The Great Grid Upgrade

Sea Link

Sea Link

Volume 6: Environmental Statement

Document: 6.3.3.5.D
Part 3 Kent
Chapter 5 Appendix 3.5.D
Generic Quantitative Risk Assessment – Kent Part 2 of 2

Planning Inspectorate Reference: EN020026

Version: A
March 2025

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 Regulation 5(2)(a)



nationalgrid

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APPENDIX E - GEOENVIRONMENTAL TESTING

(i) Laboratory Test Results

envirolab
Units 7 & 8 Sandpits Business Park
Mottram Road, Hyde, Cheshire, SK14 3AR

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 23/09366
Issue Number: 1 **Date:** 02 October, 2023

Client: Structural Soils Limited (Hemel Hempstead)
18 Frogmore Road
Hemel Hempstead
UK
HP3 9RT

Project Manager: [redacted]
Project Name: Sealink Richborough
Project Ref: 563607
Order No: N/A
Date Samples Received: 21/09/23
Date Instructions Received: 21/09/23
Date Analysis Completed: 02/10/23

Approved by:

[redacted]
Client Manager

Envirolab Job Number: 23/09366

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/09366/2							Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	R22-BH204									
Depth to Top	0.50									
Depth To Bottom										
Date Sampled	18-Sep-23									
Sample Type	SOIL - ES									
Sample Matrix Code	4AE									
% Moisture at 105C$_A$	32.7							% w/w	0.1	A-T-044
% Stones >10mm$_A$	<0.1							% w/w	0.1	A-T-044
pH$_D^{M\#}$	7.83							pH	0.01	A-T-031s
Sulphate (water sol 2:1)$_D^{M\#}$	<0.01							g/l	0.01	A-T-026s
Sulphur (total)$_D$	70							mg/kg	50	A-T-024s
Cyanide (free)$_A^{M\#}$	<1							mg/kg	1	A-T-042sFCN
Phenols - Total by HPLC$_A$	<0.2							mg/kg	0.2	A-T-050s
Organic Matter$_D^{M\#}$	1.0							% w/w	0.1	A-T-032s
Total Organic Carbon$_D^{M\#}$	0.58							% w/w	0.03	A-T-032s
Fraction of organic carbon$_D^{\#}$	0.0058							N/A	0.0003	A-T-032s
Arsenic$_D^{M\#}$	2							mg/kg	1	A-T-024s
Barium$_D$	40							mg/kg	1	A-T-024s
Beryllium$_D$	<0.5							mg/kg	0.5	A-T-024s
Boron (water soluble)$_D^{M\#}$	<1.0							mg/kg	1	A-T-027s
Cadmium$_D^{M\#}$	<0.5							mg/kg	0.5	A-T-024s
Copper$_D^{M\#}$	10							mg/kg	1	A-T-024s
Chromium$_D^{M\#}$	22							mg/kg	1	A-T-024s
Chromium (hexavalent)$_D$	<1							mg/kg	1	A-T-040s
Chromium (trivalent)	22							mg/kg	1	Calc
Lead$_D^{M\#}$	9							mg/kg	1	A-T-024s
Manganese$_D^{M\#}$	295							mg/kg	1	A-T-024s
Mercury$_D$	<0.17							mg/kg	0.17	A-T-024s
Molybdenum$_D^{M\#}$	<1							mg/kg	1	A-T-024s
Nickel$_D^{M\#}$	10							mg/kg	1	A-T-024s
Selenium$_D^{M\#}$	<1							mg/kg	1	A-T-024s
Vanadium$_D^{M\#}$	23							mg/kg	1	A-T-024s
Zinc$_D^{M\#}$	36							mg/kg	5	A-T-024s
Leachate Prep BS EN 12457-1 (2:1) (1 no)$_A$	*									A-T-001
pH (leachable)$_A$	7.07							pH	0.01	A-T-031w
Ammoniacal nitrogen as N (leachable)$_A$	<0.05							mg/l	0.05	A-T-033w
Chloride (leachable)$_A$	5.04							mg/l	1	A-T-026w
Fluoride (leachable)$_A$	1.02							mg/l	0.1	A-T-026w (F)
Sulphate (leachable)$_A$	<1.00							mg/l	1	A-T-026w

Envirolab Job Number: 23/09366

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/09366/2							Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	R22-BH204									
Depth to Top	0.50									
Depth To Bottom										
Date Sampled	18-Sep-23									
Sample Type	SOIL - ES									
Sample Matrix Code	4AE									
Cyanide (free) (leachable)$_A$	<0.005							mg/l	0.005	A-T-042wFCN
Cyanide (total) (leachable)$_A$	<0.005							mg/l	0.005	A-T-042wTCN
Cyanide (complex) (leachable)	<0.005							mg/l	0.005	Calc
Phenol (leachable)$_A$	<0.01							mg/l	0.01	A-T-050w
Cresols (leachable)$_A$	<0.01							mg/l	0.01	A-T-050w
Resorcinol (leachable)$_A$	<0.01							mg/l	0.01	A-T-050w
Catechol (leachable)$_A$	<0.01							mg/l	0.01	A-T-050w
Xylenols & Ethylphenols (leachable)$_A$	<0.01							mg/l	0.01	A-T-050w
Naphthols (leachable)$_A$	<0.01							mg/l	0.01	A-T-050w
Trimethylphenol (leachable)$_A$	<0.01							mg/l	0.01	A-T-050w
Phenols (total by HPLC) (leachable)$_A$	<0.01							mg/l	0.01	A-T-050w
Antimony (leachable)$_A$	<1							µg/l	1	A-T-025w
Arsenic (leachable)$_A$	2							µg/l	1	A-T-025w
Boron (leachable)$_A$	31							µg/l	10	A-T-025w
Barium (leachable)$_A$	68							µg/l	1	A-T-025w
Beryllium (leachable)$_A$	<1							µg/l	1	A-T-025w
Cadmium (leachable)$_A$	<1							µg/l	1	A-T-025w
Copper (leachable)$_A$	5							µg/l	4	A-T-025w
Chromium (leachable)$_A$	<1							µg/l	1	A-T-025w
Chromium (hexavalent) (leachable)$_A$	<0.05							mg/l	0.05	A-T-040w
Chromium (trivalent)	<0.05							mg/l	0.05	Calc
Iron (leachable)$_A$	242							µg/l	10	A-T-025w
Lead (leachable)$_A$	3							µg/l	1	A-T-025w
Manganese (leachable)$_A$	22							µg/l	1	A-T-025w
Magnesium (leachable)$_A$	12							mg/l	1	A-T-049w
Mercury (leachable)$_A$	<0.1							µg/l	0.1	A-T-025w
Molybdenum (leachable)$_A$	2							µg/l	1	A-T-025w
Nickel (leachable)$_A$	2							µg/l	2	A-T-025w
Selenium (leachable)$_A$	<1							µg/l	1	A-T-025w
Vanadium (leachable)$_A$	8							µg/l	1	A-T-025w
Zinc (leachable)$_A$	34							µg/l	2	A-T-025w
Calcium (leachable)$_A$	33							mg/l	1	A-T-049w

Envirolab Job Number: 23/09366

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/09366/2							Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	R22-BH204									
Depth to Top	0.50									
Depth To Bottom										
Date Sampled	18-Sep-23									
Sample Type	SOIL - ES									
Sample Matrix Code	4AE									
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: 23/09366

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/09366/2							Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	R22-BH204									
Depth to Top	0.50									
Depth To Bottom										
Date Sampled	18-Sep-23									
Sample Type	SOIL - ES									
Sample Matrix Code	4AE									
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^U							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$_A$	<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$_A^{M\#}$	<0.03							mg/kg	0.03	A-T-019s
Pyrene$_A^{M\#}$	<0.07							mg/kg	0.07	A-T-019s
Total PAH-16MS$_A$	<0.08							mg/kg	0.01	A-T-019s

Report Notes

General
This report shall not be reproduced, except in full, without written approval from Envirolab.
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 **six 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.
The client Sample No, Client Sample ID, Depth to top, Depth to Bottom and Date Sampled are all provided by the client.
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.

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 "^"	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
N/A	Not applicable

Asbestos
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
Quantification of asbestos is a 3 stage process including visual identification, hand picking and weighing, and fibre counting by sedimentation/phase contrast optical microscopy if required. 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) quantification by sedimentation is performed. 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.

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^{o}C / 11550µS/cm @ 20^{o}C fall outside the accreditation range and as such are unaccredited.

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

Envirolab Deviating Samples Report

Units 7&8 Sandpits Business Park, Mottram Road, Hyde, SK14 3AR
Tel. 0161 368 4921 email. ask@envlab.co.uk

Client: Structural Soils Limited (Hemel Hempstead), 18 Frogmore Road, Hemel Hempstead, UK, HP3 9RT

Project: Sealink Richborough

Clients Project No: 563607

Project No: 23/09366

Date Received: 21/09/2023 (am)

Cool Box Temperatures (°C): 12.8

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	23/09366/2
Client Sample No	
Client Sample ID/Depth	R22-BH204 0.50m
Date Sampled	18/09/23
A-T-019s	27/09/2023
A-T-024s	29/09/2023
A-T-025w	02/10/2023
A-T-026s	28/09/2023
A-T-026w	02/10/2023
A-T-026w (F)	28/09/2023
A-T-027s	29/09/2023
A-T-031s	28/09/2023
A-T-031w	26/09/2023
A-T-032s	28/09/2023
A-T-033w	28/09/2023
A-T-040s	28/09/2023
A-T-040w	28/09/2023
A-T-042sFCN	25/09/2023
A-T-042wFCN	27/09/2023
A-T-042wTCN	27/09/2023
A-T-044	29/09/2023
A-T-045	22/09/2023
A-T-049w	27/09/2023
A-T-050s	26/09/2023
A-T-050w	27/09/2023
Calc	29/09/2023

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

envirolab
Units 7 & 8 Sandpits Business Park
Mottram Road, Hyde, Cheshire, SK14 3AR

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 23/09558
Issue Number: 1 **Date:** 06 October, 2023

Client: Structural Soils Limited (Hemel Hempstead)
18 Frogmore Road
Hemel Hempstead
UK
HP3 9RT

Project Manager: [redacted]
Project Name: Sealink Richborough
Project Ref: 563607
Order No: N/A
Date Samples Received: 27/09/23
Date Instructions Received: 27/09/23
Date Analysis Completed: 06/10/23

Approved by:

[redacted]

Client Manager

Envirolab Job Number: 23/09558

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/09558/3							Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	R22-TP502									
Depth to Top	1.00									
Depth To Bottom										
Date Sampled	25-Sep-23									
Sample Type	SOIL - ES									
Sample Matrix Code	5AE									
% Moisture at 105C$_A$	28.3							% w/w	0.1	A-T-044
% Stones >10mm$_A$	<0.1							% w/w	0.1	A-T-044
pH$_D$$^{M\#}$	8.22							pH	0.01	A-T-031s
Sulphate (water sol 2:1)$_D$$^{M\#}$	0.07							g/l	0.01	A-T-026s
Sulphur (total)$_D$	112							mg/kg	50	A-T-024s
Cyanide (free)$_A$$^{M\#}$	<1							mg/kg	1	A-T-042sFCN
Phenols - Total by HPLC$_A$	<0.2							mg/kg	0.2	A-T-050s
Organic Matter$_D$$^{M\#}$	0.3							% w/w	0.1	A-T-032s
Total Organic Carbon$_D$$^{M\#}$	0.20							% w/w	0.03	A-T-032s
Fraction of organic carbon$_D$$^{\#}$	0.0020							N/A	0.0003	A-T-032s
Arsenic$_D$$^{M\#}$	3							mg/kg	1	A-T-024s
Barium$_D$	40							mg/kg	1	A-T-024s
Beryllium$_D$	0.7							mg/kg	0.5	A-T-024s
Boron (water soluble)$_D$$^{M\#}$	<1.0							mg/kg	1	A-T-027s
Cadmium$_D$$^{M\#}$	<0.5							mg/kg	0.5	A-T-024s
Copper$_D$$^{M\#}$	14							mg/kg	1	A-T-024s
Chromium$_D$$^{M\#}$	41							mg/kg	1	A-T-024s
Chromium (hexavalent)$_D$	<1							mg/kg	1	A-T-040s
Chromium (trivalent)	41							mg/kg	1	Calc
Lead$_D$$^{M\#}$	10							mg/kg	1	A-T-024s
Manganese$_D$$^{M\#}$	86							mg/kg	1	A-T-024s
Mercury$_D$	<0.17							mg/kg	0.17	A-T-024s
Molybdenum$_D$$^{M\#}$	<1							mg/kg	1	A-T-024s
Nickel$_D$$^{M\#}$	17							mg/kg	1	A-T-024s
Selenium$_D$$^{M\#}$	<1							mg/kg	1	A-T-024s
Vanadium$_D$$^{M\#}$	41							mg/kg	1	A-T-024s
Zinc$_D$$^{M\#}$	50							mg/kg	5	A-T-024s

Envirolab Job Number: 23/09558

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/09558/3							Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	R22-TP502									
Depth to Top	1.00									
Depth To Bottom										
Date Sampled	25-Sep-23									
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: 23/09558

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/09558/3							Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	R22-TP502									
Depth to Top	1.00									
Depth To Bottom										
Date Sampled	25-Sep-23									
Sample Type	SOIL - ES									
Sample Matrix Code	5AE									
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$_A$	<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$_A^{M\#}$	<0.03							mg/kg	0.03	A-T-019s
Pyrene$_A^{M\#}$	<0.07							mg/kg	0.07	A-T-019s
Total PAH-16MS$_A$	<0.08							mg/kg	0.01	A-T-019s

Report Notes

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Analytical results reflect the quality of the sample at the time of analysis only.
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Superscript "#"	Accredited to ISO 17025
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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 "^"	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
N/A	Not applicable

Asbestos
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
Quantification of asbestos is a 3 stage process including visual identification, hand picking and weighing, and fibre counting by sedimentation/phase contrast optical microscopy if required. 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) quantification by sedimentation is performed. 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.

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^{o}C / 11550µS/cm @ 20^{o}C fall outside the accreditation range and as such are unaccredited.

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

Envirolab Deviating Samples Report

Units 7&8 Sandpits Business Park, Mottram Road, Hyde, SK14 3AR
Tel. 0161 368 4921 email. ask@envlab.co.uk

Client: Structural Soils Limited (Hemel Hempstead), 18 Frogmore Road, Hemel Hempstead, UK, HP3 9RT

Project: Sealink Richborough

Clients Project No: 563607

Project No: 23/09558

Date Received: 27/09/2023 (am)

Cool Box Temperatures (°C): 14.5

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	23/09558/3
Client Sample No	
Client Sample ID/Depth	R22-TP502 1.00m
Date Sampled	25/09/23
A-T-019s	04/10/2023
A-T-024s	05/10/2023
A-T-026s	05/10/2023
A-T-027s	05/10/2023
A-T-031s	04/10/2023
A-T-032s	04/10/2023
A-T-040s	05/10/2023
A-T-042sFCN	02/10/2023
A-T-044	06/10/2023
A-T-045	29/09/2023
A-T-050s	02/10/2023
Calc	05/10/2023

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

envirolab
Units 7 & 8 Sandpits Business Park
Mottram Road, Hyde, Cheshire, SK14 3AR

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 23/09682
Issue Number: 1 **Date:** 30 October, 2023

Client: Structural Soils Limited (Hemel Hempstead)
18 Frogmore Road
Hemel Hempstead
UK
HP3 9RT

Project Manager: [redacted]
Project Name: Sealink Richborough
Project Ref: 563607
Order No: N/A
Date Samples Received: 29/09/23
Date Instructions Received: 29/09/23
Date Analysis Completed: 30/10/23

Approved by:

[redacted]

Client Manager

Envirolab Job Number: 23/09682

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/09682/1	23/09682/2	23/09682/6	23/09682/7				Units	Limit of Detection	Method ref
Client Sample No	101	102								
Client Sample ID	R22-TP203	R22-TP203	R22-TP204	R22-BH501						
Depth to Top	0.20	0.50	1	0.2						
Depth To Bottom										
Date Sampled	26-Sep-23	26-Sep-23	27-Sep-23	27-Sep-23						
Sample Type	SOIL	SOIL	SOIL	SOIL						
Sample Matrix Code	4AE	4A	6A	6AE						
% Moisture at 105C$_A$	23.8	-	37.4	28.9				% w/w	0.1	A-T-044
% Stones >10mm$_A$	<0.1	7.9	<0.1	<0.1				% w/w	0.1	A-T-044
pH$_D^{M\#}$	7.44	7.62	8.90	8.34				pH	0.01	A-T-031s
Sulphate (water sol 2:1)$_D^{M\#}$	<0.01	-	0.03	<0.01				g/l	0.01	A-T-026s
Sulphur (total)$_D$	151	-	120	609				mg/kg	50	A-T-024s
Cyanide (free)$_A^{M\#}$	<1	-	<1	<1				mg/kg	1	A-T-042sFCN
Phenols - Total by HPLC$_A$	<0.2	-	<0.2	<0.2				mg/kg	0.2	A-T-050s
Organic Matter$_D^{M\#}$	2.0	-	0.7	5.3				% w/w	0.1	A-T-032s
Total Organic Carbon$_D^{M\#}$	1.13	0.52	0.42	3.09				% w/w	0.03	A-T-032s
Fraction of organic carbon$_D^{\#}$	0.0113	-	0.0042	0.0309				N/A	0.0003	A-T-032s
Arsenic$_D^{M\#}$	2	-	8	14				mg/kg	1	A-T-024s
Barium$_D$	41	-	50	41				mg/kg	1	A-T-024s
Beryllium$_D$	<0.5	-	1.5	1.1				mg/kg	0.5	A-T-024s
Boron (water soluble)$_D^{M\#}$	<1.0	-	3.4	2.3				mg/kg	1	A-T-027s
Cadmium$_D^{M\#}$	0.6	-	0.9	0.9				mg/kg	0.5	A-T-024s
Copper$_D^{M\#}$	11	-	14	11				mg/kg	1	A-T-024s
Chromium$_D^{M\#}$	25	-	49	37				mg/kg	1	A-T-024s
Chromium (hexavalent)$_D$	<1	-	<1	<1				mg/kg	1	A-T-040s
Chromium (trivalent)	25	-	49	37				mg/kg	1	Calc
Lead$_D^{M\#}$	16	-	15	20				mg/kg	1	A-T-024s
Manganese$_D^{M\#}$	309	-	238	325				mg/kg	1	A-T-024s
Mercury$_D$	<0.17	-	0.17	<0.17				mg/kg	0.17	A-T-024s
Molybdenum$_D^{M\#}$	<1	-	<1	<1				mg/kg	1	A-T-024s
Nickel$_D^{M\#}$	12	-	26	20				mg/kg	1	A-T-024s
Selenium$_D^{M\#}$	<1	-	1	1				mg/kg	1	A-T-024s
Vanadium$_D^{M\#}$	26	-	89	64				mg/kg	1	A-T-024s
Zinc$_D^{M\#}$	42	-	66	63				mg/kg	5	A-T-024s
Leachate Prep BS EN 12457-1 (2:1) (1 no)$_A$	*	-	-	-						A-T-001
pH (leachable)$_A$	7.76	-	-	-				pH	0.01	A-T-031w
Ammoniacal nitrogen as N (leachable)$_A$	0.16	-	-	-				mg/l	0.05	A-T-033w
Chloride (leachable)$_A$	4.19	-	-	-				mg/l	1	A-T-026w
Fluoride (leachable)$_A$	1.20	-	-	-				mg/l	0.1	A-T-026w (F)
Sulphate (leachable)$_A$	<1.00	-	-	-				mg/l	1	A-T-026w

