIED OF ANY DISCREPANCIES IN FIGURED DIMENSIONS. CONTRACTOR TO VERIFY ALL DIMENSIONS.
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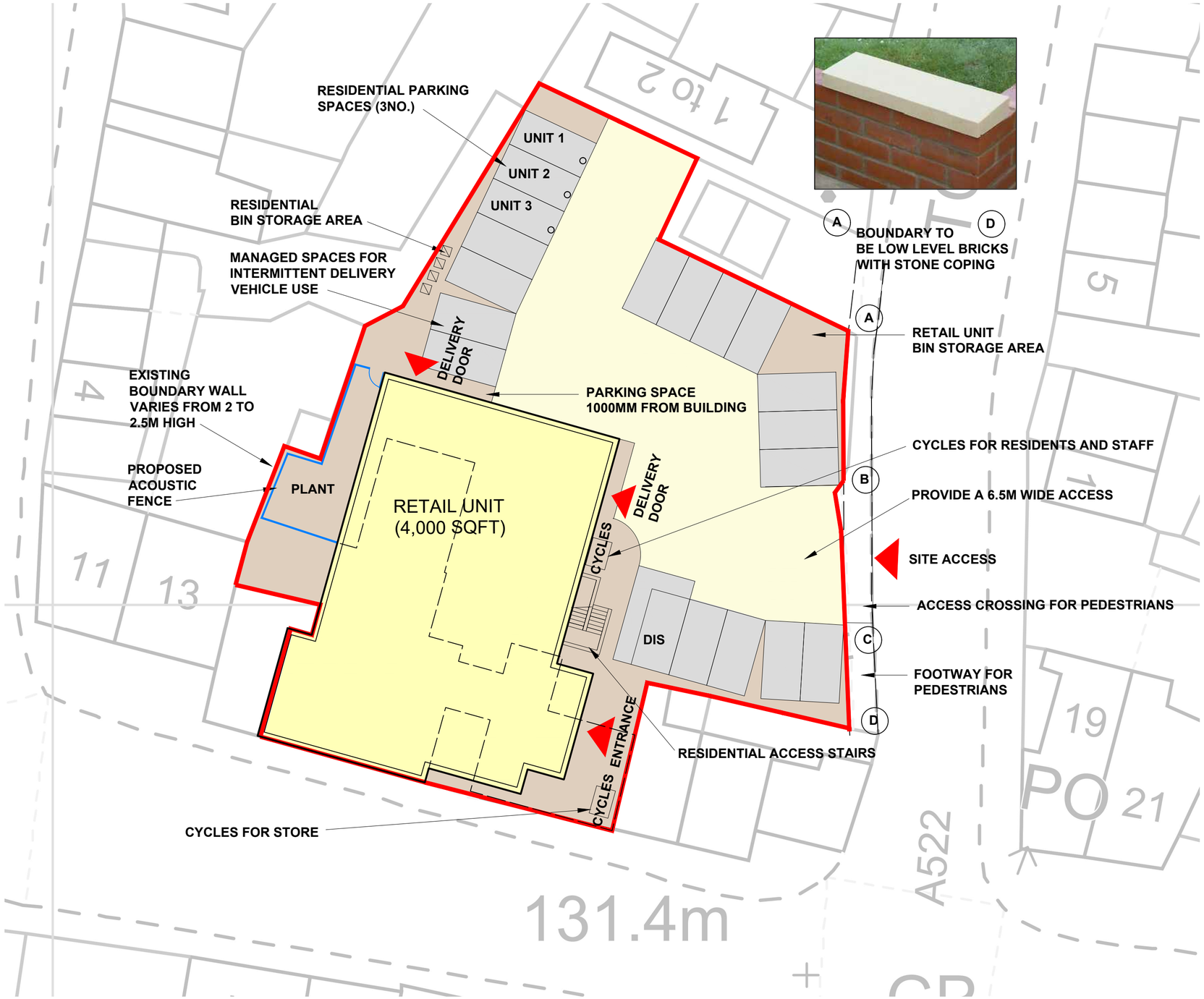

concept architectural design
TEL : 07809 580481 EMAIL : concept-designs@outlook.com

ARCHITECTURAL DESIGN • PROJECT MANAGEMENT • DEVELOPMENT CONSULTANTS

Project
PROPOSED DEVELOPMENT AT HIGH STREET, TEAN

Drawing Title
PROPOSED SITE LAYOUT PLAN

Client
SEP PROPERTIES

Drawing No.	Revision
CA-SEP-06-03	J

Scale	Date	Drawn by
1:200@A2	OCT 19	SG

APPENDIX B

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THE ENVIRONMENTAL LABORATORY LTD