Envirolab Job Number: 23/09682

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/09682/1	23/09682/2	23/09682/6	23/09682/7				Units	Limit of Detection	Method ref
Client Sample No	101	102								
Client Sample ID	R22-TP203	R22-TP203	R22-TP204	R22-BH501						
Depth to Top	0.20	0.50	1	0.2						
Depth To Bottom										
Date Sampled	26-Sep-23	26-Sep-23	27-Sep-23	27-Sep-23						
Sample Type	SOIL	SOIL	SOIL	SOIL						
Sample Matrix Code	4AE	4A	6A	6AE						
Cyanide (free) (leachable)$_A$	<0.005	-	-	-				mg/l	0.005	A-T-042wFCN
Cyanide (total) (leachable)$_A$	<0.005	-	-	-				mg/l	0.005	A-T-042wTCN
Cyanide (complex) (leachable)	<0.005	-	-	-				mg/l	0.005	Calc
Phenol (leachable)$_A$	<0.01	-	-	-				mg/l	0.01	A-T-050w
Cresols (leachable)$_A$	<0.01	-	-	-				mg/l	0.01	A-T-050w
Resorcinol (leachable)$_A$	<0.01	-	-	-				mg/l	0.01	A-T-050w
Catechol (leachable)$_A$	<0.01	-	-	-				mg/l	0.01	A-T-050w
Xylenols & Ethylphenols (leachable)$_A$	<0.01	-	-	-				mg/l	0.01	A-T-050w
Naphthols (leachable)$_A$	<0.01	-	-	-				mg/l	0.01	A-T-050w
Trimethylphenol (leachable)$_A$	<0.01	-	-	-				mg/l	0.01	A-T-050w
Phenols (total by HPLC) (leachable)$_A$	<0.01	-	-	-				mg/l	0.01	A-T-050w
Antimony (leachable)$_A$	<1	-	-	-				µg/l	1	A-T-025w
Arsenic (leachable)$_A$	4	-	-	-				µg/l	1	A-T-025w
Boron (leachable)$_A$	48	-	-	-				µg/l	10	A-T-025w
Barium (leachable)$_A$	50	-	-	-				µg/l	1	A-T-025w
Beryllium (leachable)$_A$	<1	-	-	-				µg/l	1	A-T-025w
Cadmium (leachable)$_A$	<1	-	-	-				µg/l	1	A-T-025w
Copper (leachable)$_A$	8	-	-	-				µg/l	4	A-T-025w
Chromium (leachable)$_A$	<1	-	-	-				µg/l	1	A-T-025w
Chromium (hexavalent) (leachable)$_A$	<0.05	-	-	-				mg/l	0.05	A-T-040w
Chromium (trivalent)	<0.05	-	-	-				mg/l	0.05	Calc
Iron (leachable)$_A$	688	-	-	-				µg/l	10	A-T-025w
Lead (leachable)$_A$	7	-	-	-				µg/l	1	A-T-025w
Manganese (leachable)$_A$	51	-	-	-				µg/l	1	A-T-025w
Magnesium (leachable)$_A$	11	-	-	-				mg/l	1	A-T-049w
Mercury (leachable)$_A$	<0.1	-	-	-				µg/l	0.1	A-T-025w
Molybdenum (leachable)$_A$	<1	-	-	-				µg/l	1	A-T-025w
Nickel (leachable)$_A$	4	-	-	-				µg/l	2	A-T-025w
Selenium (leachable)$_A$	<1	-	-	-				µg/l	1	A-T-025w
Vanadium (leachable)$_A$	16	-	-	-				µg/l	1	A-T-025w
Zinc (leachable)$_A$	15	-	-	-				µg/l	2	A-T-025w
Bentazone$_A$	-	-	-	<0.10				mg/kg	0.1	Subcon RPS MH
Cypermethrin$_A$	-	-	-	<0.10				mg/kg	0.1	Subcon RPS MH

Envirolab Job Number: 23/09682

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/09682/1	23/09682/2	23/09682/6	23/09682/7				Units	Limit of Detection	Method ref
Client Sample No	101	102								
Client Sample ID	R22-TP203	R22-TP203	R22-TP204	R22-BH501						
Depth to Top	0.20	0.50	1	0.2						
Depth To Bottom										
Date Sampled	26-Sep-23	26-Sep-23	27-Sep-23	27-Sep-23						
Sample Type	SOIL	SOIL	SOIL	SOIL						
Sample Matrix Code	4AE	4A	6A	6AE						
Linuron$_A$	-	-	-	<0.10				mg/kg	0.1	Subcon RPS MH
Alachlor$_A$	-	-	-	<0.02				mg/kg	0.02	Subcon RPS MH
Carbaryl$_A$	-	-	-	<0.10				mg/kg	0.1	Subcon RPS MH
Diuron$_A$	-	-	-	<0.10				mg/kg	0.1	Subcon RPS MH
Isoproturon$_A$	-	-	-	<0.10				mg/kg	0.1	Subcon RPS MH
MCPP; (Mecoprop)$_A$	-	-	-	<0.10				mg/kg	0.1	Subcon RPS MH
Calcium (leachable)$_A$	31	-	-	-				mg/l	1	A-T-049w

Lab Sample ID	23/09682/1	23/09682/2	23/09682/6	23/09682/7				Units	Limit of Detection	Method ref
Client Sample No	101	102								
Client Sample ID	R22-TP203	R22-TP203	R22-TP204	R22-BH501						
Depth to Top	0.20	0.50	1	0.2						
Depth To Bottom										
Date Sampled	26-Sep-23	26-Sep-23	27-Sep-23	27-Sep-23						
Sample Type	SOIL	SOIL	SOIL	SOIL						
Sample Matrix Code	4AE	4A	6A	6AE						
Asbestos in Soil (inc. matrix) ^										
Asbestos in soil$_{D}^{\#}$	NAD	-	NAD	NAD						A-T-045
Asbestos Matrix (visual)$_{D}$	-	-	-	-						A-T-045
Asbestos Matrix (microscope)$_{D}$	-	-	-	-						A-T-045
Asbestos ACM - Suitable for Water Absorption Test?$_{D}$	N/A	-	N/A	N/A						A-T-045
OCP+OPP Combined Pest Suite (incl. Atrazine and Simazine)										
Dichlobenil$_{A}$	-	-	-	<0.01				mg/kg	0.01	A-T-056
Tecnazene$_{A}$	-	-	-	<0.01				mg/kg	0.01	A-T-056
Trifluralin$_{A}$	-	-	-	<0.01				mg/kg	0.01	A-T-056
alpha-Hexachlorocyclohexane (HCH)$_{A}$	-	-	-	<0.01				mg/kg	0.01	A-T-056
Hexachlorobenzene (HCB) $_{A}$	-	-	-	<0.01				mg/kg	0.01	A-T-056
Simazine$_{A}$	-	-	-	<0.01				mg/kg	0.01	A-T-056
Atrazine$_{A}$	-	-	-	<0.01				mg/kg	0.01	A-T-056
beta-Hexachlorocyclohexane (HCH)$_{A}$	-	-	-	<0.01				mg/kg	0.01	A-T-056
Quintozene (PCNB)$_{A}$	-	-	-	<0.01				mg/kg	0.01	A-T-056
Chlorothalonil$_{A}$	-	-	-	<0.01				mg/kg	0.01	A-T-056
delta-Hexachlorocyclohexane (HCH)$_{A}$	-	-	-	<0.01				mg/kg	0.01	A-T-056
Triallate$_{A}$	-	-	-	0.03				mg/kg	0.01	A-T-056
Heptachlor$_{A}$	-	-	-	<0.01				mg/kg	0.01	A-T-056
Aldrin$_{A}$	-	-	-	<0.01				mg/kg	0.01	A-T-056
Triadimefon$_{A}$	-	-	-	<0.01				mg/kg	0.01	A-T-056
Telodrin$_{A}$	-	-	-	<0.01				mg/kg	0.01	A-T-056
Isodrin$_{A}$	-	-	-	<0.01				mg/kg	0.01	A-T-056
Pendimethalin$_{A}$	-	-	-	<0.01				mg/kg	0.01	A-T-056
Heptachlor epoxide$_{A}$	-	-	-	<0.01				mg/kg	0.01	A-T-056
trans-Chlordane (Gamma)$_{A}$	-	-	-	<0.01				mg/kg	0.01	A-T-056
o,p-DDE (2,4)$_{A}$	-	-	-	<0.01				mg/kg	0.01	A-T-056
Endosulphan I (Alpha)$_{A}$	-	-	-	<0.01				mg/kg	0.01	A-T-056
cis-Chlordane (Alpha)$_{A}$	-	-	-	<0.01				mg/kg	0.01	A-T-056
p,p-DDE (4,4)$_{A}$	-	-	-	0.03				mg/kg	0.01	A-T-056
Dieldrin$_{A}$	-	-	-	<0.01				mg/kg	0.01	A-T-056

Lab Sample ID	23/09682/1	23/09682/2	23/09682/6	23/09682/7				Units	Limit of Detection	Method ref
Client Sample No	101	102								
Client Sample ID	R22-TP203	R22-TP203	R22-TP204	R22-BH501						
Depth to Top	0.20	0.50	1	0.2						
Depth To Bottom										
Date Sampled	26-Sep-23	26-Sep-23	27-Sep-23	27-Sep-23						
Sample Type	SOIL	SOIL	SOIL	SOIL						
Sample Matrix Code	4AE	4A	6A	6AE						
o,p-DDD (2,4)$_A$	-	-	-	<0.01				mg/kg	0.01	A-T-056
Endrin$_A$	-	-	-	<0.01				mg/kg	0.01	A-T-056
Endosulphan II (Beta)$_A$	-	-	-	<0.01				mg/kg	0.01	A-T-056
p,p-DDD (4,4)$_A$	-	-	-	<0.01				mg/kg	0.01	A-T-056
o,p-DDT (2,4)$_A$	-	-	-	<0.01				mg/kg	0.01	A-T-056
Endrin Aldehyde$_A$	-	-	-	<0.01				mg/kg	0.01	A-T-056
Endrin Ketone$_A$	-	-	-	<0.01				mg/kg	0.01	A-T-056
Endosulphan Sulphate$_A$	-	-	-	<0.01				mg/kg	0.01	A-T-056
p,p-DDT (4,4)$_A$	-	-	-	0.01				mg/kg	0.01	A-T-056
o,p-Methoxychlor$_A$	-	-	-	<0.01				mg/kg	0.01	A-T-056
p,p-Methoxychlor$_A$	-	-	-	<0.01				mg/kg	0.01	A-T-056
Permethrin I (cis)$_A$	-	-	-	<0.01				mg/kg	0.01	A-T-056
Permethrin II (trans)$_A$	-	-	-	<0.01				mg/kg	0.01	A-T-056
Dichlorvos$_A$	-	-	-	<0.01				mg/kg	0.01	A-T-056
Mevinphos$_A$	-	-	-	<0.01				mg/kg	0.01	A-T-056
Demeton-S$_A$	-	-	-	<0.50				mg/kg	0.5	A-T-056
Demeton-O$_A$	-	-	-	<0.50				mg/kg	0.5	A-T-056
Phorate$_A$	-	-	-	<0.01				mg/kg	0.01	A-T-056
Dimethoate$_A$	-	-	-	<0.01				mg/kg	0.01	A-T-056
Propetamphos$_A$	-	-	-	<0.01				mg/kg	0.01	A-T-056
Diazinon (Dimpylate)$_A$	-	-	-	<0.01				mg/kg	0.01	A-T-056
Disulfoton$_A$	-	-	-	<0.10				mg/kg	0.1	A-T-056
Chlorpyrifos-methyl$_A$	-	-	-	<0.01				mg/kg	0.01	A-T-056
Parathion (Ethyl Parathion)$_A$	-	-	-	<0.01				mg/kg	0.01	A-T-056
Methyl Parathion$_A$	-	-	-	<0.01				mg/kg	0.01	A-T-056
Pirimiphos-methyl$_A$	-	-	-	<0.01				mg/kg	0.01	A-T-056
Fenitrothion$_A$	-	-	-	<0.01				mg/kg	0.01	A-T-056
Fensulphothion$_A$	-	-	-	<0.01				mg/kg	0.01	A-T-056
Fenthion$_A$	-	-	-	<0.01				mg/kg	0.01	A-T-056
Malathion$_A$	-	-	-	<0.01				mg/kg	0.01	A-T-056
Chlorfenvinphos$_A$	-	-	-	<0.01				mg/kg	0.01	A-T-056
Chlorpyrifos$_A$	-	-	-	<0.01				mg/kg	0.01	A-T-056
Trichloronate$_A$	-	-	-	<0.01				mg/kg	0.01	A-T-056
Prothiofos (Tokuthion)$_A$	-	-	-	<0.01				mg/kg	0.01	A-T-056

Lab Sample ID	23/09682/1	23/09682/2	23/09682/6	23/09682/7				Units	Limit of Detection	Method ref
Client Sample No	101	102								
Client Sample ID	R22-TP203	R22-TP203	R22-TP204	R22-BH501						
Depth to Top	0.20	0.50	1	0.2						
Depth To Bottom										
Date Sampled	26-Sep-23	26-Sep-23	27-Sep-23	27-Sep-23						
Sample Type	SOIL	SOIL	SOIL	SOIL						
Sample Matrix Code	4AE	4A	6A	6AE						
Ethion$_A$	-	-	-	<0.01				mg/kg	0.01	A-T-056
Triazophos$_A$	-	-	-	<0.01				mg/kg	0.01	A-T-056
Carbophenothion$_A$	-	-	-	<0.01				mg/kg	0.01	A-T-056
Phosalone$_A$	-	-	-	<0.01				mg/kg	0.01	A-T-056
Azinphos-methyl$_A$	-	-	-	<0.01				mg/kg	0.01	A-T-056
Azinphos-ethyl$_A$	-	-	-	<0.01				mg/kg	0.01	A-T-056
Coumaphos$_A$	-	-	-	<0.01				mg/kg	0.01	A-T-056
gamma-Hexachlorocyclohexane (HCH)$_A$	-	-	-	<0.01				mg/kg	0.01	A-T-056

Envirolab Job Number: 23/09682

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/09682/1	23/09682/2	23/09682/6	23/09682/7				Units	Limit of Detection	Method ref
Client Sample No	101	102								
Client Sample ID	R22-TP203	R22-TP203	R22-TP204	R22-BH501						
Depth to Top	0.20	0.50	1	0.2						
Depth To Bottom										
Date Sampled	26-Sep-23	26-Sep-23	27-Sep-23	27-Sep-23						
Sample Type	SOIL	SOIL	SOIL	SOIL						
Sample Matrix Code	4AE	4A	6A	6AE						
PAH-16MS										
Acenaphthene$_A^{M\#}$	<0.01	-	<0.01	<0.01				mg/kg	0.01	A-T-019s
Acenaphthylene$_A^{M\#}$	<0.01	-	<0.01	<0.01				mg/kg	0.01	A-T-019s
Anthracene$_A^{M\#}$	<0.02	-	<0.02	<0.02				mg/kg	0.02	A-T-019s
Benzo(a)anthracene$_A^{M\#}$	0.17	-	<0.04	<0.04				mg/kg	0.04	A-T-019s
Benzo(a)pyrene$_A^{M\#}$	0.16	-	<0.04	<0.04				mg/kg	0.04	A-T-019s
Benzo(b)fluoranthene$_A^{M\#}$	0.20	-	<0.05	<0.05				mg/kg	0.05	A-T-019s
Benzo(ghi)perylene$_A^{M\#}$	0.09	-	<0.05^U	<0.05^U				mg/kg	0.05	A-T-019s
Benzo(k)fluoranthene$_A^{M\#}$	<0.07	-	<0.07	<0.07				mg/kg	0.07	A-T-019s
Chrysene$_A^{M\#}$	0.18	-	<0.06	<0.06				mg/kg	0.06	A-T-019s
Dibenzo(ah)anthracene$_A$	<0.04	-	<0.04	<0.04				mg/kg	0.04	A-T-019s
Fluoranthene$_A^{M\#}$	0.43	-	<0.08	<0.08				mg/kg	0.08	A-T-019s
Fluorene$_A^{M\#}$	<0.01	-	<0.01	<0.01				mg/kg	0.01	A-T-019s
Indeno(123-cd)pyrene$_A^{M\#}$	0.12	-	<0.03	<0.03				mg/kg	0.03	A-T-019s
Naphthalene $_A^{M\#}$	<0.03	-	<0.03	<0.03				mg/kg	0.03	A-T-019s
Phenanthrene$_A^{M\#}$	0.12	-	<0.03	<0.03				mg/kg	0.03	A-T-019s
Pyrene$_A^{M\#}$	0.35	-	<0.07	<0.07				mg/kg	0.07	A-T-019s
Total PAH-16MS$_A$	1.82	-	<0.08	<0.08				mg/kg	0.01	A-T-019s

Report Notes

General
This report shall not be reproduced, except in full, without written approval from Envirolab.
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 **six 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.
The client Sample No, Client Sample ID, Depth to top, Depth to Bottom and Date Sampled are all provided by the client.
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.

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 "^"	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
N/A	Not applicable

Asbestos
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
Quantification of asbestos is a 3 stage process including visual identification, hand picking and weighing, and fibre counting by sedimentation/phase contrast optical microscopy if required. 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) quantification by sedimentation is performed. 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.

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^{o}C / 11550µS/cm @ 20^{o}C fall outside the accreditation range and as such are unaccredited.

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

Envirolab Deviating Samples Report

Units 7&8 Sandpits Business Park, Mottram Road, Hyde, SK14 3AR
Tel. 0161 368 4921 email. ask@envlab.co.uk

Client: Structural Soils Limited (Hemel Hempstead), 18 Frogmore Road, Hemel Hempstead, UK, HP3 9RT

Project: Sealink Richborough

Clients Project No: 563607

Project No: 23/09682

Date Received: 29/09/2023 (am)

Cool Box Temperatures (°C): 14.6, 14.3

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	23/09682/1	23/09682/2	23/09682/6	23/09682/7
Client Sample No	101	102		
Client Sample ID/Depth	R22-TP203 0.20m	R22-TP203 0.50m	R22-TP204 1m	R22-BH501 0.2m
Date Sampled	26/09/23	26/09/23	27/09/23	27/09/23
A-T-004s		10/10/2023		
A-T-007s		05/10/2023		
A-T-019s	06/10/2023	06/10/2023	06/10/2023	06/10/2023
A-T-022s		04/10/2023		
A-T-024s	06/10/2023		10/10/2023	06/10/2023
A-T-025w	10/10/2023	10/10/2023		
A-T-026s	06/10/2023		06/10/2023	06/10/2023
A-T-026w	06/10/2023	10/10/2023		
A-T-026w (F)	06/10/2023	10/10/2023		
A-T-027s	09/10/2023		09/10/2023	09/10/2023
A-T-030s		06/10/2023		
A-T-031s	09/10/2023	09/10/2023	09/10/2023	09/10/2023
A-T-031w	09/10/2023	10/10/2023		
A-T-032s	05/10/2023	05/10/2023	05/10/2023	05/10/2023
A-T-032w		10/10/2023		
A-T-033w	09/10/2023			
A-T-037w		10/10/2023		
A-T-040s	06/10/2023		06/10/2023	06/10/2023
A-T-040w	06/10/2023			
A-T-042sFCN	05/10/2023		06/10/2023	06/10/2023
A-T-042wFCN	06/10/2023			
A-T-042wTCN	06/10/2023			
A-T-044	09/10/2023	09/10/2023	09/10/2023	09/10/2023
A-T-045	03/10/2023		04/10/2023	04/10/2023
A-T-049w	06/10/2023			
A-T-050s	04/10/2023		06/10/2023	06/10/2023
A-T-050w	06/10/2023	10/10/2023		
A-T-056				09/10/2023
A-T-ANCs		09/10/2023		
Calc	09/10/2023		10/10/2023	06/10/2023
Calc-no stones		10/10/2023		
Probe (w)		10/10/2023		

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

Certificate of Analysis

Report No.: **23-06786-2**

Issue No.: **2**
Date of Issue **08/04/2024**

Customer Details:	Envirolab Ltd, 7 - 8 Sandpits Business Park, Mottram Road, Hyde, Greater Manchester, SK14 3AR, United Kingdom
Customer Contact:	[redacted]
Customer Order No.:	PO752487
Customer Reference:	Not Supplied
Quotation Reference:	Q22-00104 (Issue: 36)
Description:	1 geo sample
Date Received:	05/10/2023
Date Started:	06/10/2023
Date Completed:	20/10/2023
Test Methods:	Details available on request (refer to SOP code against relevant result/s)
Notes:	This report replaces issue 1 in its entirety

[redacted]

Approved By: [redacted], **LIMS Administrator**

This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service.
This certificate shall not be reproduced except in full without the prior written approval of the laboratory.
Observations and interpretations are outside of the scope of UKAS accreditation.
Results reported herein relate only to the items supplied to the laboratory for testing.
Results on an Interim Report are not dry-weight corrected.
Where the laboratory is not responsible for the sampling, results apply to the sample(s) as they were received.
The laboratory shall not be responsible for any information that is supplied by the customer that may affect the validity of results.

RPS Environmental Management Limited trading as RPS Mountainheath. Registered in England No. 01756175.
13 St Martins Way, Bedford, Bedfordshire, MK42 0LF. T +44 1462 480 400
A member of the RPS Group plc. Terms and conditions apply - copy on request

Results Summary

Report No.: 23-06786-2

Customer Reference: Not Supplied

Customer Order No: PO752487

Customer Sample No	**R22-BH501 0.2m**
RPS Sample No	33908
Sample Type	**GEO**
Sample Matrix	SOIL
Sampling Date	27/09/2023

Determinand	CAS No	Codes	SOP	RL	Units	
carbaryl	63-25-2	N	L001	0.1	mg/kg DW	< 0.10 (T)
2,4,5-trichlorophenoxyacetic acid (2,4,5-T)	93-76-5	N	L340	0.1	mg/kg DW	< 0.10 (T)
2,4,5-TP (Fenoprop)	93-72-1	N	L340	0.1	mg/kg DW	< 0.10 (T)
2,4-dichlorophenoxyacetic acid (2,4-D)	94-75-7	N	L340	0.1	mg/kg DW	< 0.10 (T)
acifluorfen	50594-66-6	N	L340	0.1	mg/kg DW	< 0.10 (T)
bentazone	25057-89-0	N	L340	0.1	mg/kg DW	< 0.10 (T)
clopyralid	1702-17-6	N	L340	0.1	mg/kg DW	< 0.10 (T)
dichlorprop (2,4-DP)	120-36-5	N	L340	0.1	mg/kg DW	< 0.10 (T)
dinoseb (DNBP)	88-85-7	N	L340	0.1	mg/kg DW	< 0.10 (T)
2-methyl-4-chlorophenoxyacetic acid (MCPA)	94-74-6	N	L340	0.1	mg/kg DW	< 0.10 (T)
mecoprop (MCPP)	7085-19-0	N	L340	0.1	mg/kg DW	< 0.10 (T)
pentachlorophenol (PCP)	87-86-5	N	L340	0.1	mg/kg DW	< 0.10 (T)
2,3,6-trichlorobenzoic acid (2,3,6-TBA)	50-31-7	N	L340	0.1	mg/kg DW	< 0.10 (T)
4-(2,4-dichlorophenoxy)butanoic acid (2,4-DB)	94-82-6	N	L340	0.1	mg/kg DW	< 0.10 (T)
4-chlorophenoxyacetic acid (4-CPA)	122-88-3	N	L340	0.1	mg/kg DW	< 0.10 (T)
benazolin	3813-05-6	N	L340	0.1	mg/kg DW	< 0.10 (T)
bromoxynil	1689-84-5	N	L340	0.1	mg/kg DW	< 0.10 (T)
dicamba	1918-00-9	N	L340	0.1	mg/kg DW	< 0.10 (T)
diclofop	40843-25-2	N	L340	0.1	mg/kg DW	< 0.10 (T)
2-methyl-4,6-dinitrophenol (DNOC)	534-52-1	N	L340	0.1	mg/kg DW	< 0.10 (T)
flamprop	58667-63-3	N	L340	0.1	mg/kg DW	< 0.10 (T)
fluroxypyr	69377-81-7	N	L340	0.1	mg/kg DW	< 0.10 (T)
ioxynil	1689-83-4	N	L340	0.1	mg/kg DW	< 0.10 (T)
MCPB	94-81-5	N	L340	0.1	mg/kg DW	< 0.10 (T)
picloram	1918-02-1	N	L340	0.1	mg/kg DW	< 0.10 (T)
triclopyr	55335-06-3	N	L340	0.1	mg/kg DW	< 0.10 (T)
alachlor	15972-60-8	N	G029	0.02	mg/kg AR	< 0.02 (T)
chloroxuron	1982-47-4	N	L025	0.1	mg/kg DW	< 0.10 (T)
chlortoluron	15545-48-9	N	L025	0.1	mg/kg DW	< 0.10 (T)
diflubenzuron	35367-38-5	N	L025	0.1	mg/kg DW	< 0.10 (T)
dimefuron	34205-21-5	N	L025	0.1	mg/kg DW	< 0.10 (T)
diuron	330-54-1	N	L025	0.1	mg/kg DW	< 0.10 (T)
isoproturon	34123-59-6	N	L025	0.1	mg/kg DW	< 0.10 (T)
linuron	330-55-2	N	L025	0.1	mg/kg DW	< 0.10 (T)
methabenzthiazuron	18691-97-9	N	L025	0.1	mg/kg DW	< 0.10 (T)
metoxuron	19937-59-8	N	L025	0.1	mg/kg DW	< 0.10 (T)
monolinuron	1746-81-2	N	L025	0.1	mg/kg DW	< 0.10 (T)
monuron	150-68-5	N	L025	0.1	mg/kg DW	< 0.10 (T)

Results Summary

Report No.: 23-06786-2

Customer Reference: Not Supplied

Customer Order No: PO752487

Customer Sample No	**R22-BH501 0.2m**
RPS Sample No	33908
Sample Type	**GEO**
Sample Matrix	SOIL
Sampling Date	27/09/2023

Determinand	CAS No	Codes	SOP	RL	Units	
pencycuron	66063-05-6	N	L025	0.1	mg/kg DW	< 0.10 (T)
bifenthrin	82657-04-3	N	G127	0.1	mg/kg DW	< 0.10 (T)
cyfluthrin, total	68359-37-5	N	G127	0.1	mg/kg DW	< 0.10 (T)
cyhalothrin, total	68085-85-8	N	G127	0.1	mg/kg DW	< 0.10 (T)
cypermethrin, total	52315-07-8	N	G127	0.1	mg/kg DW	< 0.10 (T)
deltamethrin	52918-63-5	N	G127	0.1	mg/kg DW	< 0.10 (T)
fenvalerate	51630-58-1	N	G127	0.1	mg/kg DW	< 0.10 (T)
permethrin, total	52645-53-1	N	G127	0.1	mg/kg DW	< 0.10 (T)
resmethrin	10453-86-8	N	G127	0.1	mg/kg DW	< 0.10 (T)
tetramethrin	7696-12-0	N	G127	0.1	mg/kg DW	< 0.10 (T)

Comments

Report No.: 23-06786-2

Customer Reference: Not Supplied

Customer Order No: PO752487

Job	Description	Document History
23-06786	n/a	Sample numbers cahanged as per client request

Deviating Samples

Report No.: 23-06786-2

Customer Reference: Not Supplied

Customer Order No: PO752487

Our policy on Deviating Samples has been implemented in accordance with UKAS Policy on Deviating Samples (TPS63).
RPS is not responsible for the integrity of samples as received, unless RPS personnel performed the sampling. Samples submitted may be declared to be deviating.
Where applicable the analysis method remains UKAS accredited, however results reported for a deviating sample may be compromised.
Where no sampling date was supplied, samples have been declared to be deviating. If the date can be supplied, results may be reissued if assessed not deviating.
Where the sample container used was unsuitable or broken, the sample is flagged as deviating and re-sampling/re-submisson may be required.

RPS No.	Customer No.	Customer ID	Date Sampled	Containers Received	Deviating	Reason for Deviation
33908	R22-BH501 0.2m		27/09/2023	100 mL amber glass jar	**Yes**	No sampling time provided.

Report No.: 23-06786-2

Type	Matrix Code	Description
Food	CEREALPROD	Cereals, grains & products
Food	DRIEDFRUIT	Dried fruits
Food	FRIEDBAKED	Fried or baked food
Food	LEGUME	Legumes
Food	MEAT	Meat
Food	POWDERED	Powdered food
Food	PULSE	Pulses (dried legumes)
Food	VEGETABLES	Vegetables
Gas	TDTUBE	TD Tube
Gas	TENAX	Tenax Tube
Gas	TUBE	Tube
Gas	VAPOUR	Gas
Geological	SED_MAR	Marine Sediment
Geological	SED_RIV	River Sediment
Geological	SLUDG_SOL	Sludge (solid only)
Geological	SOIL	Soil
Liquid	BEVERAGE	Beverage
Liquid	BLOOD	Blood
Liquid	CONDENSATE	Condensate
Liquid	FOAM_LIQ	Liquid foam
Liquid	FORMULATN	Formula
Liquid	LEACHATE	Leachate
Liquid	OIL/GREASE	Oil or grease
Liquid	SLUDG_LIQ	Sludge (liquid only)
Liquid	SOLVENT	Solvent
Liquid	URINE	Urine
Sludge	SLUDG_WHL	Sludge for bulk route
Solid	BADGE	Badge
Solid	BEDDING	Bedding
Solid	BIOTA	Biota (general)
Solid	BIOTA_F	Biota (fish)
Solid	BIOTA_SF	Biota (shellfish)
Solid	CONSTRCTN	Construction materials
Solid	FABRIC	Fabrics & furnishing materials
Solid	FEED	Animal feed
Solid	FERTILISER	Fertiliser
Solid	FILTER	Filter
Solid	FOAM	Solid foam material
Solid	PACKAGING	Packaging material
Solid	PAPER	Paper
Solid	PLANT	Plant (vegetation)
Solid	POWDER	Powder
Solid	SWAB	Swab
Water	BAL	Ballast Water
Water	BIL	Bilge Water
Water	DW	Drinking Water
Water	EFFLUENT	Effluent
Water	GW	Ground Water
Water	INFLUENT	Influent
Water	SALTW	Salt Water
Water	SW	Surface Water
Water	TW	Tap Water
Water	W	Water

Key Code	Description
N	Not Accredited Test
U	UKAS Accredited Test - UKAS accreditation is only implied if the report carries the UKAS logo
UF	UKAS Flexible Scope Test
M	MCERTS Accredited Test - MCERTS accreditation is only implied if the report carries the MCERTS logo
O	Marine Management Organisation (MMO) Validated
SN	Subcontracted to approved laboratory not accredited for the test
SU	Subcontracted to approved laboratory UKAS Accredited for the test
SM	Subcontracted to approved laboratory MCERTS/UKAS Accredited for the test
SIN	Subcontracted to internal RPS Group laboratory not accredited for the test
SIU	Subcontracted to internal RPS Group laboratory UKAS Accredited for the test
SIM	Subcontracted to internal RPS Group laboratory MCERTS/UKAS Accredited for the test
*	Modified standard method
I/S (in results)	Insufficient Sample
U/S (in results)	Unsuitable Sample
S/C (in results)	See Comments
ND (in results)	Not Detected
DW (in units)	Results are expressed on a dry weight basis
L (in results)	Result is outside normal limits

Sample Type	Sample Retention and Disposal Period
Foodstuff	1 month (if frozen) from the issue date of this report
Waters	2 weeks from the issue date of this report
Other Liquids	1 month from the issue date of this report
Solids / Soils	1 month from the issue date of this report
Sediments	1 month from the issue date of this report

Note: Sample retention may be subject to agreement with the customer for particular projects

Where the dry solids value of a sample is low (<50%), reporting limits are automatically raised for all determinants analysed on an as-received basis.

Soil Typing	Description
Type 1	Clay - Brown
Type 2	Clay - Grey/Black
Type 3	Sand
Type 4	Top Soil (Standard)
Type 5	Top Soil (High Peat)
Type 6	Made Ground (>50% Clay)
Type 7	Made Ground (>50% Sand)
Type 8	Made Ground (>50% Top Soil)
Type X	Other

Dev code	Description
D	No sampling date provided.
T	No sampling time provided.
Z	Temperature of samples exceeded in transit/storage.
V	Excessive headspace for volatile determinands.
P	Sample submitted without required preservative(s).
C	Incorrect container.
H	Holding time exceeded (sampling to extraction).
X	Holding time exceeded (sampling to receipt).

Note: Where the following information is included in this certificate, it has usually been supplied by the customer: Customer Sample ID, Sample Location, Sample Depth, Sampling Date and Sampling Time. The laboratory shall not be responsible for any information that is supplied by the customer that may affect the validity of results.

envirolab
Units 7 & 8, Sandpits Business Park
Mottram Road, Hyde, Cheshire, SK14 3AR

Final Test Report

Envirolab Job Number:	23/09682
Issue Number:	1 Date: 10-Oct-23
Client:	Structural Soils Limited (Hemel Hempstead) 18 Frogmore Road Hemel Hempstead UK HP3 9RT
Project Manager:	[redacted]
Project Name:	Sealink Richborough
Project Ref:	563607
Order No:	N/A
Date Samples Received:	29-Sep-23
Date Instructions Received:	29-Sep-23
Date Analysis Completed:	10-Oct-23

Notes - Soil analysis

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

For samples with Matrix Codes 1 - 6 natural stones >10mm are removed or excluded from the sample prior to analysis and reported results corrected to a whole sample basis.

For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis.

Notes - General

This report shall not be reproduced, except in full, without written approval from Envirolab.

Subscript "A" indicates analysis performed on the sample as received. "D" indicates analysis performed on the dried sample, crushed to pass a 2mm sieve, unless asbestos is found to be present in which case all analysis is performed on the sample as received.

All analysis is performed on the dried and crushed sample for samples with Matrix Code 7 and this supercedes any "A" subscripts.

All analysis is performed on the sample as received for soil samples from outside the European Union and this supercedes any "D" subscripts

For complex, multi-compound analysis, quality control results do not always fall within chart limits for every compound and we have criteria for reporting in these situations.

If results are in italic font they are associated with such quality control failures and may be unreliable.

A deviating samples 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

Predominant Matrix Codes: 1 = SAND, 2 = LOAM, 3 = CLAY, 4 = LOAM/SAND, 5 = SAND/CLAY, 6 = CLAY/LOAM, 7 = OTHER, 8 = Asbestos bulk ID sample

Secondary Matrix Codes: A = contains stones, B = contains construction rubble, C = contains visible hydrocarbons, D = contains glass/metal, E = contains roots/twigs.

IS indicates Insufficient sample for analysis, NDP indicates No Determination Possible and NAD indicates No Asbestos Detected.

Analytical results reflect the quality of the sample at the time of analysis only. Opinions and interpretations expressed are outside the scope of our accreditation.

Please contact us if you need any further information.