Analytical Report Number:	21-34171
Issue:	1
Date of Issue:	14/06/2021
Contact:	Nicki Spilman
Customer Details:	Spilman Associates Ltd 38 South Avenue Stourbridge West MidlandsDY9 3XY
Quotation No:	Q19-01596
Order No:	P20072
Customer Reference:	P20072
Date Received:	08/06/2021
Date Approved:	14/06/2021
Details:	High Street, Tean
Approved by:	

Mike Varley, Technical Manager

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.: 21-34171, issue number 1

Elab No.	Client's Ref.	Date Sampled	Date Scheduled	Description	Deviations
240000	Tank 1 1.80	04/06/2021	08/06/2021	Loamy sand	
240001	Tank 2 1.10	04/06/2021	08/06/2021	Loamy sand	

Results Summary

Report No.: 21-34171, issue number 1

			ELAB Reference	240000	240001
			Customer Reference		
			Sample ID		
			Sample Type	SOIL	SOIL
			Sample Location	Tank 1	Tank 2
			Sample Depth (m)	1.80	1.10
			Sampling Date	04/06/2021	04/06/2021
Determinand	**Codes**	**Units**	**LOD**		
Soil sample preparation parameters					
Moisture Content	N	%	0.1	11.3	25.3
Material removed	N	%	0.1	71.0	29.1
Description of Inert material removed	N		0	Stones	Stones
Metals					
Arsenic	M	mg/kg	1	18.7	28.2
Cadmium	M	mg/kg	0.5	0.6	1.8
Chromium	M	mg/kg	5	25.7	22.1
Copper	M	mg/kg	5	52.3	212
Lead	M	mg/kg	5	84.0	347
Mercury	M	mg/kg	0.5	< 0.5	0.7
Nickel	M	mg/kg	5	34.2	43.6
Selenium	M	mg/kg	1	< 1.0	< 1.0
Zinc	M	mg/kg	5	200	401
Inorganics					
Complex Cyanide	N	mg/kg	1	< 1.0	1.3
Elemental Sulphur	M	mg/kg	20	246	1790
Free Cyanide	N	mg/kg	1	< 1.0	< 1.0
Hexavalent Chromium	N	mg/kg	0.8	< 0.8	< 0.8
Total Sulphide	N	mg/kg	2	3	< 2
Total Cyanide	M	mg/kg	1	< 1.0	1.3
Acid Soluble Sulphate (SO4)	U	%	0.02	0.09	0.11
Water Soluble Boron	N	mg/kg	0.5	1.6	2.9
Miscellaneous					
pH	M	pH units	0.1	8.5	7.9
Phenols					
Total Monohydric Phenols	N	mg/kg	5	< 5	< 5
Polyaromatic hydrocarbons					
Naphthalene	M	mg/kg	0.1	2.0	10.4
Acenaphthylene	M	mg/kg	0.1	0.2	0.6
Acenaphthene	M	mg/kg	0.1	0.3	0.4
Fluorene	M	mg/kg	0.1	0.4	< 0.1
Phenanthrene	M	mg/kg	0.1	2.1	< 0.1
Anthracene	M	mg/kg	0.1	0.7	< 0.1
Fluoranthene	M	mg/kg	0.1	2.6	< 0.1
Pyrene	M	mg/kg	0.1	2.0	< 0.1
Benzo(a)anthracene	M	mg/kg	0.1	1.0	< 0.1
Chrysene	M	mg/kg	0.1	1.1	< 0.1
Benzo(b)fluoranthene	M	mg/kg	0.1	1.2	< 0.1
Benzo(k)fluoranthene	M	mg/kg	0.1	0.9	< 0.1
Benzo(a)pyrene	M	mg/kg	0.1	0.8	< 0.1
Indeno(1,2,3-cd)pyrene	M	mg/kg	0.1	0.6	< 0.1
Dibenzo(a,h)anthracene	M	mg/kg	0.1	0.3	< 0.1
Benzo[g,h,i]perylene	M	mg/kg	0.1	0.9	< 0.1
Total PAH(16)	M	mg/kg	0.4	17.0	11.4