HWOL TPH Code: EH_CU_1D_AL: Extractable hydrocarbons - i.e. everything extracted by the solvent(s), Clean-up - e.g. by florisil, silica gel, GC - Single coil gas chromatography, Aliphatics only

Approved by:

[redacted]rvisor

Landfill WAC analysis must not be used for hazardous waste classification purposes. This analysis is only applicable for landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Sample Details						Landfill Waste Acceptance Criteria Limits		
Lab Sample ID	Method	ISO17025	MCERTS	23/09682/2				
Client Sample Number				102		Inert Waste Landfill	Stable Non-reactive Hazardous Waste in Non-Hazardous Landfill	Hazardous Waste Landfill
Client Sample ID				R22-TP203				
Depth to Top				0.5				
Depth to Bottom								
Date Sampled				26/09/2023				
Sample Type				Soil				
Sample Matrix Code				4A				
Solid Waste Analysis								
pH (pH Units)$_D$	A-T-031	N	N	**7.62**		-	>6	-
ANC to pH 4 (mol/kg)$_D$	A-T-ANC	N	N	**0.08**		-	to be evaluated	to be evaluated
ANC to pH 6 (mol/kg)$_D$	A-T-ANC	N	N	**0.07**		-	to be evaluated	to be evaluated
Loss on Ignition (%)$_D$	A-T-030	N	N	**2.9**		-	-	10
Total Organic Carbon (%)$_D$	A-T-032	N	N	**0.52**		3	5	6
PAH Sum of 17 (mg/kg) $_A$	A-T-019	N	N	**<0.08**		100	-	-
Mineral Oil (mg/kg)$_{A\ EH_CU_1D_AL}$	A-T-007	N	N	**<10**		500	-	-
Sum of 7 PCBs (mg/kg)$_A$	A-T-004	N	N	**<0.007**		1	-	-
Sum of BTEX (mg/kg)$_A$	A-T-022	N	N	**<0.01**		6	-	-
Eluate Analysis				**10:1**	**10:1**	**Limit values for compliance leaching test using**		
				mg/l	**mg/kg**	**BS EN 12457-2 at L/S 10 l/kg (mg/kg)**		
Arsenic	A-T-025	N	N	0.003	**0.030**	0.5	2	25
Barium	A-T-025	N	N	0.184	**1.840**	20	100	300
Cadmium	A-T-025	N	N	<0.001	**<0.01**	0.04	1	5
Chromium	A-T-025	N	N	0.001	**0.010**	0.5	10	70
Copper	A-T-025	N	N	0.012	**0.120**	2	50	100
Mercury	A-T-025	N	N	<0.0005	**<0.005**	0.01	0.2	2
Molybdenum	A-T-025	N	N	<0.001	**<0.01**	0.5	10	30
Nickel	A-T-025	N	N	0.006	**0.060**	0.4	10	40
Lead	A-T-025	N	N	0.007	**0.070**	0.5	10	50
Antimony	A-T-025	N	N	<0.001	**<0.01**	0.06	0.7	5
Selenium	A-T-025	N	N	<0.001	**<0.01**	0.1	0.5	7
Zinc	A-T-025	N	N	0.025	**0.250**	4	50	200
Chloride	A-T-026	N	N	5	**49**	800	15000	25000
Fluoride	A-T-026	N	N	0.5	**5.0**	10	150	500
Sulphate as SO_4	A-T-026	N	N	88	**885**	1000	20000	50000
Total Dissolved Solids	A-T-035	N	N	<20	**<200**	4000	60000	100000
Phenol Index	A-T-050	N	N	<0.01	**<0.1**	1	-	-
Dissolved Organic Carbon	A-T-032	N	N	<2.0	**<200**	500	800	1000
Leach Test Information								
pH (pH Units)	A-T-031	N	N	7.9				
Conductivity (µS/cm)	A-T-037	N	N	25				
Mass Sample (kg)				0.194				
Dry Matter (%)	A-T-044	N	N	90				

Stated acceptance limits are for guidance only and Envirolab cannot be held responsible for any discrepancies with current legislation

envirolab
Units 7 & 8 Sandpits Business Park
Mottram Road, Hyde, Cheshire, SK14 3AR

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 23/09789
Issue Number: 1 **Date:** 02 November, 2023

Client: Structural Soils Limited (Hemel Hempstead)
18 Frogmore Road
Hemel Hempstead
UK
HP3 9RT

Project Manager: [redacted]
Project Name: Sealink Richborough
Project Ref: 563607
Order No: N/A
Date Samples Received: 04/10/23
Date Instructions Received: 04/10/23
Date Analysis Completed: 02/11/23

Approved by:

[redacted]

Client Manager

Envirolab Job Number: 23/09789

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/09789/1	23/09789/5	23/09789/9	23/09789/10	23/09789/15			Units	Limit of Detection	Method ref
Client Sample No	101	102	103							
Client Sample ID	R22-TP503a	R22-BH105	R22-TP504	R22-BH104	R22-TP405					
Depth to Top	0.20	0.50	1.00	0.30	1.00					
Depth To Bottom										
Date Sampled	28-Sep-23	28-Sep-23	29-Sep-23	02-Oct-23	02-Oct-23					
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES					
Sample Matrix Code	6A	3	3	3	3					
% Moisture at 105C$_A$	38.5	38.2	39.6	35.0	49.7			% w/w	0.1	A-T-044
% Stones >10mm$_A$	4.7	<0.1	<0.1	<0.1	<0.1			% w/w	0.1	A-T-044
pH$_D$[M#]	7.87	8.60	8.62	8.36	8.83			pH	0.01	A-T-031s
Sulphate (water sol 2:1)$_D$[M#]	0.23	0.03	0.04	0.05	0.26			g/l	0.01	A-T-026s
Sulphur (total)$_D$	626	131	232	465	343			mg/kg	50	A-T-024s
Cyanide (free)$_A$[M#]	<1	<1	<1	-	-			mg/kg	1	A-T-042sFCN
Phenols - Total by HPLC$_A$	<0.2	<0.2	<0.2	<0.2	<0.2			mg/kg	0.2	A-T-050s
Organic Matter$_D$[M#]	2.6	0.8	0.6	3.7	0.7			% w/w	0.1	A-T-032s
Total Organic Carbon$_D$[M#]	1.49	0.44	0.36	2.13	0.42			% w/w	0.03	A-T-032s
Fraction of organic carbon$_D$[#]	0.0149	0.0044	0.0036	0.0213	0.0042			N/A	0.0003	A-T-032s
Arsenic$_D$[M#]	18	15	10	9	4			mg/kg	1	A-T-024s
Barium$_D$	37	33	59	57	64			mg/kg	1	A-T-024s
Beryllium$_D$	0.9	0.9	2.0	1.2	1.3			mg/kg	0.5	A-T-024s
Boron (water soluble)$_D$[M#]	2.8	2.8	2.2	4.9	8.7			mg/kg	1	A-T-027s
Cadmium$_D$[M#]	0.8	0.9	1.4	<0.5	<0.5			mg/kg	0.5	A-T-024s
Copper$_D$[M#]	9	8	16	11	11			mg/kg	1	A-T-024s
Chromium$_D$[M#]	25	29	58	43	47			mg/kg	1	A-T-024s
Chromium (hexavalent)$_D$	<1	<1	<1	<1	<1			mg/kg	1	A-T-040s
Chromium (trivalent)	25	29	58	43	47			mg/kg	1	Calc
Lead$_D$[M#]	20	12	23	17	12			mg/kg	1	A-T-024s
Manganese$_D$[M#]	406	472	435	296	453			mg/kg	1	A-T-024s
Mercury$_D$	0.78	0.65	1.10	<0.17	<0.17			mg/kg	0.17	A-T-024s
Molybdenum$_D$[M#]	<1	<1	<1	<1	4			mg/kg	1	A-T-024s
Nickel$_D$[M#]	16	20	38	23	28			mg/kg	1	A-T-024s
Selenium$_D$[M#]	<1	<1	<1	<1	<1			mg/kg	1	A-T-024s
Vanadium$_D$[M#]	45	55	103	70	85			mg/kg	1	A-T-024s
Zinc$_D$[M#]	47	48	103	63	58			mg/kg	5	A-T-024s
Bentazone$_A$	<0.10	-	-	-	-			mg/kg	0.1	Subcon RPS MH
Cypermethrin$_A$	<0.10	-	-	-	-			mg/kg	0.1	Subcon RPS MH
Linuron$_A$	<0.10	-	-	-	-			mg/kg	0.1	Subcon RPS MH
Alachlor$_A$	<0.02	-	-	-	-			mg/kg	0.02	Subcon RPS MH
Carbaryl$_A$	<0.10	-	-	-	-			mg/kg	0.1	Subcon RPS MH
Diuron$_A$	<0.10	-	-	-	-			mg/kg	0.1	Subcon RPS MH

Envirolab Job Number: 23/09789

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/09789/1	23/09789/5	23/09789/9	23/09789/10	23/09789/15			Units	Limit of Detection	Method ref
Client Sample No	101	102	103							
Client Sample ID	R22-TP503a	R22-BH105	R22-TP504	R22-BH104	R22-TP405					
Depth to Top	0.20	0.50	1.00	0.30	1.00					
Depth To Bottom										
Date Sampled	28-Sep-23	28-Sep-23	29-Sep-23	02-Oct-23	02-Oct-23					
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES					
Sample Matrix Code	6A	3	3	3	3					
Isoproturon$_A$	<0.10	-	-	-	-			mg/kg	0.1	Subcon RPS MH
MCPP; (Mecoprop)$_A$	<0.10	-	-	-	-			mg/kg	0.1	Subcon RPS MH

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Depth to Top	0.20	0.50	1.00	0.30	1.00					
Depth To Bottom										
Date Sampled	28-Sep-23	28-Sep-23	29-Sep-23	02-Oct-23	02-Oct-23					
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES					
Sample Matrix Code	6A	3	3	3	3					
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
OCP+OPP Combined Pest Suite (incl. Atrazine and Simazine)										
Dichlobenil$_{A}$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
Tecnazene$_{A}$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
Trifluralin$_{A}$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
alpha-Hexachlorocyclohexane (HCH)$_{A}$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
Hexachlorobenzene (HCB) $_{A}$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
Simazine$_{A}$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
Atrazine$_{A}$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
beta-Hexachlorocyclohexane (HCH)$_{A}$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
Quintozene (PCNB)$_{A}$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
Chlorothalonil$_{A}$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
delta-Hexachlorocyclohexane (HCH)$_{A}$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
Triallate$_{A}$	0.03	-	-	-	-			mg/kg	0.01	A-T-056
Heptachlor$_{A}$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
Aldrin$_{A}$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
Triadimefon$_{A}$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
Telodrin$_{A}$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
Isodrin$_{A}$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
Pendimethalin$_{A}$	0.03	-	-	-	-			mg/kg	0.01	A-T-056
Heptachlor epoxide$_{A}$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
trans-Chlordane (Gamma)$_{A}$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
o,p-DDE (2,4)$_{A}$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
Endosulphan I (Alpha)$_{A}$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
cis-Chlordane (Alpha)$_{A}$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
p,p-DDE (4,4)$_{A}$	0.12	-	-	-	-			mg/kg	0.01	A-T-056
Dieldrin$_{A}$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056

Envirolab Job Number: 23/09789

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Client Project Ref: 563607

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Client Sample No	101	102	103							
Client Sample ID	R22-TP503a	R22-BH105	R22-TP504	R22-BH104	R22-TP405					
Depth to Top	0.20	0.50	1.00	0.30	1.00					
Depth To Bottom										
Date Sampled	28-Sep-23	28-Sep-23	29-Sep-23	02-Oct-23	02-Oct-23					
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES					
Sample Matrix Code	6A	3	3	3	3					
o,p-DDD (2,4)$_A$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
Endrin$_A$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
Endosulphan II (Beta)$_A$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
p,p-DDD (4,4)$_A$	0.03	-	-	-	-			mg/kg	0.01	A-T-056
o,p-DDT (2,4)$_A$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
Endrin Aldehyde$_A$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
Endrin Ketone$_A$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
Endosulphan Sulphate$_A$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
p,p-DDT (4,4)$_A$	0.03	-	-	-	-			mg/kg	0.01	A-T-056
o,p-Methoxychlor$_A$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
p,p-Methoxychlor$_A$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
Permethrin I (cis)$_A$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
Permethrin II (trans)$_A$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
Dichlorvos$_A$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
Mevinphos$_A$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
Demeton-S$_A$	<0.50	-	-	-	-			mg/kg	0.5	A-T-056
Demeton-O$_A$	<0.50	-	-	-	-			mg/kg	0.5	A-T-056
Phorate$_A$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
Dimethoate$_A$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
Propetamphos$_A$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
Diazinon (Dimpylate)$_A$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
Disulfoton$_A$	<0.10	-	-	-	-			mg/kg	0.1	A-T-056
Chlorpyrifos-methyl$_A$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
Parathion (Ethyl Parathion)$_A$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
Methyl Parathion$_A$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
Pirimiphos-methyl$_A$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
Fenitrothion$_A$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
Fensulphothion$_A$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
Fenthion$_A$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
Malathion$_A$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
Chlorfenvinphos$_A$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
Chlorpyrifos$_A$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
Trichloronate$_A$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
Prothiofos (Tokuthion)$_A$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056

Envirolab Job Number: 23/09789

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/09789/1	23/09789/5	23/09789/9	23/09789/10	23/09789/15			Units	Limit of Detection	Method ref
Client Sample No	101	102	103							
Client Sample ID	R22-TP503a	R22-BH105	R22-TP504	R22-BH104	R22-TP405					
Depth to Top	0.20	0.50	1.00	0.30	1.00					
Depth To Bottom										
Date Sampled	28-Sep-23	28-Sep-23	29-Sep-23	02-Oct-23	02-Oct-23					
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES					
Sample Matrix Code	6A	3	3	3	3					
Ethion$_A$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
Triazophos$_A$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
Carbophenothion$_A$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
Phosalone$_A$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
Azinphos-methyl$_A$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
Azinphos-ethyl$_A$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
Coumaphos$_A$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056
gamma-Hexachlorocyclohexane (HCH)$_A$	<0.01	-	-	-	-			mg/kg	0.01	A-T-056

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Client Sample ID	R22-TP503a	R22-BH105	R22-TP504	R22-BH104	R22-TP405					
Depth to Top	0.20	0.50	1.00	0.30	1.00					
Depth To Bottom										
Date Sampled	28-Sep-23	28-Sep-23	29-Sep-23	02-Oct-23	02-Oct-23					
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES					
Sample Matrix Code	6A	3	3	3	3					
PAH-16MS										
Acenaphthene$_A^{M\#}$	<0.01	<0.01	<0.01	-	-			mg/kg	0.01	A-T-019s
Acenaphthylene$_A^{M\#}$	<0.01	<0.01	<0.01	-	-			mg/kg	0.01	A-T-019s
Anthracene$_A^{M\#}$	<0.02	<0.02	<0.02	-	-			mg/kg	0.02	A-T-019s
Benzo(a)anthracene$_A^{M\#}$	<0.04	<0.04	<0.04	-	-			mg/kg	0.04	A-T-019s
Benzo(a)pyrene$_A^{M\#}$	<0.04	<0.04	<0.04	-	-			mg/kg	0.04	A-T-019s
Benzo(b)fluoranthene$_A^{M\#}$	<0.05	<0.05	<0.05	-	-			mg/kg	0.05	A-T-019s
Benzo(ghi)perylene$_A^{M\#}$	<0.05	<0.05	<0.05	-	-			mg/kg	0.05	A-T-019s
Benzo(k)fluoranthene$_A^{M\#}$	<0.07	<0.07	<0.07	-	-			mg/kg	0.07	A-T-019s
Chrysene$_A^{M\#}$	<0.06	<0.06	<0.06	-	-			mg/kg	0.06	A-T-019s
Dibenzo(ah)anthracene$_A$	<0.04	<0.04	<0.04	-	-			mg/kg	0.04	A-T-019s
Fluoranthene$_A^{M\#}$	<0.08	<0.08	<0.08	-	-			mg/kg	0.08	A-T-019s
Fluorene$_A^{M\#}$	<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	-	-			mg/kg	0.03	A-T-019s
Naphthalene $_A^{M\#}$	<0.03	<0.03	<0.03	-	-			mg/kg	0.03	A-T-019s
Phenanthrene$_A^{M\#}$	<0.03	<0.03	<0.03	-	-			mg/kg	0.03	A-T-019s
Pyrene$_A^{M\#}$	<0.07	<0.07	<0.07	-	-			mg/kg	0.07	A-T-019s
Total PAH-16MS$_A$	<0.08	<0.08	<0.08	-	-			mg/kg	0.01	A-T-019s

Report Notes

General
This report shall not be reproduced, except in full, without written approval from Envirolab.
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 **six 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.
The client Sample No, Client Sample ID, Depth to top, Depth to Bottom and Date Sampled are all provided by the client.
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.

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 "^"	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
N/A	Not applicable

Asbestos
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
Quantification of asbestos is a 3 stage process including visual identification, hand picking and weighing, and fibre counting by sedimentation/phase contrast optical microscopy if required. 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) quantification by sedimentation is performed. 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.

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^{o}C / 11550µS/cm @ 20^{o}C fall outside the accreditation range and as such are unaccredited.

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

Envirolab Deviating Samples Report

Units 7&8 Sandpits Business Park, Mottram Road, Hyde, SK14 3AR
Tel. 0161 368 4921 email. ask@envlab.co.uk

Client: Structural Soils Limited (Hemel Hempstead), 18 Frogmore Road, Hemel Hempstead, UK, HP3 9RT

Project: Sealink Richborough

Clients Project No: 563607

Project No: 23/09789

Date Received: 04/10/2023 (am)

Cool Box Temperatures (°C): 12.8, 12.4, 12.5

Lab Sample ID	23/09789/10	23/09789/15
Client Sample No		
Client Sample ID/Depth	R22-BH104 0.30m	R22-TP405 1.00m
Date Sampled	02/10/23	02/10/23
Deviation Code		
F	✓	✓

Key

F *Maximum holding time exceeded between sampling date and analysis for analytes listed below*

HOLDING TIME EXCEEDANCES

Lab Sample ID	23/09789/10	23/09789/15
Client Sample No		
Client Sample ID/Depth	R22-BH104 0.30m	R22-TP405 1.00m
Date Sampled	02/10/23	02/10/23
Fraction of organic carbon	✓	✓
Organic Matter	✓	✓
Total Organic Carbon	✓	✓

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	23/09789/1	23/09789/5	23/09789/9	23/09789/10	23/09789/15
Client Sample No	101	102	103		
Client Sample ID/Depth	R22-TP503a 0.20m	R22-BH105 0.50m	R22-TP504 1.00m	R22-BH104 0.30m	R22-TP405 1.00m
Date Sampled	28/09/23	28/09/23	29/09/23	02/10/23	02/10/23
A-T-004s	10/10/2023				
A-T-007s	09/10/2023				
A-T-019s	09/10/2023	09/10/2023	09/10/2023		
A-T-022s	10/10/2023				
A-T-024s	10/10/2023	10/10/2023	10/10/2023	26/10/2023	26/10/2023
A-T-025w	19/10/2023				
A-T-026s	11/10/2023	11/10/2023	11/10/2023	25/10/2023	25/10/2023
A-T-026w	19/10/2023				
A-T-026w (F)	19/10/2023				
A-T-027s	10/10/2023	10/10/2023	10/10/2023	26/10/2023	26/10/2023
A-T-030s	10/10/2023				
A-T-031s	10/10/2023	10/10/2023	10/10/2023	25/10/2023	25/10/2023
A-T-031w	19/10/2023				
A-T-032s	11/10/2023	11/10/2023	11/10/2023	31/10/2023	31/10/2023
A-T-032w	19/10/2023				
A-T-037w	19/10/2023				
A-T-040s	11/10/2023	11/10/2023	11/10/2023	25/10/2023	25/10/2023
A-T-042sFCN	06/10/2023	06/10/2023	06/10/2023		
A-T-044	12/10/2023	12/10/2023	12/10/2023	26/10/2023	26/10/2023
A-T-045	05/10/2023	05/10/2023	05/10/2023	19/10/2023	19/10/2023
A-T-050s	09/10/2023	09/10/2023	09/10/2023	31/10/2023	31/10/2023
A-T-050w	19/10/2023				
A-T-056	09/10/2023				
A-T-ANCs	10/10/2023				
Calc	11/10/2023	11/10/2023	11/10/2023	26/10/2023	26/10/2023
Calc-no stones	19/10/2023				
Probe (w)	19/10/2023				

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

Certificate of Analysis

Report No.: **23-06840-2**

Issue No.: **2**
Date of Issue **08/04/2024**

Customer Details:	Envirolab Ltd, 7 - 8 Sandpits Business Park, Mottram Road, Hyde, Greater Manchester, SK14 3AR, United Kingdom
Customer Contact:	[redacted]
Customer Order No.:	P0752494
Customer Reference:	Not Supplied
Quotation Reference:	Q22-00104 (Issue: 36)
Description:	1 geo sample
Date Received:	06/10/2023
Date Started:	10/10/2023
Date Completed:	27/10/2023
Test Methods:	Details available on request (refer to SOP code against relevant result/s)
Notes:	This report replaces issue 1 in its entirety

[redacted]

Approved By: [redacted] **LIMS Administrator**

This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service.
This certificate shall not be reproduced except in full without the prior written approval of the laboratory.
Observations and interpretations are outside of the scope of UKAS accreditation.
Results reported herein relate only to the items supplied to the laboratory for testing.
Results on an Interim Report are not dry-weight corrected.
Where the laboratory is not responsible for the sampling, results apply to the sample(s) as they were received.
The laboratory shall not be responsible for any information that is supplied by the customer that may affect the validity of results.

RPS Environmental Management Limited trading as RPS Mountainheath. Registered in England No. 01756175.
13 St Martins Way, Bedford, Bedfordshire, MK42 0LF. T +44 1462 480 400
A member of the RPS Group plc. Terms and conditions apply - copy on request

Results Summary

Report No.: 23-06840-2

Customer Reference: Not Supplied

Customer Order No: P0752494

Customer Sample No	**R22-TP503a 0.20m**
RPS Sample No	34091
Sample Type	**GEO**
Sample Matrix	SOIL
Sampling Date	28/09/2023

Determinand	CAS No	Codes	SOP	RL	Units	
carbaryl	63-25-2	N	L001	0.1	mg/kg DW	< 0.10 (T)
2,4,5-trichlorophenoxyacetic acid (2,4,5-T)	93-76-5	N	L340	0.1	mg/kg DW	< 0.10 (T)
2,4,5-TP (Fenoprop)	93-72-1	N	L340	0.1	mg/kg DW	< 0.10 (T)
2,4-dichlorophenoxyacetic acid (2,4-D)	94-75-7	N	L340	0.1	mg/kg DW	< 0.10 (T)
acifluorfen	50594-66-6	N	L340	0.1	mg/kg DW	< 0.10 (T)
bentazone	25057-89-0	N	L340	0.1	mg/kg DW	< 0.10 (T)
clopyralid	1702-17-6	N	L340	0.1	mg/kg DW	< 0.10 (T)
dichlorprop (2,4-DP)	120-36-5	N	L340	0.1	mg/kg DW	< 0.10 (T)
dinoseb (DNBP)	88-85-7	N	L340	0.1	mg/kg DW	< 0.10 (T)
2-methyl-4-chlorophenoxyacetic acid (MCPA)	94-74-6	N	L340	0.1	mg/kg DW	< 0.10 (T)
mecoprop (MCPP)	7085-19-0	N	L340	0.1	mg/kg DW	< 0.10 (T)
pentachlorophenol (PCP)	87-86-5	N	L340	0.1	mg/kg DW	< 0.10 (T)
2,3,6-trichlorobenzoic acid (2,3,6-TBA)	50-31-7	N	L340	0.1	mg/kg DW	< 0.10 (T)
4-(2,4-dichlorophenoxy)butanoic acid (2,4-DB)	94-82-6	N	L340	0.1	mg/kg DW	< 0.10 (T)
4-chlorophenoxyacetic acid (4-CPA)	122-88-3	N	L340	0.1	mg/kg DW	< 0.10 (T)
benazolin	3813-05-6	N	L340	0.1	mg/kg DW	< 0.10 (T)
bromoxynil	1689-84-5	N	L340	0.1	mg/kg DW	< 0.10 (T)
dicamba	1918-00-9	N	L340	0.1	mg/kg DW	< 0.10 (T)
diclofop	40843-25-2	N	L340	0.1	mg/kg DW	< 0.10 (T)
2-methyl-4,6-dinitrophenol (DNOC)	534-52-1	N	L340	0.1	mg/kg DW	< 0.10 (T)
flamprop	58667-63-3	N	L340	0.1	mg/kg DW	< 0.10 (T)
fluroxypyr	69377-81-7	N	L340	0.1	mg/kg DW	< 0.10 (T)
ioxynil	1689-83-4	N	L340	0.1	mg/kg DW	< 0.10 (T)
MCPB	94-81-5	N	L340	0.1	mg/kg DW	< 0.10 (T)
picloram	1918-02-1	N	L340	0.1	mg/kg DW	< 0.10 (T)
triclopyr	55335-06-3	N	L340	0.1	mg/kg DW	< 0.10 (T)
alachlor	15972-60-8	N	G029	0.02	mg/kg AR	< 0.02 (T)
chloroxuron	1982-47-4	N	L025	0.1	mg/kg DW	< 0.10 (T)
chlortoluron	15545-48-9	N	L025	0.1	mg/kg DW	< 0.10 (T)
diflubenzuron	35367-38-5	N	L025	0.1	mg/kg DW	< 0.10 (T)
dimefuron	34205-21-5	N	L025	0.1	mg/kg DW	< 0.10 (T)
diuron	330-54-1	N	L025	0.1	mg/kg DW	< 0.10 (T)
isoproturon	34123-59-6	N	L025	0.1	mg/kg DW	< 0.10 (T)
linuron	330-55-2	N	L025	0.1	mg/kg DW	< 0.10 (T)
methabenzthiazuron	18691-97-9	N	L025	0.1	mg/kg DW	< 0.10 (T)
metoxuron	19937-59-8	N	L025	0.1	mg/kg DW	< 0.10 (T)
monolinuron	1746-81-2	N	L025	0.1	mg/kg DW	< 0.10 (T)
monuron	150-68-5	N	L025	0.1	mg/kg DW	< 0.10 (T)

Results Summary

Report No.: 23-06840-2

Customer Reference: Not Supplied

Customer Order No: P0752494

Customer Sample No	**R22-TP503a 0.20m**
RPS Sample No	34091
Sample Type	**GEO**
Sample Matrix	SOIL
Sampling Date	28/09/2023

Determinand	CAS No	Codes	SOP	RL	Units	
pencycuron	66063-05-6	N	L025	0.1	mg/kg DW	< 0.10 (T)
bifenthrin	82657-04-3	N	G127	0.1	mg/kg DW	< 0.10 (T)
cyfluthrin, total	68359-37-5	N	G127	0.1	mg/kg DW	< 0.10 (T)
cyhalothrin, total	68085-85-8	N	G127	0.1	mg/kg DW	< 0.10 (T)
cypermethrin, total	52315-07-8	N	G127	0.1	mg/kg DW	< 0.10 (T)
deltamethrin	52918-63-5	N	G127	0.1	mg/kg DW	< 0.10 (T)
fenvalerate	51630-58-1	N	G127	0.1	mg/kg DW	< 0.10 (T)
permethrin, total	52645-53-1	N	G127	0.1	mg/kg DW	< 0.10 (T)
resmethrin	10453-86-8	N	G127	0.1	mg/kg DW	< 0.10 (T)
tetramethrin	7696-12-0	N	G127	0.1	mg/kg DW	< 0.10 (T)

Comments

Report No.: 23-06840-2

Customer Reference: Not Supplied

Customer Order No: P0752494

Job	Description	Document History
23-06840	n/a	Sample numbers changed as per client request

Deviating Samples

Report No.: 23-06840-2

Customer Reference: Not Supplied

Customer Order No: P0752494

Our policy on Deviating Samples has been implemented in accordance with UKAS Policy on Deviating Samples (TPS63).
RPS is not responsible for the integrity of samples as received, unless RPS personnel performed the sampling. Samples submitted may be declared to be deviating.
Where applicable the analysis method remains UKAS accredited, however results reported for a deviating sample may be compromised.
Where no sampling date was supplied, samples have been declared to be deviating. If the date can be supplied, results may be reissued if assessed not deviating.
Where the sample container used was unsuitable or broken, the sample is flagged as deviating and re-sampling/re-submisson may be required.

RPS No.	Customer No.	Customer ID	Date Sampled	Containers Received	Deviating	Reason for Deviation
34091	R22-TP503a 0.20m		28/09/2023	250 mL amber glass jar	**Yes**	No sampling time provided.

Type	Matrix Code	Description
Food	CEREALPROD	Cereals, grains & products
Food	DRIEDFRUIT	Dried fruits
Food	FRIEDBAKED	Fried or baked food
Food	LEGUME	Legumes
Food	MEAT	Meat
Food	POWDERED	Powdered food
Food	PULSE	Pulses (dried legumes)
Food	VEGETABLES	Vegetables
Gas	TDTUBE	TD Tube
Gas	TENAX	Tenax Tube
Gas	TUBE	Tube
Gas	VAPOUR	Gas
Geological	SED_MAR	Marine Sediment
Geological	SED_RIV	River Sediment
Geological	SLUDG_SOL	Sludge (solid only)
Geological	SOIL	Soil
Liquid	BEVERAGE	Beverage
Liquid	BLOOD	Blood
Liquid	CONDENSATE	Condensate
Liquid	FOAM_LIQ	Liquid foam
Liquid	FORMULATN	Formula
Liquid	LEACHATE	Leachate
Liquid	OIL/GREASE	Oil or grease
Liquid	SLUDG_LIQ	Sludge (liquid only)
Liquid	SOLVENT	Solvent
Liquid	URINE	Urine
Sludge	SLUDG_WHL	Sludge for bulk route
Solid	BADGE	Badge
Solid	BEDDING	Bedding
Solid	BIOTA	Biota (general)
Solid	BIOTA_F	Biota (fish)
Solid	BIOTA_SF	Biota (shellfish)
Solid	CONSTRCTN	Construction materials
Solid	FABRIC	Fabrics & furnishing materials
Solid	FEED	Animal feed
Solid	FERTILISER	Fertiliser
Solid	FILTER	Filter
Solid	FOAM	Solid foam material
Solid	PACKAGING	Packaging material
Solid	PAPER	Paper
Solid	PLANT	Plant (vegetation)
Solid	POWDER	Powder
Solid	SWAB	Swab
Water	BAL	Ballast Water
Water	BIL	Bilge Water
Water	DW	Drinking Water
Water	EFFLUENT	Effluent
Water	GW	Ground Water
Water	INFLUENT	Influent
Water	SALTW	Salt Water
Water	SW	Surface Water
Water	TW	Tap Water
Water	W	Water

Key Code	Description
N	Not Accredited Test
U	UKAS Accredited Test - UKAS accreditation is only implied if the report carries the UKAS logo
UF	UKAS Flexible Scope Test
M	MCERTS Accredited Test - MCERTS accreditation is only implied if the report carries the MCERTS logo
O	Marine Management Organisation (MMO) Validated
SN	Subcontracted to approved laboratory not accredited for the test
SU	Subcontracted to approved laboratory UKAS Accredited for the test
SM	Subcontracted to approved laboratory MCERTS/UKAS Accredited for the test
SIN	Subcontracted to internal RPS Group laboratory not accredited for the test
SIU	Subcontracted to internal RPS Group laboratory UKAS Accredited for the test
SIM	Subcontracted to internal RPS Group laboratory MCERTS/UKAS Accredited for the test
*	Modified standard method
I/S (in results)	Insufficient Sample
U/S (in results)	Unsuitable Sample
S/C (in results)	See Comments
ND (in results)	Not Detected
DW (in units)	Results are expressed on a dry weight basis
L (in results)	Result is outside normal limits

Sample Type	Sample Retention and Disposal Period
Foodstuff	1 month (if frozen) from the issue date of this report
Waters	2 weeks from the issue date of this report
Other Liquids	1 month from the issue date of this report
Solids / Soils	1 month from the issue date of this report
Sediments	1 month from the issue date of this report

Note: Sample retention may be subject to agreement with the customer for particular projects

Where the dry solids value of a sample is low (<50%), reporting limits are automatically raised for all determinants analysed on an as-received basis.

Soil Typing	Description
Type 1	Clay - Brown
Type 2	Clay - Grey/Black
Type 3	Sand
Type 4	Top Soil (Standard)
Type 5	Top Soil (High Peat)
Type 6	Made Ground (>50% Clay)
Type 7	Made Ground (>50% Sand)
Type 8	Made Ground (>50% Top Soil)
Type X	Other

Dev code	Description
D	No sampling date provided.
T	No sampling time provided.
Z	Temperature of samples exceeded in transit/storage.
V	Excessive headspace for volatile determinands.
P	Sample submitted without required preservative(s).
C	Incorrect container.
H	Holding time exceeded (sampling to extraction).
X	Holding time exceeded (sampling to receipt).

Note: Where the following information is included in this certificate, it has usually been supplied by the customer: Customer Sample ID, Sample Location, Sample Depth, Sampling Date and Sampling Time. The laboratory shall not be responsible for any information that is supplied by the customer that may affect the validity of results.

envirolab
Units 7 & 8, Sandpits Business Park
Mottram Road, Hyde, Cheshire, SK14 3AR

Final Test Report

Envirolab Job Number:	23/09789
Issue Number:	1
Date:	2-Nov-23

Client: Structural Soils Limited (Hemel Hempstead)
18 Frogmore Road
Hemel Hempstead
UK
HP3 9RT

Project Manager:	[redacted]
Project Name:	Sealink Richborough
Project Ref:	563607
Order No:	N/A
Date Samples Received:	4-Oct-23
Date Instructions Received:	4-Oct-23
Date Analysis Completed:	2-Nov-23

Notes - Soil analysis

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

For samples with Matrix Codes 1 - 6 natural stones >10mm are removed or excluded from the sample prior to analysis and reported results corrected to a whole sample basis.

For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis.

Notes - General

This report shall not be reproduced, except in full, without written approval from Envirolab.

Subscript "A" indicates analysis performed on the sample as received. "D" indicates analysis performed on the dried sample, crushed to pass a 2mm sieve, unless asbestos is found to be present in which case all analysis is performed on the sample as received.

All analysis is performed on the dried and crushed sample for samples with Matrix Code 7 and this supercedes any "A" subscripts.

All analysis is performed on the sample as received for soil samples from outside the European Union and this supercedes any "D" subscripts

For complex, multi-compound analysis, quality control results do not always fall within chart limits for every compound and we have criteria for reporting in these situations.

If results are in italic font they are associated with such quality control failures and may be unreliable.

A deviating samples 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

Predominant Matrix Codes: 1 = SAND, 2 = LOAM, 3 = CLAY, 4 = LOAM/SAND, 5 = SAND/CLAY, 6 = CLAY/LOAM, 7 = OTHER, 8 = Asbestos bulk ID sample

Secondary Matrix Codes: A = contains stones, B = contains construction rubble, C = contains visible hydrocarbons, D = contains glass/metal, E = contains roots/twigs.

IS indicates Insufficient sample for analysis, NDP indicates No Determination Possible and NAD indicates No Asbestos Detected.

Analytical results reflect the quality of the sample at the time of analysis only. Opinions and interpretations expressed are outside the scope of our accreditation.

Please contact us if you need any further information.

HWOL TPH Code: EH_CU_1D_AL: Extractable hydrocarbons - i.e. everything extracted by the solvent(s), Clean-up - e.g. by florisil, silica gel, GC - Single coil gas chromatography, Aliphatics only

Approved by:

[redacted]

Client Manager

Landfill WAC analysis must not be used for hazardous waste classification purposes. This analysis is only applicable for landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Sample Details						Landfill Waste Acceptance Criteria Limits		
Lab Sample ID	Method	ISO17025	MCERTS	23/09789/1				
Client Sample Number				101		Inert Waste Landfill	Stable Non-reactive Hazardous Waste in Non-Hazardous Landfill	Hazardous Waste Landfill
Client Sample ID				R22-TP503a				
Depth to Top				0.2				
Depth to Bottom								
Date Sampled				28/09/2023				
Sample Type				Soil - ES				
Sample Matrix Code				6A				
Solid Waste Analysis								
pH (pH Units)$_D$	A-T-031	N	N	**7.87**		-	>6	-
ANC to pH 4 (mol/kg)$_D$	A-T-ANC	N	N	**2.32**		-	to be evaluated	to be evaluated
ANC to pH 6 (mol/kg)$_D$	A-T-ANC	N	N	**0.22**		-	to be evaluated	to be evaluated
Loss on Ignition (%)$_D$	A-T-030	N	N	**5.5**		-	-	10
Total Organic Carbon (%)$_D$	A-T-032	N	N	**1.49**		3	5	6
PAH Sum of 17 (mg/kg) $_A$	A-T-019	N	N	**<0.08**		100	-	-
Mineral Oil (mg/kg)$_{A\ EH_CU_1D_AL}$	A-T-007	N	N	**<10**		500	-	-
Sum of 7 PCBs (mg/kg)$_A$	A-T-004	N	N	**<0.007**		1	-	-
Sum of BTEX (mg/kg)$_A$	A-T-022	N	N	**<0.01**		6	-	-
Eluate Analysis				**10:1**	**10:1**	**Limit values for compliance leaching test using**		
				mg/l	**mg/kg**	**BS EN 12457-2 at L/S 10 l/kg (mg/kg)**		
Arsenic	A-T-025	N	N	0.008	**0.080**	0.5	2	25
Barium	A-T-025	N	N	0.014	**0.140**	20	100	300
Cadmium	A-T-025	N	N	<0.001	**<0.01**	0.04	1	5
Chromium	A-T-025	N	N	<0.001	**<0.01**	0.5	10	70
Copper	A-T-025	N	N	<0.004	**<0.04**	2	50	100
Mercury	A-T-025	N	N	<0.0005	**<0.005**	0.01	0.2	2
Molybdenum	A-T-025	N	N	0.003	**0.030**	0.5	10	30
Nickel	A-T-025	N	N	0.003	**0.030**	0.4	10	40
Lead	A-T-025	N	N	0.004	**0.040**	0.5	10	50
Antimony	A-T-025	N	N	<0.001	**<0.01**	0.06	0.7	5
Selenium	A-T-025	N	N	<0.001	**<0.01**	0.1	0.5	7
Zinc	A-T-025	N	N	0.005	**0.050**	4	50	200
Chloride	A-T-026	N	N	26	**261**	800	15000	25000
Fluoride	A-T-026	N	N	0.7	**7.0**	10	150	500
Sulphate as SO_4	A-T-026	N	N	73	**729**	1000	20000	50000
Total Dissolved Solids	A-T-035	N	N	120	**1200**	4000	60000	100000
Phenol Index	A-T-050	N	N	<0.01	**<0.1**	1	-	-
Dissolved Organic Carbon	A-T-032	N	N	<2.0	**<200**	500	800	1000
Leach Test Information								
pH (pH Units)	A-T-031	N	N	7.2				
Conductivity (µS/cm)	A-T-037	N	N	239				
Mass Sample (kg)				0.219				
Dry Matter (%)	A-T-044	N	N	79.9				

Stated acceptance limits are for guidance only and Envirolab cannot be held responsible for any discrepancies with current legislation

envirolab
Units 7 & 8 Sandpits Business Park
Mottram Road, Hyde, Cheshire, SK14 3AR

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 23/09900
Issue Number: 1 **Date:** 17 November, 2023