Results Summary

Report No.: 21-34171, issue number 1

			ELAB Reference	240000	240001
			Customer Reference		
			Sample ID		
			Sample Type	SOIL	SOIL
			Sample Location	Tank 1	Tank 2
			Sample Depth (m)	1.80	1.10
			Sampling Date	04/06/2021	04/06/2021
Determinand	**Codes**	**Units**	**LOD**		
BTEX					
Benzene	M	ug/kg	10	12.8	20.7
Toluene	M	ug/kg	10	< 10.0	19.2
Ethylbenzene	M	ug/kg	10	18.5	47.4
Xylenes	M	ug/kg	10	153	103
MTBE	N	ug/kg	10	< 10.0	< 10.0
TPH CWG					
>C5-C6 Aliphatic	N	mg/kg	0.01	0.04	0.09
>C6-C8 Aliphatic	N	mg/kg	0.01	0.41	0.46
>C8-C10 Aliphatic	N	mg/kg	1	40.6	558
>C10-C12 Aliphatic	M	mg/kg	1	67.0	1000
>C12-C16 Aliphatic	M	mg/kg	1	31.8	447
>C16-C21 Aliphatic	M	mg/kg	1	8.6	20.5
>C21-C35 Aliphatic	M	mg/kg	1	86.9	30.4
>C35-C40 Aliphatic	M	mg/kg	1	22.8	2.5
>C40-C44 Aliphatic	N	mg/kg	1	4.4	1.0
Total aliphatic hydrocarbons (>C5 - C44)	N	mg/kg	1	262	2060
>C5-C7 Aromatic	N	mg/kg	0.01	0.01	0.02
>C7-C8 Aromatic	N	mg/kg	0.01	< 0.01	0.02
>C8-C10 Aromatic	N	mg/kg	1	47.8	731
>C10-C12 Aromatic	M	mg/kg	1	86.4	808
>C12-C16 Aromatic	M	mg/kg	1	28.1	296
>C16-C21 Aromatic	M	mg/kg	1	9.7	11.6
>C21-C35 Aromatic	M	mg/kg	1	61.5	37.4
>C35-C40 Aromatic	M	mg/kg	1	20.8	< 1.0
>C40-C44 Aromatic Soil	N	mg/kg	1	2.5	< 1.0
Total aromatic hydrocarbons (>C5 - C44)	N	mg/kg	1	257	1880
Total petroleum hydrocarbons (>C5 - C44)	N	mg/kg	1	519	3950

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Results Summary

Report No.: 21-34171, 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 Analysis Total (%)	Gravimetric Analysis by ACM Type (%)	Free Fibre Analysis (%)	Total Asbestos (%)
240000	1.80	Tank 1	Brown soil, stones, clinker	No asbestos detected	n/t	n/t	n/t	n/t
240001	1.10	Tank 2	Brown soil, stones, clinker	No asbestos detected	n/t	n/t	n/t	n/t

Method Summary

Report No.: 21-34171, issue number 1

Parameter	Codes	Analysis Undertaken On	Date Tested	Method Number	Technique
Soil					
Free cyanide	N	As submitted sample	11/06/2021		Colorimetry
Sulphide	N	As submitted sample	10/06/2021	109	Colorimetry
Hexavalent chromium	N	As submitted sample	10/06/2021	110	Colorimetry
pH	M	Air dried sample	11/06/2021	113	Electromeric
Acid Soluble Sulphate	U	Air dried sample	10/06/2021	115	Ion Chromatography
Phenols in solids	N	As submitted sample	10/06/2021	121	HPLC
Elemental Sulphur	M	Air dried sample	09/06/2021	122	HPLC
PAH (GC-FID)	M	As submitted sample	09/06/2021	133	GC-FID
Low range Aliphatic hydrocarbons soil	N	As submitted sample	10/06/2021	181	GC-MS
Low range Aromatic hydrocarbons soil	N	As submitted sample	10/06/2021	181	GC-MS
BTEX in solids	M	As submitted sample	10/06/2021	181A	GC-MS
Water soluble boron	N	Air dried sample	09/06/2021	202	Colorimetry
Total cyanide	M	As submitted sample	11/06/2021	204	Colorimetry
TPH CWG soil by gc-gc	M	As submitted sample	09/06/2021	271	
Asbestos identification	U	Air dried sample	11/06/2021	280	Microscopy
Aqua regia extractable metals	M	Air dried sample	09/06/2021	300	ICPMS