Client: Structural Soils Limited (Hemel Hempstead)
18 Frogmore Road
Hemel Hempstead
UK
HP3 9RT

Project Manager: [redacted]
Project Name: Sealink Richborough
Project Ref: 563607
Order No: N/A
Date Samples Received: 06/10/23
Date Instructions Received: 06/10/23
Date Analysis Completed: 17/11/23

Approved by:

[redacted]
Client Manager

Envirolab Job Number: 23/09900

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/09900/3	23/09900/4						Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	R22-TP104	RedP-BH-8								
Depth to Top	1.00	0.20								
Depth To Bottom										
Date Sampled	04-Oct-23	04-Oct-23								
Sample Type	SOIL - ES	SOIL - ES								
Sample Matrix Code	3	6AE								
% Moisture at 105C$_A$	37.8	28.2						% w/w	0.1	A-T-044
% Stones >10mm$_A$	<0.1	<0.1						% w/w	0.1	A-T-044
pH$_D$$^{M\#}$	8.58	7.93						pH	0.01	A-T-031s
Sulphate (water sol 2:1)$_D$$^{M\#}$	0.13	<0.01						g/l	0.01	A-T-026s
Sulphur (total)$_D$	263	219						mg/kg	50	A-T-024s
Cyanide (free)$_A$$^{M\#}$	<1	<1						mg/kg	1	A-T-042sFCN
Phenols - Total by HPLC$_A$	<0.2	<0.2						mg/kg	0.2	A-T-050s
Organic Matter$_D$$^{M\#}$	1.1	1.8						% w/w	0.1	A-T-032s
Total Organic Carbon$_D$$^{M\#}$	0.64	1.02						% w/w	0.03	A-T-032s
Fraction of organic carbon$_D$$^{\#}$	0.0064	0.0102						N/A	0.0003	A-T-032s
Arsenic$_D$$^{M\#}$	10	2						mg/kg	1	A-T-024s
Barium$_D$	49	47						mg/kg	1	A-T-024s
Beryllium$_D$	1.3	0.6						mg/kg	0.5	A-T-024s
Boron (water soluble)$_D$$^{M\#}$	6.5	1.1						mg/kg	1	A-T-027s
Cadmium$_D$$^{M\#}$	0.6	<0.5						mg/kg	0.5	A-T-024s
Copper$_D$$^{M\#}$	12	10						mg/kg	1	A-T-024s
Chromium$_D$$^{M\#}$	44	28						mg/kg	1	A-T-024s
Chromium (hexavalent)$_D$	<1	<1						mg/kg	1	A-T-040s
Chromium (trivalent)	44	28						mg/kg	1	Calc
Lead$_D$$^{M\#}$	17	23						mg/kg	1	A-T-024s
Manganese$_D$$^{M\#}$	194	266						mg/kg	1	A-T-024s
Mercury$_D$	1.03	<0.17						mg/kg	0.17	A-T-024s
Molybdenum$_D$$^{M\#}$	<1	<1						mg/kg	1	A-T-024s
Nickel$_D$$^{M\#}$	24	12						mg/kg	1	A-T-024s
Selenium$_D$$^{M\#}$	<1	<1						mg/kg	1	A-T-024s
Vanadium$_D$$^{M\#}$	78	37						mg/kg	1	A-T-024s
Zinc$_D$$^{M\#}$	64	42						mg/kg	5	A-T-024s
Leachate Prep BS EN 12457-1 (2:1) (1 no)$_A$	-	*								A-T-001
pH (leachable)$_A$	-	7.58						pH	0.01	A-T-031w
Ammoniacal nitrogen as N (leachable)$_A$	-	<0.05						mg/l	0.05	A-T-033w
Chloride (leachable)$_A$	-	23.59						mg/l	1	A-T-026w
Fluoride (leachable)$_A$	-	0.98						mg/l	0.1	A-T-026w (F)
Sulphate (leachable)$_A$	-	33.79						mg/l	1	A-T-026w

Envirolab Job Number: 23/09900

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/09900/3	23/09900/4						Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	R22-TP104	RedP-BH-8								
Depth to Top	1.00	0.20								
Depth To Bottom										
Date Sampled	04-Oct-23	04-Oct-23								
Sample Type	SOIL - ES	SOIL - ES								
Sample Matrix Code	3	6AE								
Cyanide (free) (leachable)$_A$	-	<0.005						mg/l	0.005	A-T-042wFCN
Cyanide (total) (leachable)$_A$	-	<0.005						mg/l	0.005	A-T-042wTCN
Cyanide (complex) (leachable)	-	<0.005						mg/l	0.005	Calc
Phenol (leachable)$_A$	-	<0.01						mg/l	0.01	A-T-050w
Cresols (leachable)$_A$	-	<0.01						mg/l	0.01	A-T-050w
Resorcinol (leachable)$_A$	-	<0.01						mg/l	0.01	A-T-050w
Catechol (leachable)$_A$	-	<0.01						mg/l	0.01	A-T-050w
Xylenols & Ethylphenols (leachable)$_A$	-	<0.01						mg/l	0.01	A-T-050w
Naphthols (leachable)$_A$	-	<0.01						mg/l	0.01	A-T-050w
Trimethylphenol (leachable)$_A$	-	<0.01						mg/l	0.01	A-T-050w
Phenols (total by HPLC) (leachable)$_A$	-	<0.01						mg/l	0.01	A-T-050w
Antimony (leachable)$_A$	-	<1						µg/l	1	A-T-025w
Arsenic (leachable)$_A$	-	5						µg/l	1	A-T-025w
Boron (leachable)$_A$	-	44						µg/l	10	A-T-025w
Barium (leachable)$_A$	-	67						µg/l	1	A-T-025w
Beryllium (leachable)$_A$	-	<1						µg/l	1	A-T-025w
Cadmium (leachable)$_A$	-	<1						µg/l	1	A-T-025w
Copper (leachable)$_A$	-	10						µg/l	4	A-T-025w
Chromium (leachable)$_A$	-	<1						µg/l	1	A-T-025w
Chromium (hexavalent) (leachable)$_A$	-	<0.05						mg/l	0.05	A-T-040w
Chromium (trivalent)	-	<0.05						mg/l	0.05	Calc
Iron (leachable)$_A$	-	223						µg/l	10	A-T-025w
Lead (leachable)$_A$	-	17						µg/l	1	A-T-025w
Manganese (leachable)$_A$	-	40						µg/l	1	A-T-025w
Magnesium (leachable)$_A$	-	5						mg/l	1	A-T-049w
Mercury (leachable)$_A$	-	<0.1						µg/l	0.1	A-T-025w
Molybdenum (leachable)$_A$	-	<1						µg/l	1	A-T-025w
Nickel (leachable)$_A$	-	5						µg/l	2	A-T-025w
Selenium (leachable)$_A$	-	<1						µg/l	1	A-T-025w
Vanadium (leachable)$_A$	-	25						µg/l	1	A-T-025w
Zinc (leachable)$_A$	-	17						µg/l	2	A-T-025w
Bentazone$_A$	-	<0.10						mg/kg	0.1	Subcon RPS MH
Cypermethrin$_A$	-	<0.10						mg/kg	0.1	Subcon RPS MH

Envirolab Job Number: 23/09900

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/09900/3	23/09900/4						Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	R22-TP104	RedP-BH-8								
Depth to Top	1.00	0.20								
Depth To Bottom										
Date Sampled	04-Oct-23	04-Oct-23								
Sample Type	SOIL - ES	SOIL - ES								
Sample Matrix Code	3	6AE								
Linuron$_A$	-	<0.10						mg/kg	0.1	Subcon RPS MH
Alachlor$_A$	-	<0.02						mg/kg	0.02	Subcon RPS MH
Carbaryl$_A$	-	<0.10						mg/kg	0.1	Subcon RPS MH
Diuron$_A$	-	<0.10						mg/kg	0.1	Subcon RPS MH
Isoproturon$_A$	-	<0.10						mg/kg	0.1	Subcon RPS MH
MCPP; (Mecoprop)$_A$	-	<0.10						mg/kg	0.1	Subcon RPS MH
Calcium (leachable)$_A$	-	32						mg/l	1	A-T-049w

Lab Sample ID	23/09900/3	23/09900/4						Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	R22-TP104	RedP-BH-8								
Depth to Top	1.00	0.20								
Depth To Bottom										
Date Sampled	04-Oct-23	04-Oct-23								
Sample Type	SOIL - ES	SOIL - ES								
Sample Matrix Code	3	6AE								
Asbestos in Soil (inc. matrix) ^										
Asbestos in soil$_{D}^{\#}$	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								A-T-045
OCP+OPP Combined Pest Suite (incl. Atrazine and Simazine)										
Dichlobenil$_{A}$	-	<0.01						mg/kg	0.01	A-T-056
Tecnazene$_{A}$	-	<0.01						mg/kg	0.01	A-T-056
Trifluralin$_{A}$	-	<0.01						mg/kg	0.01	A-T-056
alpha-Hexachlorocyclohexane (HCH)$_{A}$	-	<0.01						mg/kg	0.01	A-T-056
Hexachlorobenzene (HCB) $_{A}$	-	<0.01						mg/kg	0.01	A-T-056
Simazine$_{A}$	-	<0.01						mg/kg	0.01	A-T-056
Atrazine$_{A}$	-	<0.01						mg/kg	0.01	A-T-056
beta-Hexachlorocyclohexane (HCH)$_{A}$	-	<0.01						mg/kg	0.01	A-T-056
Quintozene (PCNB)$_{A}$	-	<0.01						mg/kg	0.01	A-T-056
Chlorothalonil$_{A}$	-	<0.01						mg/kg	0.01	A-T-056
delta-Hexachlorocyclohexane (HCH)$_{A}$	-	<0.01						mg/kg	0.01	A-T-056
Triallate$_{A}$	-	<0.01						mg/kg	0.01	A-T-056
Heptachlor$_{A}$	-	<0.01						mg/kg	0.01	A-T-056
Aldrin$_{A}$	-	<0.01						mg/kg	0.01	A-T-056
Triadimefon$_{A}$	-	<0.01						mg/kg	0.01	A-T-056
Telodrin$_{A}$	-	<0.01						mg/kg	0.01	A-T-056
Isodrin$_{A}$	-	<0.01						mg/kg	0.01	A-T-056
Pendimethalin$_{A}$	-	<0.01						mg/kg	0.01	A-T-056
Heptachlor epoxide$_{A}$	-	<0.01						mg/kg	0.01	A-T-056
trans-Chlordane (Gamma)$_{A}$	-	<0.01						mg/kg	0.01	A-T-056
o,p-DDE (2,4)$_{A}$	-	<0.01						mg/kg	0.01	A-T-056
Endosulphan I (Alpha)$_{A}$	-	<0.01						mg/kg	0.01	A-T-056
cis-Chlordane (Alpha)$_{A}$	-	<0.01						mg/kg	0.01	A-T-056
p,p-DDE (4,4)$_{A}$	-	<0.01						mg/kg	0.01	A-T-056
Dieldrin$_{A}$	-	<0.01						mg/kg	0.01	A-T-056

Lab Sample ID	23/09900/3	23/09900/4						Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	R22-TP104	RedP-BH-8								
Depth to Top	1.00	0.20								
Depth To Bottom										
Date Sampled	04-Oct-23	04-Oct-23								
Sample Type	SOIL - ES	SOIL - ES								
Sample Matrix Code	3	6AE								
o,p-DDD (2,4)$_A$	-	<0.01						mg/kg	0.01	A-T-056
Endrin$_A$	-	<0.01						mg/kg	0.01	A-T-056
Endosulphan II (Beta)$_A$	-	<0.01						mg/kg	0.01	A-T-056
p,p-DDD (4,4)$_A$	-	<0.01						mg/kg	0.01	A-T-056
o,p-DDT (2,4)$_A$	-	<0.01						mg/kg	0.01	A-T-056
Endrin Aldehyde$_A$	-	<0.01						mg/kg	0.01	A-T-056
Endrin Ketone$_A$	-	<0.01						mg/kg	0.01	A-T-056
Endosulphan Sulphate$_A$	-	<0.01						mg/kg	0.01	A-T-056
p,p-DDT (4,4)$_A$	-	<0.01						mg/kg	0.01	A-T-056
o,p-Methoxychlor$_A$	-	<0.01						mg/kg	0.01	A-T-056
p,p-Methoxychlor$_A$	-	<0.01						mg/kg	0.01	A-T-056
Permethrin I (cis)$_A$	-	<0.01						mg/kg	0.01	A-T-056
Permethrin II (trans)$_A$	-	<0.01						mg/kg	0.01	A-T-056
Dichlorvos$_A$	-	<0.01						mg/kg	0.01	A-T-056
Mevinphos$_A$	-	<0.01						mg/kg	0.01	A-T-056
Demeton-S$_A$	-	<0.50						mg/kg	0.5	A-T-056
Demeton-O$_A$	-	<0.50						mg/kg	0.5	A-T-056
Phorate$_A$	-	<0.01						mg/kg	0.01	A-T-056
Dimethoate$_A$	-	<0.01						mg/kg	0.01	A-T-056
Propetamphos$_A$	-	<0.01						mg/kg	0.01	A-T-056
Diazinon (Dimpylate)$_A$	-	<0.01						mg/kg	0.01	A-T-056
Disulfoton$_A$	-	<0.10						mg/kg	0.1	A-T-056
Chlorpyrifos-methyl$_A$	-	<0.01						mg/kg	0.01	A-T-056
Parathion (Ethyl Parathion)$_A$	-	<0.01						mg/kg	0.01	A-T-056
Methyl Parathion$_A$	-	<0.01						mg/kg	0.01	A-T-056
Pirimiphos-methyl$_A$	-	<0.01						mg/kg	0.01	A-T-056
Fenitrothion$_A$	-	<0.01						mg/kg	0.01	A-T-056
Fensulphothion$_A$	-	<0.01						mg/kg	0.01	A-T-056
Fenthion$_A$	-	<0.01						mg/kg	0.01	A-T-056
Malathion$_A$	-	<0.01						mg/kg	0.01	A-T-056
Chlorfenvinphos$_A$	-	<0.01						mg/kg	0.01	A-T-056
Chlorpyrifos$_A$	-	<0.01						mg/kg	0.01	A-T-056
Trichloronate$_A$	-	<0.01						mg/kg	0.01	A-T-056
Prothiofos (Tokuthion)$_A$	-	<0.01						mg/kg	0.01	A-T-056

Lab Sample ID	23/09900/3	23/09900/4						Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	R22-TP104	RedP-BH-8								
Depth to Top	1.00	0.20								
Depth To Bottom										
Date Sampled	04-Oct-23	04-Oct-23								
Sample Type	SOIL - ES	SOIL - ES								
Sample Matrix Code	3	6AE								
Ethion$_A$	-	<0.01						mg/kg	0.01	A-T-056
Triazophos$_A$	-	<0.01						mg/kg	0.01	A-T-056
Carbophenothion$_A$	-	<0.01						mg/kg	0.01	A-T-056
Phosalone$_A$	-	<0.01						mg/kg	0.01	A-T-056
Azinphos-methyl$_A$	-	<0.01						mg/kg	0.01	A-T-056
Azinphos-ethyl$_A$	-	<0.01						mg/kg	0.01	A-T-056
Coumaphos$_A$	-	<0.01						mg/kg	0.01	A-T-056
gamma-Hexachlorocyclohexane (HCH)$_A$	-	<0.01						mg/kg	0.01	A-T-056

Envirolab Job Number: 23/09900

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/09900/3	23/09900/4						Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	R22-TP104	RedP-BH-8								
Depth to Top	1.00	0.20								
Depth To Bottom										
Date Sampled	04-Oct-23	04-Oct-23								
Sample Type	SOIL - ES	SOIL - ES								
Sample Matrix Code	3	6AE								
PAH-16MS										
Acenaphthene$_A^{M\#}$	<0.01	<0.01						mg/kg	0.01	A-T-019s
Acenaphthylene$_A^{M\#}$	<0.01	<0.01						mg/kg	0.01	A-T-019s
Anthracene$_A^{M\#}$	<0.02	<0.02						mg/kg	0.02	A-T-019s
Benzo(a)anthracene$_A^{M\#}$	<0.04	<0.04						mg/kg	0.04	A-T-019s
Benzo(a)pyrene$_A^{M\#}$	<0.04	<0.04						mg/kg	0.04	A-T-019s
Benzo(b)fluoranthene$_A^{M\#}$	<0.05	<0.05						mg/kg	0.05	A-T-019s
Benzo(ghi)perylene$_A^{M\#}$	<0.05	<0.05						mg/kg	0.05	A-T-019s
Benzo(k)fluoranthene$_A^{M\#}$	<0.07	<0.07						mg/kg	0.07	A-T-019s
Chrysene$_A^{M\#}$	<0.06	<0.06						mg/kg	0.06	A-T-019s
Dibenzo(ah)anthracene$_A$	<0.04	<0.04						mg/kg	0.04	A-T-019s
Fluoranthene$_A^{M\#}$	<0.08	<0.08						mg/kg	0.08	A-T-019s
Fluorene$_A^{M\#}$	<0.01	<0.01						mg/kg	0.01	A-T-019s
Indeno(123-cd)pyrene$_A^{M\#}$	<0.03	<0.03						mg/kg	0.03	A-T-019s
Naphthalene $_A^{M\#}$	<0.03	<0.03						mg/kg	0.03	A-T-019s
Phenanthrene$_A^{M\#}$	<0.03	<0.03						mg/kg	0.03	A-T-019s
Pyrene$_A^{M\#}$	<0.07	<0.07						mg/kg	0.07	A-T-019s
Total PAH-16MS$_A$	<0.08	<0.08						mg/kg	0.01	A-T-019s

Report Notes

General
This report shall not be reproduced, except in full, without written approval from Envirolab.
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 **six 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.
The client Sample No, Client Sample ID, Depth to top, Depth to Bottom and Date Sampled are all provided by the client.
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.

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 "^"	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
N/A	Not applicable

Asbestos
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
Quantification of asbestos is a 3 stage process including visual identification, hand picking and weighing, and fibre counting by sedimentation/phase contrast optical microscopy if required. 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) quantification by sedimentation is performed. 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.

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^{o}C / 11550µS/cm @ 20^{o}C fall outside the accreditation range and as such are unaccredited.

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

Envirolab Deviating Samples Report

Units 7&8 Sandpits Business Park, Mottram Road, Hyde, SK14 3AR
Tel. 0161 368 4921 email. ask@envlab.co.uk

Client: Structural Soils Limited (Hemel Hempstead), 18 Frogmore Road, Hemel Hempstead, UK, HP3 9RT

Project: Sealink Richborough

Clients Project No: 563607

Project No: 23/09900

Date Received: 06/10/2023 (am)

Cool Box Temperatures (°C): 16.1, 16.2, 16.4

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	23/09900/3	23/09900/4
Client Sample No		
Client Sample ID/Depth	R22-TP104 1.00m	RedP-BH-8 0.20m
Date Sampled	04/10/23	04/10/23
A-T-004s		12/10/2023
A-T-007s		12/10/2023
A-T-019s	11/10/2023	11/10/2023
A-T-022s		11/10/2023
A-T-024s	12/10/2023	12/10/2023
A-T-025w		18/10/2023
A-T-026s	12/10/2023	12/10/2023
A-T-026w		18/10/2023
A-T-026w (F)		18/10/2023
A-T-027s	13/10/2023	13/10/2023
A-T-030s		12/10/2023
A-T-031s	12/10/2023	12/10/2023
A-T-031w		18/10/2023
A-T-032s	12/10/2023	12/10/2023
A-T-032w		18/10/2023
A-T-033w		23/10/2023
A-T-037w		18/10/2023
A-T-040s	12/10/2023	12/10/2023
A-T-040w		11/10/2023
A-T-042sFCN	16/10/2023	16/10/2023
A-T-042wFCN		19/10/2023
A-T-042wTCN		19/10/2023
A-T-044	14/10/2023	14/10/2023
A-T-045	09/10/2023	09/10/2023
A-T-049w		13/10/2023
A-T-050s	11/10/2023	11/10/2023
A-T-050w		18/10/2023
A-T-056		19/10/2023
A-T-ANCs		12/10/2023
Calc	12/10/2023	19/10/2023
Calc-no stones		18/10/2023
Probe (w)		18/10/2023

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

Certificate of Analysis

Report No.: **23-07336-2**

Issue No.: **2**
Date of Issue **08/04/2024**

Customer Details:	Envirolab Ltd, 7 - 8 Sandpits Business Park, Mottram Road, Hyde, Greater Manchester, SK14 3AR, United Kingdom
Customer Contact:	[redacted]
Customer Order No.:	P0752508
Customer Reference:	Not Supplied
Quotation Reference:	Q22-00104 (Issue: 36)
Description:	1 geo sample
Date Received:	25/10/2023
Date Started:	31/10/2023
Date Completed:	16/11/2023
Test Methods:	Details available on request (refer to SOP code against relevant result/s)
Notes:	This report replaces issue 1 in its entirety

[redacted]

Approved By: [redacted], **LIMS Administrator**

This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service.
This certificate shall not be reproduced except in full without the prior written approval of the laboratory.
Observations and interpretations are outside of the scope of UKAS accreditation.
Results reported herein relate only to the items supplied to the laboratory for testing.
Results on an Interim Report are not dry-weight corrected.
Where the laboratory is not responsible for the sampling, results apply to the sample(s) as they were received.
The laboratory shall not be responsible for any information that is supplied by the customer that may affect the validity of results.

RPS Environmental Management Limited trading as RPS Mountainheath. Registered in England No. 01756175.
13 St Martins Way, Bedford, Bedfordshire, MK42 0LF. T +44 1462 480 400
A member of the RPS Group plc. Terms and conditions apply - copy on request

Results Summary

Report No.: 23-07336-2

Customer Reference: Not Supplied

Customer Order No: P0752508

Customer Sample No	**RedP-BH-8 0.2m**
RPS Sample No	35437
Sample Type	**GEO**
Sample Matrix	SOIL
Sampling Date	04/10/2023

Determinand	CAS No	Codes	SOP	RL	Units	
carbaryl	63-25-2	N	L001	0.1	mg/kg DW	< 0.10 (T)
2,4,5-trichlorophenoxyacetic acid (2,4,5-T)	93-76-5	N	L340	0.1	mg/kg DW	< 0.10 (T)
2,4,5-TP (Fenoprop)	93-72-1	N	L340	0.1	mg/kg DW	< 0.10 (T)
2,4-dichlorophenoxyacetic acid (2,4-D)	94-75-7	N	L340	0.1	mg/kg DW	< 0.10 (T)
acifluorfen	50594-66-6	N	L340	0.1	mg/kg DW	< 0.10 (T)
bentazone	25057-89-0	N	L340	0.1	mg/kg DW	< 0.10 (T)
clopyralid	1702-17-6	N	L340	0.1	mg/kg DW	< 0.10 (T)
dichlorprop (2,4-DP)	120-36-5	N	L340	0.1	mg/kg DW	< 0.10 (T)
dinoseb (DNBP)	88-85-7	N	L340	0.1	mg/kg DW	< 0.10 (T)
2-methyl-4-chlorophenoxyacetic acid (MCPA)	94-74-6	N	L340	0.1	mg/kg DW	< 0.10 (T)
mecoprop (MCPP)	7085-19-0	N	L340	0.1	mg/kg DW	< 0.10 (T)
pentachlorophenol (PCP)	87-86-5	N	L340	0.1	mg/kg DW	< 0.10 (T)
2,3,6-trichlorobenzoic acid (2,3,6-TBA)	50-31-7	N	L340	0.1	mg/kg DW	< 0.10 (T)
4-(2,4-dichlorophenoxy)butanoic acid (2,4-DB)	94-82-6	N	L340	0.1	mg/kg DW	< 0.10 (T)
4-chlorophenoxyacetic acid (4-CPA)	122-88-3	N	L340	0.1	mg/kg DW	< 0.10 (T)
benazolin	3813-05-6	N	L340	0.1	mg/kg DW	< 0.10 (T)
bromoxynil	1689-84-5	N	L340	0.1	mg/kg DW	< 0.10 (T)
dicamba	1918-00-9	N	L340	0.1	mg/kg DW	< 0.10 (T)
diclofop	40843-25-2	N	L340	0.1	mg/kg DW	< 0.10 (T)
2-methyl-4,6-dinitrophenol (DNOC)	534-52-1	N	L340	0.1	mg/kg DW	< 0.10 (T)
flamprop	58667-63-3	N	L340	0.1	mg/kg DW	< 0.10 (T)
fluroxypyr	69377-81-7	N	L340	0.1	mg/kg DW	< 0.10 (T)
ioxynil	1689-83-4	N	L340	0.1	mg/kg DW	< 0.10 (T)
MCPB	94-81-5	N	L340	0.1	mg/kg DW	< 0.10 (T)
picloram	1918-02-1	N	L340	0.1	mg/kg DW	< 0.10 (T)
triclopyr	55335-06-3	N	L340	0.1	mg/kg DW	< 0.10 (T)
alachlor	15972-60-8	N	G029	0.02	mg/kg AR	< 0.02 (T)
chloroxuron	1982-47-4	N	L025	0.1	mg/kg DW	< 0.10 (T)
chlortoluron	15545-48-9	N	L025	0.1	mg/kg DW	< 0.10 (T)
diflubenzuron	35367-38-5	N	L025	0.1	mg/kg DW	< 0.10 (T)
dimefuron	34205-21-5	N	L025	0.1	mg/kg DW	< 0.10 (T)
diuron	330-54-1	N	L025	0.1	mg/kg DW	< 0.10 (T)
isoproturon	34123-59-6	N	L025	0.1	mg/kg DW	< 0.10 (T)
linuron	330-55-2	N	L025	0.1	mg/kg DW	< 0.10 (T)
methabenzthiazuron	18691-97-9	N	L025	0.1	mg/kg DW	< 0.10 (T)
metoxuron	19937-59-8	N	L025	0.1	mg/kg DW	< 0.10 (T)
monolinuron	1746-81-2	N	L025	0.1	mg/kg DW	< 0.10 (T)
monuron	150-68-5	N	L025	0.1	mg/kg DW	< 0.10 (T)

Results Summary

Report No.: 23-07336-2

Customer Reference: Not Supplied

Customer Order No: P0752508

Customer Sample No	**RedP-BH-8 0.2m**
RPS Sample No	35437
Sample Type	**GEO**
Sample Matrix	SOIL
Sampling Date	04/10/2023

Determinand	CAS No	Codes	SOP	RL	Units	
pencycuron	66063-05-6	N	L025	0.1	mg/kg DW	< 0.10 (T)
bifenthrin	82657-04-3	N	G127	0.1	mg/kg DW	< 0.10 (T)
cyfluthrin, total	68359-37-5	N	G127	0.1	mg/kg DW	< 0.10 (T)
cyhalothrin, total	68085-85-8	N	G127	0.1	mg/kg DW	< 0.10 (T)
cypermethrin, total	52315-07-8	N	G127	0.1	mg/kg DW	< 0.10 (T)
deltamethrin	52918-63-5	N	G127	0.1	mg/kg DW	< 0.10 (T)
fenvalerate	51630-58-1	N	G127	0.1	mg/kg DW	< 0.10 (T)
permethrin, total	52645-53-1	N	G127	0.1	mg/kg DW	< 0.10 (T)
resmethrin	10453-86-8	N	G127	0.1	mg/kg DW	< 0.10 (T)
tetramethrin	7696-12-0	N	G127	0.1	mg/kg DW	< 0.10 (T)

Comments

Report No.: 23-07336-2

Customer Reference: Not Supplied

Customer Order No: P0752508

Job	Description	Document History
23-07336	n/a	Sample numbers changes as per client

Deviating Samples

Report No.: 23-07336-2

Customer Reference: Not Supplied

Customer Order No: P0752508

Our policy on Deviating Samples has been implemented in accordance with UKAS Policy on Deviating Samples (TPS63).
RPS is not responsible for the integrity of samples as received, unless RPS personnel performed the sampling. Samples submitted may be declared to be deviating.
Where applicable the analysis method remains UKAS accredited, however results reported for a deviating sample may be compromised.
Where no sampling date was supplied, samples have been declared to be deviating. If the date can be supplied, results may be reissued if assessed not deviating.
Where the sample container used was unsuitable or broken, the sample is flagged as deviating and re-sampling/re-submisson may be required.

RPS No.	Customer No.	Customer ID	Date Sampled	Containers Received	Deviating	Reason for Deviation
35437	RedP-BH-8 0.2m		04/10/2023	100 mL amber glass jar	**Yes**	No sampling time provided.

Type	Matrix Code	Description
Food	CEREALPROD	Cereals, grains & products
Food	DRIEDFRUIT	Dried fruits
Food	FRIEDBAKED	Fried or baked food
Food	LEGUME	Legumes
Food	MEAT	Meat
Food	POWDERED	Powdered food
Food	PULSE	Pulses (dried legumes)
Food	VEGETABLES	Vegetables
Gas	TDTUBE	TD Tube
Gas	TENAX	Tenax Tube
Gas	TUBE	Tube
Gas	VAPOUR	Gas
Geological	SED_MAR	Marine Sediment
Geological	SED_RIV	River Sediment
Geological	SLUDG_SOL	Sludge (solid only)
Geological	SOIL	Soil
Liquid	BEVERAGE	Beverage
Liquid	BLOOD	Blood
Liquid	CONDENSATE	Condensate
Liquid	FOAM_LIQ	Liquid foam
Liquid	FORMULATN	Formula
Liquid	LEACHATE	Leachate
Liquid	OIL/GREASE	Oil or grease
Liquid	SLUDG_LIQ	Sludge (liquid only)
Liquid	SOLVENT	Solvent
Liquid	URINE	Urine
Sludge	SLUDG_WHL	Sludge for bulk route
Solid	BADGE	Badge
Solid	BEDDING	Bedding
Solid	BIOTA	Biota (general)
Solid	BIOTA_F	Biota (fish)
Solid	BIOTA_SF	Biota (shellfish)
Solid	CONSTRCTN	Construction materials
Solid	FABRIC	Fabrics & furnishing materials
Solid	FEED	Animal feed
Solid	FERTILISER	Fertiliser
Solid	FILTER	Filter
Solid	FOAM	Solid foam material
Solid	PACKAGING	Packaging material
Solid	PAPER	Paper
Solid	PLANT	Plant (vegetation)
Solid	POWDER	Powder
Solid	SWAB	Swab
Water	BAL	Ballast Water
Water	BIL	Bilge Water
Water	DW	Drinking Water
Water	EFFLUENT	Effluent
Water	GW	Ground Water
Water	INFLUENT	Influent
Water	SALTW	Salt Water
Water	SW	Surface Water
Water	TW	Tap Water
Water	W	Water

Report No.: 23-07336-2

Key Code	Description
N	Not Accredited Test
U	UKAS Accredited Test - UKAS accreditation is only implied if the report carries the UKAS logo
UF	UKAS Flexible Scope Test
M	MCERTS Accredited Test - MCERTS accreditation is only implied if the report carries the MCERTS logo
O	Marine Management Organisation (MMO) Validated
SN	Subcontracted to approved laboratory not accredited for the test
SU	Subcontracted to approved laboratory UKAS Accredited for the test
SM	Subcontracted to approved laboratory MCERTS/UKAS Accredited for the test
SIN	Subcontracted to internal RPS Group laboratory not accredited for the test
SIU	Subcontracted to internal RPS Group laboratory UKAS Accredited for the test
SIM	Subcontracted to internal RPS Group laboratory MCERTS/UKAS Accredited for the test
*	Modified standard method
I/S (in results)	Insufficient Sample
U/S (in results)	Unsuitable Sample
S/C (in results)	See Comments
ND (in results)	Not Detected
DW (in units)	Results are expressed on a dry weight basis
L (in results)	Result is outside normal limits

Sample Type	Sample Retention and Disposal Period
Foodstuff	1 month (if frozen) from the issue date of this report
Waters	2 weeks from the issue date of this report
Other Liquids	1 month from the issue date of this report
Solids / Soils	1 month from the issue date of this report
Sediments	1 month from the issue date of this report

Note: Sample retention may be subject to agreement with the customer for particular projects

Where the dry solids value of a sample is low (<50%), reporting limits are automatically raised for all determinants analysed on an as-received basis.

Soil Typing	Description
Type 1	Clay - Brown
Type 2	Clay - Grey/Black
Type 3	Sand
Type 4	Top Soil (Standard)
Type 5	Top Soil (High Peat)
Type 6	Made Ground (>50% Clay)
Type 7	Made Ground (>50% Sand)
Type 8	Made Ground (>50% Top Soil)
Type X	Other

Dev code	Description
D	No sampling date provided.
T	No sampling time provided.
Z	Temperature of samples exceeded in transit/storage.
V	Excessive headspace for volatile determinands.
P	Sample submitted without required preservative(s).
C	Incorrect container.
H	Holding time exceeded (sampling to extraction).
X	Holding time exceeded (sampling to receipt).

Note: Where the following information is included in this certificate, it has usually been supplied by the customer: Customer Sample ID, Sample Location, Sample Depth, Sampling Date and Sampling Time. The laboratory shall not be responsible for any information that is supplied by the customer that may affect the validity of results.

Units 7 & 8, Sandpits Business Park
Mottram Road, Hyde, Cheshire, SK14 3AR

Final Test Report

Envirolab Job Number:	23/09900
Issue Number:	1 Date: 17-Nov-23
Client:	Structural Soils Limited (Hemel Hempstead) 18 Frogmore Road Hemel Hempstead UK HP3 9RT
Project Manager:	[redacted]
Project Name:	Sealink Richborough
Project Ref:	563607
Order No:	N/A
Date Samples Received:	6-Oct-23
Date Instructions Received:	6-Oct-23
Date Analysis Completed:	17-Nov-23

Notes - Soil analysis

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

For samples with Matrix Codes 1 - 6 natural stones >10mm are removed or excluded from the sample prior to analysis and reported results corrected to a whole sample basis.

For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis.

Notes - General

This report shall not be reproduced, except in full, without written approval from Envirolab.

Subscript "A" indicates analysis performed on the sample as received. "D" indicates analysis performed on the dried sample, crushed to pass a 2mm sieve, unless asbestos is found to be present in which case all analysis is performed on the sample as received.

All analysis is performed on the dried and crushed sample for samples with Matrix Code 7 and this supercedes any "A" subscripts.

All analysis is performed on the sample as received for soil samples from outside the European Union and this supercedes any "D" subscripts

For complex, multi-compound analysis, quality control results do not always fall within chart limits for every compound and we have criteria for reporting in these situations.

If results are in italic font they are associated with such quality control failures and may be unreliable.

A deviating samples 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

Predominant Matrix Codes: 1 = SAND, 2 = LOAM, 3 = CLAY, 4 = LOAM/SAND, 5 = SAND/CLAY, 6 = CLAY/LOAM, 7 = OTHER, 8 = Asbestos bulk ID sample

Secondary Matrix Codes: A = contains stones, B = contains construction rubble, C = contains visible hydrocarbons, D = contains glass/metal, E = contains roots/twigs.

IS indicates Insufficient sample for analysis, NDP indicates No Determination Possible and NAD indicates No Asbestos Detected.

Analytical results reflect the quality of the sample at the time of analysis only. Opinions and interpretations expressed are outside the scope of our accreditation.

Please contact us if you need any further information.