Tests marked N are not UKAS accredited

Report Information

Report No.: 21-34171, issue number 1

Key

U	hold UKAS accreditation
M	hold MCERTS and UKAS accreditation
N	do not currently hold UKAS accreditation
^	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	LOD refers to limit of detection, except in the case of pH soils and pH waters where it 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

a	No date of sampling supplied
b	No time of sampling supplied (Waters Only)
c	Sample not received in appropriate containers
d	Sample not received in cooled condition
e	The container has been incorrectly filled
f	Sample age exceeds stability time (sampling to receipt)
g	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

APPENDIX C

Photo 1: Excavated Tanks (Tank 1 at back)

Photo 2: Tank 1 Excavation

Photo 3: Tank 2 Excavation

APPENDIX D

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THE ENVIRONMENTAL LABORATORY LTD

Analytical Report Number:	21-34493
Issue:	1
Date of Issue:	02/07/2021
Contact:	Nicki Spilman
Customer Details:	Spilman Associates Ltd 38 South Avenue Stourbridge West MidlandsDY9 3XY
Quotation No:	Q19-01596
Order No:	P20072
Customer Reference:	P20072
Date Received:	25/06/2021
Date Approved:	02/07/2021
Details:	High Street, Tean
Approved by:	

Mike Varley, Technical Manager

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.: 21-34493, issue number 1

Elab No.	Client's Ref.	Date Sampled	Date Scheduled	Description	Deviations
242005	Tank 1 S1 1.60	22/06/2021	25/06/2021	Sandy loam	
242006	Tank 1 S2 1.00	22/06/2021	25/06/2021	Sandy loam	
242007	Tank 1 S3 1.40	22/06/2021	25/06/2021	Sandy loam	
242008	Tank 1 S4 1.00	22/06/2021	25/06/2021	Sandy silty loam	
242009	Tank 1 B1 2.50	22/06/2021	25/06/2021	Silty loam	
242010	Tank 2 S1 1.20	22/06/2021	25/06/2021	Loamy sand	
242011	Tank 2 S2 1.40	22/06/2021	25/06/2021	Loamy sand	
242012	Tank 2 S3 1.20	22/06/2021	25/06/2021	Silty loam	
242013	Tank 2 S4 1.10	22/06/2021	25/06/2021	Loamy sand	
242014	Tank 2 B1 1.70	22/06/2021	25/06/2021	Loamy sand	

Results Summary

Report No.: 21-34493, issue number 1

			ELAB Reference	242005	242006	242007	242008	242009
			Customer Reference					
			Sample ID					
			Sample Type	SOIL	SOIL	SOIL	SOIL	SOIL
			Sample Location	Tank 1 S1	Tank 1 S2	Tank 1 S3	Tank 1 S4	Tank 1 B1
			Sample Depth (m)	1.60	1.00	1.40	1.00	2.50
			Sampling Date	22/06/2021	22/06/2021	22/06/2021	22/06/2021	22/06/2021
Determinand	**Codes**	**Units**	**LOD**					
BTEX								
Benzene	M	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Toluene	M	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Ethylbenzene	M	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Xylenes	M	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
MTBE	N	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
TPH CWG								
>C5-C6 Aliphatic	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
>C6-C8 Aliphatic	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
>C8-C10 Aliphatic	N	mg/kg	1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
>C10-C12 Aliphatic	M	mg/kg	1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
>C12-C16 Aliphatic	M	mg/kg	1	2.2	< 1.0	< 1.0	< 1.0	< 1.0
>C16-C21 Aliphatic	M	mg/kg	1	3.8	< 1.0	< 1.0	1.3	< 1.0
>C21-C35 Aliphatic	M	mg/kg	1	36.3	2.8	3.0	8.5	< 1.0
>C35-C40 Aliphatic	M	mg/kg	1	13.9	1.3	1.3	3.2	< 1.0
>C40-C44 Aliphatic	N	mg/kg	1	5.2	< 1.0	< 1.0	< 1.0	< 1.0
Total aliphatic hydrocarbons (>C5 - C44)	N	mg/kg	1	62.4	5.5	5.7	15.1	< 1.0
>C5-C7 Aromatic	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
>C7-C8 Aromatic	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
>C8-C10 Aromatic	N	mg/kg	1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
>C10-C12 Aromatic	M	mg/kg	1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
>C12-C16 Aromatic	M	mg/kg	1	2.8	< 1.0	< 1.0	1.2	< 1.0
>C16-C21 Aromatic	M	mg/kg	1	7.2	1.8	1.0	5.0	< 1.0
>C21-C35 Aromatic	M	mg/kg	1	49.0	11.5	7.7	28.8	< 1.0
>C35-C40 Aromatic	M	mg/kg	1	23.2	3.4	2.3	8.4	< 1.0
>C40-C44 Aromatic Soil	N	mg/kg	1	4.5	< 1.0	< 1.0	< 1.0	< 1.0
Total aromatic hydrocarbons (>C5 - C44)	N	mg/kg	1	87.1	18.0	12.0	44.5	1.2
Total petroleum hydrocarbons (>C5 - C44)	N	mg/kg	1	150	23.5	17.7	59.6	1.2

Results Summary

Report No.: 21-34493, issue number 1

			ELAB Reference	242010	242011	242012	242013	242014
			Customer Reference					
			Sample ID					
			Sample Type	SOIL	SOIL	SOIL	SOIL	SOIL
			Sample Location	Tank 2 S1	Tank 2 S2	Tank 2 S3	Tank 2 S4	Tank 2 B1
			Sample Depth (m)	1.20	1.40	1.20	1.10	1.70
			Sampling Date	22/06/2021	22/06/2021	22/06/2021	22/06/2021	22/06/2021
Determinand	**Codes**	**Units**	**LOD**					
BTEX								
Benzene	M	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Toluene	M	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Ethylbenzene	M	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Xylenes	M	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
MTBE	N	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
TPH CWG								
>C5-C6 Aliphatic	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
>C6-C8 Aliphatic	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
>C8-C10 Aliphatic	N	mg/kg	1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
>C10-C12 Aliphatic	M	mg/kg	1	1.7	< 1.0	< 1.0	< 1.0	< 1.0
>C12-C16 Aliphatic	M	mg/kg	1	2.0	< 1.0	< 1.0	< 1.0	< 1.0
>C16-C21 Aliphatic	M	mg/kg	1	< 1.0	1.0	< 1.0	< 1.0	< 1.0
>C21-C35 Aliphatic	M	mg/kg	1	< 1.0	1.1	< 1.0	< 1.0	< 1.0
>C35-C40 Aliphatic	M	mg/kg	1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
>C40-C44 Aliphatic	N	mg/kg	1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total aliphatic hydrocarbons (>C5 - C44)	N	mg/kg	1	3.8	3.1	< 1.0	< 1.0	< 1.0
>C5-C7 Aromatic	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
>C7-C8 Aromatic	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
>C8-C10 Aromatic	N	mg/kg	1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
>C10-C12 Aromatic	M	mg/kg	1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
>C12-C16 Aromatic	M	mg/kg	1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
>C16-C21 Aromatic	M	mg/kg	1	< 1.0	10.4	< 1.0	4.5	< 1.0
>C21-C35 Aromatic	M	mg/kg	1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
>C35-C40 Aromatic	M	mg/kg	1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
>C40-C44 Aromatic Soil	N	mg/kg	1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total aromatic hydrocarbons (>C5 - C44)	N	mg/kg	1	< 1.0	11.4	< 1.0	4.7	< 1.0
Total petroleum hydrocarbons (>C5 - C44)	N	mg/kg	1	4.3	14.5	< 1.0	5.4	< 1.0

Method Summary

Report No.: 21-34493, issue number 1

Parameter	Codes	Analysis Undertaken On	Date Tested	Method Number	Technique
Soil					
Low range Aliphatic hydrocarbons soil	N	As submitted sample	29/06/2021	181	GC-MS
Low range Aromatic hydrocarbons soil	N	As submitted sample	29/06/2021	181	GC-MS
BTEX in solids	M	As submitted sample	29/06/2021	181A	GC-MS
TPH CWG soil by gc-gc	M	As submitted sample	25/06/2021	271	

Tests marked N are not UKAS accredited

Report Information

Report No.: 21-34493, issue number 1

Key

U	hold UKAS accreditation
M	hold MCERTS and UKAS accreditation
N	do not currently hold UKAS accreditation
^	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	LOD refers to limit of detection, except in the case of pH soils and pH waters where it 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

a	No date of sampling supplied
b	No time of sampling supplied (Waters Only)
c	Sample not received in appropriate containers
d	Sample not received in cooled condition
e	The container has been incorrectly filled
f	Sample age exceeds stability time (sampling to receipt)
g	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