HWOL TPH Code: EH_CU_1D_AL: Extractable hydrocarbons - i.e. everything extracted by the solvent(s), Clean-up - e.g. by florisil, silica gel, GC - Single coil gas chromatography, Aliphatics only

Approved by:

[redacted]

Client Manager

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Landfill WAC analysis must not be used for hazardous waste classification purposes. This analysis is only applicable for landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Sample Details						Landfill Waste Acceptance Criteria Limits		
Lab Sample ID	Method	ISO17025	MCERTS	23/09900/4				
Client Sample Number						Inert Waste Landfill	Stable Non-reactive Hazardous Waste in Non-Hazardous Landfill	Hazardous Waste Landfill
Client Sample ID				RedP-BH-8				
Depth to Top				0.2				
Depth to Bottom								
Date Sampled				04/10/2023				
Sample Type				Soil - ES				
Sample Matrix Code				6AE				
Solid Waste Analysis								
pH (pH Units)$_D$	A-T-031	N	N	**7.93**		-	>6	-
ANC to pH 4 (mol/kg)$_D$	A-T-ANC	N	N	**0.08**		-	to be evaluated	to be evaluated
ANC to pH 6 (mol/kg)$_D$	A-T-ANC	N	N	**0.02**		-	to be evaluated	to be evaluated
Loss on Ignition (%)$_D$	A-T-030	N	N	**4.5**		-	-	10
Total Organic Carbon (%)$_D$	A-T-032	N	N	**1.02**		3	5	6
PAH Sum of 17 (mg/kg) $_A$	A-T-019	N	N	**<0.08**		100	-	-
Mineral Oil (mg/kg)$_{A\ EH_CU_1D_AL}$	A-T-007	N	N	**<10**		500	-	-
Sum of 7 PCBs (mg/kg)$_A$	A-T-004	N	N	**<0.007**		1	-	-
Sum of BTEX (mg/kg)$_A$	A-T-022	N	N	**<0.01**		6	-	-
Eluate Analysis				**10:1**	**10:1**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg (mg/kg)**		
				mg/l	**mg/kg**			
Arsenic	A-T-025	N	N	0.005	**0.050**	0.5	2	25
Barium	A-T-025	N	N	0.047	**0.470**	20	100	300
Cadmium	A-T-025	N	N	<0.001	**<0.01**	0.04	1	5
Chromium	A-T-025	N	N	<0.001	**<0.01**	0.5	10	70
Copper	A-T-025	N	N	0.007	**0.070**	2	50	100
Mercury	A-T-025	N	N	<0.0005	**<0.005**	0.01	0.2	2
Molybdenum	A-T-025	N	N	<0.001	**<0.01**	0.5	10	30
Nickel	A-T-025	N	N	0.003	**0.030**	0.4	10	40
Lead	A-T-025	N	N	0.013	**0.130**	0.5	10	50
Antimony	A-T-025	N	N	<0.001	**<0.01**	0.06	0.7	5
Selenium	A-T-025	N	N	<0.001	**<0.01**	0.1	0.5	7
Zinc	A-T-025	N	N	0.009	**0.090**	4	50	200
Chloride	A-T-026	N	N	8	**83**	800	15000	25000
Fluoride	A-T-026	N	N	0.4	**4.0**	10	150	500
Sulphate as SO_4	A-T-026	N	N	<1.00	**<10**	1000	20000	50000
Total Dissolved Solids	A-T-035	N	N	43	**430**	4000	60000	100000
Phenol Index	A-T-050	N	N	<0.01	**<0.1**	1	-	-
Dissolved Organic Carbon	A-T-032	N	N	<2.0	**<200**	500	800	1000
Leach Test Information								
pH (pH Units)	A-T-031	N	N	7.5				
Conductivity (µS/cm)	A-T-037	N	N	86				
Mass Sample (kg)				0.205				
Dry Matter (%)	A-T-044	N	N	85.2				

Stated acceptance limits are for guidance only and Envirolab cannot be held responsible for any discrepancies with current legislation

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Units 7 & 8 Sandpits Business Park
Mottram Road, Hyde, Cheshire, SK14 3AR

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 23/09901
Issue Number: 1 **Date:** 23 October, 2023

Client: Structural Soils Limited (Hemel Hempstead)
18 Frogmore Road
Hemel Hempstead
UK
HP3 9RT

Project Manager: [redacted]
Project Name: Sealink Richborough
Project Ref: 563607
Order No: N/A
Date Samples Received: 06/10/23
Date Instructions Received: 06/10/23
Date Analysis Completed: 23/10/23

[redacted]
Client Manager

Envirolab Job Number: 23/09901

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/09901/2	23/09901/3						Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	R22-TP505	R22-TP505								
Depth to Top	0.50	1.00								
Depth To Bottom										
Date Sampled	03-Oct-23	03-Oct-23								
Sample Type	SOIL - ES	SOIL - ES								
Sample Matrix Code	6A	3								
% Moisture at 105C$_A$	-	43.5						% w/w	0.1	A-T-044
% Stones >10mm$_A$	-	<0.1						% w/w	0.1	A-T-044
pH$_D^{M\#}$	-	8.07						pH	0.01	A-T-031s
Sulphate (water sol 2:1)$_D^{M\#}$	-	0.40						g/l	0.01	A-T-026s
Sulphur (total)$_D$	-	415						mg/kg	50	A-T-024s
Cyanide (free)$_A^{M\#}$	-	<1						mg/kg	1	A-T-042sFCN
Phenols - Total by HPLC$_A$	-	<0.2						mg/kg	0.2	A-T-050s
Organic Matter$_D^{M\#}$	-	1.2						% w/w	0.1	A-T-032s
Total Organic Carbon$_D^{M\#}$	-	0.71						% w/w	0.03	A-T-032s
Fraction of organic carbon$_D^{\#}$	-	0.0071						N/A	0.0003	A-T-032s
Arsenic$_D^{M\#}$	-	18						mg/kg	1	A-T-024s
Barium$_D$	-	46						mg/kg	1	A-T-024s
Beryllium$_D$	-	1.5						mg/kg	0.5	A-T-024s
Boron (water soluble)$_D^{M\#}$	-	5.4						mg/kg	1	A-T-027s
Cadmium$_D^{M\#}$	-	0.7						mg/kg	0.5	A-T-024s
Copper$_D^{M\#}$	-	14						mg/kg	1	A-T-024s
Chromium$_D^{M\#}$	-	49						mg/kg	1	A-T-024s
Chromium (hexavalent)$_D$	-	<1						mg/kg	1	A-T-040s
Chromium (trivalent)	-	49						mg/kg	1	Calc
Lead$_D^{M\#}$	-	17						mg/kg	1	A-T-024s
Manganese$_D^{M\#}$	-	216						mg/kg	1	A-T-024s
Mercury$_D$	-	0.40						mg/kg	0.17	A-T-024s
Molybdenum$_D^{M\#}$	-	<1						mg/kg	1	A-T-024s
Nickel$_D^{M\#}$	-	27						mg/kg	1	A-T-024s
Selenium$_D^{M\#}$	-	1						mg/kg	1	A-T-024s
Vanadium$_D^{M\#}$	-	85						mg/kg	1	A-T-024s
Zinc$_D^{M\#}$	-	75						mg/kg	5	A-T-024s
Leachate Prep BS EN 12457-1 (2:1) (1 no)$_A$	-	*								A-T-001
pH (leachable)$_A$	-	7.98						pH	0.01	A-T-031w
Ammoniacal nitrogen as N (leachable)$_A$	-	<0.05						mg/l	0.05	A-T-033w
Chloride (leachable)$_A$	-	221						mg/l	1	A-T-026w
Fluoride (leachable)$_A$	-	1.27						mg/l	0.1	A-T-026w (F)
Sulphate (leachable)$_A$	-	250.71						mg/l	1	A-T-026w

Lab Sample ID	23/09901/2	23/09901/3						Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	R22-TP505	R22-TP505								
Depth to Top	0.50	1.00								
Depth To Bottom										
Date Sampled	03-Oct-23	03-Oct-23								
Sample Type	SOIL - ES	SOIL - ES								
Sample Matrix Code	6A	3								
Cyanide (free) (leachable)$_A$	-	<0.005						mg/l	0.005	A-T-042wFCN
Cyanide (total) (leachable)$_A$	-	<0.005						mg/l	0.005	A-T-042wTCN
Cyanide (complex) (leachable)	-	<0.005						mg/l	0.005	Calc
Phenol (leachable)$_A$	-	<0.01						mg/l	0.01	A-T-050w
Cresols (leachable)$_A$	-	<0.01						mg/l	0.01	A-T-050w
Resorcinol (leachable)$_A$	-	<0.01						mg/l	0.01	A-T-050w
Catechol (leachable)$_A$	-	<0.01						mg/l	0.01	A-T-050w
Xylenols & Ethylphenols (leachable)$_A$	-	<0.01						mg/l	0.01	A-T-050w
Naphthols (leachable)$_A$	-	<0.01						mg/l	0.01	A-T-050w
Trimethylphenol (leachable)$_A$	-	<0.01						mg/l	0.01	A-T-050w
Phenols (total by HPLC) (leachable)$_A$	-	<0.01						mg/l	0.01	A-T-050w
Antimony (leachable)$_A$	-	<1						µg/l	1	A-T-025w
Arsenic (leachable)$_A$	-	4						µg/l	1	A-T-025w
Boron (leachable)$_A$	-	415						µg/l	10	A-T-025w
Barium (leachable)$_A$	-	12						µg/l	1	A-T-025w
Beryllium (leachable)$_A$	-	<1						µg/l	1	A-T-025w
Cadmium (leachable)$_A$	-	<1						µg/l	1	A-T-025w
Copper (leachable)$_A$	-	7						µg/l	4	A-T-025w
Chromium (leachable)$_A$	-	1						µg/l	1	A-T-025w
Chromium (hexavalent) (leachable)$_A$	-	<0.05						mg/l	0.05	A-T-040w
Chromium (trivalent)	-	<0.05						mg/l	0.05	Calc
Iron (leachable)$_A$	-	760						µg/l	10	A-T-025w
Lead (leachable)$_A$	-	3						µg/l	1	A-T-025w
Manganese (leachable)$_A$	-	10						µg/l	1	A-T-025w
Magnesium (leachable)$_A$	-	12						mg/l	1	A-T-049w
Mercury (leachable)$_A$	-	<0.1						µg/l	0.1	A-T-025w
Molybdenum (leachable)$_A$	-	27						µg/l	1	A-T-025w
Nickel (leachable)$_A$	-	4						µg/l	2	A-T-025w
Selenium (leachable)$_A$	-	2						µg/l	1	A-T-025w
Vanadium (leachable)$_A$	-	6						µg/l	1	A-T-025w
Zinc (leachable)$_A$	-	15						µg/l	2	A-T-025w
Calcium (leachable)$_A$	-	30						mg/l	1	A-T-049w

Envirolab Job Number: 23/09901

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/09901/2	23/09901/3						Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	R22-TP505	R22-TP505								
Depth to Top	0.50	1.00								
Depth To Bottom										
Date Sampled	03-Oct-23	03-Oct-23								
Sample Type	SOIL - ES	SOIL - ES								
Sample Matrix Code	6A	3								
Asbestos in Soil (inc. matrix)										
Asbestos in soil$_{D}^{\#}$	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								A-T-045

Envirolab Job Number: 23/09901

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/09901/2	23/09901/3						Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	R22-TP505	R22-TP505								
Depth to Top	0.50	1.00								
Depth To Bottom										
Date Sampled	03-Oct-23	03-Oct-23								
Sample Type	SOIL - ES	SOIL - ES								
Sample Matrix Code	6A	3								
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$_A$	-	<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$_A^{M\#}$	-	<0.03						mg/kg	0.03	A-T-019s
Pyrene$_A^{M\#}$	-	<0.07						mg/kg	0.07	A-T-019s
Total PAH-16MS$_A$	-	<0.08						mg/kg	0.01	A-T-019s

Envirolab Job Number: 23/09901

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/09901/2	23/09901/3						Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	R22-TP505	R22-TP505								
Depth to Top	0.50	1.00								
Depth To Bottom										
Date Sampled	03-Oct-23	03-Oct-23								
Sample Type	SOIL - ES	SOIL - ES								
Sample Matrix Code	6A	3								
Speciated PCB-WHO12										
PCB BZ 81$_{A}^{M\#}$	-	<0.005^{U}						mg/kg	0.005	A-T-004s
PCB BZ 105$_{A}^{M\#}$	-	<0.005^{U}						mg/kg	0.005	A-T-004s
PCB BZ 114$_{A}^{M\#}$	-	<0.005^{U}						mg/kg	0.005	A-T-004s
PCB BZ 118$_{A}^{M\#}$	-	<0.007						mg/kg	0.007	A-T-004s
PCB BZ 123$_{A}^{M\#}$	-	<0.005^{U}						mg/kg	0.005	A-T-004s
PCB BZ 126$_{A}^{M\#}$	-	<0.005^{U}						mg/kg	0.005	A-T-004s
PCB BZ 156$_{A}^{M\#}$	-	<0.005^{U}						mg/kg	0.005	A-T-004s
PCB BZ 157$_{A}^{M\#}$	-	<0.005^{U}						mg/kg	0.005	A-T-004s
PCB BZ 167$_{A}^{M\#}$	-	<0.005^{U}						mg/kg	0.005	A-T-004s
PCB BZ 169$_{A}^{M\#}$	-	<0.005^{U}						mg/kg	0.005	A-T-004s
PCB BZ 189$_{A}^{M\#}$	-	<0.005^{U}						mg/kg	0.005	A-T-004s
PCB BZ 77$_{A}^{M\#}$	-	<0.005^{U}						mg/kg	0.005	A-T-004s
Total Speciated PCB-WHO12$_{A}^{M\#}$	-	<0.007						mg/kg	0.005	A-T-004s

Envirolab Job Number: 23/09901

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/09901/2	23/09901/3						Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	R22-TP505	R22-TP505								
Depth to Top	0.50	1.00								
Depth To Bottom										
Date Sampled	03-Oct-23	03-Oct-23								
Sample Type	SOIL - ES	SOIL - ES								
Sample Matrix Code	6A	3								
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$_A^{M\#}$	-	<1						mg/kg	1	A-T-055s
Ali >C21-C35$_A^{M\#}$	-	<1						mg/kg	1	A-T-055s
Total Aliphatics$_A$	-	<1						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$_A^{M\#}$	-	<1						mg/kg	1	A-T-055s
Aro >C16-C21$_A^{M\#}$	-	<1						mg/kg	1	A-T-055s
Aro >C21-C35$_A^{M\#}$	-	<1						mg/kg	1	A-T-055s
Total Aromatics$_A$	-	<1						mg/kg	1	Calc-As Recd
TPH (Ali & Aro >C5-C35)$_A$	-	<1						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 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 **six 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.
The client Sample No, Client Sample ID, Depth to top, Depth to Bottom and Date Sampled are all provided by the client.
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.

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 "^"	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
N/A	Not applicable

Asbestos
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
Quantification of asbestos is a 3 stage process including visual identification, hand picking and weighing, and fibre counting by sedimentation/phase contrast optical microscopy if required. 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) quantification by sedimentation is performed. 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.

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^{o}C / 11550µS/cm @ 20^{o}C fall outside the accreditation range and as such are unaccredited.

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

Envirolab Deviating Samples Report

Units 7&8 Sandpits Business Park, Mottram Road, Hyde, SK14 3AR
Tel. 0161 368 4921 email. ask@envlab.co.uk

Client: Structural Soils Limited (Hemel Hempstead), 18 Frogmore Road, Hemel Hempstead, UK, HP3 9RT

Project: Sealink Richborough

Clients Project No: 563607

Project No: 23/09901

Date Received: 06/10/2023 (am)

Cool Box Temperatures (°C): 16.1,16.2, 16.4

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	23/09901/2	23/09901/3
Client Sample No		
Client Sample ID/Depth	R22-TP505 0.50m	R22-TP505 1.00m
Date Sampled	03/10/23	03/10/23
A-T-004s		12/10/2023
A-T-007s		12/10/2023
A-T-019s		11/10/2023
A-T-022s		12/10/2023
A-T-024s		12/10/2023
A-T-025w		18/10/2023
A-T-026s		12/10/2023
A-T-026w		18/10/2023
A-T-026w (F)		18/10/2023
A-T-027s		13/10/2023
A-T-030s		12/10/2023
A-T-031s		12/10/2023
A-T-031w		18/10/2023
A-T-032s		12/10/2023
A-T-032w		18/10/2023
A-T-033w		23/10/2023
A-T-037w		18/10/2023
A-T-040s		12/10/2023
A-T-040w		11/10/2023
A-T-042sFCN		16/10/2023
A-T-042wFCN		19/10/2023
A-T-042wTCN		19/10/2023
A-T-044		14/10/2023
A-T-045	09/10/2023	09/10/2023
A-T-049w		13/10/2023
A-T-050s		11/10/2023
A-T-050w		18/10/2023
A-T-055s		11/10/2023
A-T-ANCs		12/10/2023
Calc		19/10/2023
Calc-As Recd		12/10/2023
Calc-no stones		18/10/2023

Lab Sample ID	23/09901/2	23/09901/3
Client Sample No		
Client Sample ID/Depth	R22-TP505 0.50m	R22-TP505 1.00m
Date Sampled	03/10/23	03/10/23
Probe (w)		18/10/2023

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

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Units 7 & 8, Sandpits Business Park
Mottram Road, Hyde, Cheshire, SK14 3AR

Final Test Report

Envirolab Job Number:	23/09901
Issue Number:	1 Date: 23-Oct-23
Client:	Structural Soils Limited (Hemel Hempstead) 18 Frogmore Road Hemel Hempstead UK HP3 9RT NE38 8QJ
Project Manager:	[redacted]
Project Name:	Sealink Richborough
Project Ref:	563607
Order No:	N/A
Date Samples Received:	6-Oct-23
Date Instructions Received:	6-Oct-23
Date Analysis Completed:	23-Oct-23

Notes - Soil analysis

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

For samples with Matrix Codes 1 - 6 natural stones >10mm are removed or excluded from the sample prior to analysis and reported results corrected to a whole sample basis.

For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis.

Notes - General

This report shall not be reproduced, except in full, without written approval from Envirolab.

Subscript "A" indicates analysis performed on the sample as received. "D" indicates analysis performed on the dried sample, crushed to pass a 2mm sieve, unless asbestos is found to be present in which case all analysis is performed on the sample as received.

All analysis is performed on the dried and crushed sample for samples with Matrix Code 7 and this supercedes any "A" subscripts.

All analysis is performed on the sample as received for soil samples from outside the European Union and this supercedes any "D" subscripts

For complex, multi-compound analysis, quality control results do not always fall within chart limits for every compound and we have criteria for reporting in these situations.

If results are in italic font they are associated with such quality control failures and may be unreliable.

A deviating samples 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

Predominant Matrix Codes: 1 = SAND, 2 = LOAM, 3 = CLAY, 4 = LOAM/SAND, 5 = SAND/CLAY, 6 = CLAY/LOAM, 7 = OTHER, 8 = Asbestos bulk ID sample

Secondary Matrix Codes: A = contains stones, B = contains construction rubble, C = contains visible hydrocarbons, D = contains glass/metal, E = contains roots/twigs.

IS indicates Insufficient sample for analysis, NDP indicates No Determination Possible and NAD indicates No Asbestos Detected.

Analytical results reflect the quality of the sample at the time of analysis only. Opinions and interpretations expressed are outside the scope of our accreditation.

Please contact us if you need any further information.

HWOL TPH Code: EH_CU_1D_AL: Extractable hydrocarbons - i.e. everything extracted by the solvent(s), Clean-up - e.g. by florisil, silica gel, GC - Single coil gas chromatography, Aliphatics only

Approved by:

[redacted]

Client Manager

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Landfill WAC analysis must not be used for hazardous waste classification purposes. This analysis is only applicable for landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Sample Details						Landfill Waste Acceptance Criteria Limits		
Lab Sample ID	Method	ISO17025	MCERTS	23/09901/3				
Client Sample Number						Inert Waste Landfill	Stable Non-reactive Hazardous Waste in Non-Hazardous Landfill	Hazardous Waste Landfill
Client Sample ID				R22-TP505				
Depth to Top				1				
Depth to Bottom								
Date Sampled				03/10/2023				
Sample Type				Soil - ES				
Sample Matrix Code				3				
Solid Waste Analysis								
pH (pH Units)$_D$	A-T-031	N	N	**8.07**		-	>6	-
ANC to pH 4 (mol/kg)$_D$	A-T-ANC	N	N	**1.26**		-	to be evaluated	to be evaluated
ANC to pH 6 (mol/kg)$_D$	A-T-ANC	N	N	**0.16**		-	to be evaluated	to be evaluated
Loss on Ignition (%)$_D$	A-T-030	N	N	**6.8**		-	-	10
Total Organic Carbon (%)$_D$	A-T-032	N	N	**0.71**		3	5	6
PAH Sum of 17 (mg/kg) $_A$	A-T-019	N	N	**<0.08**		100	-	-
Mineral Oil (mg/kg)$_{A\ EH_CU_1D_AL}$	A-T-007	N	N	**<10**		500	-	-
Sum of 7 PCBs (mg/kg)$_A$	A-T-004	N	N	**<0.007**		1	-	-
Sum of BTEX (mg/kg)$_A$	A-T-022	N	N	**<0.01**		6	-	-
Eluate Analysis				**10:1**	**10:1**	**Limit values for compliance leaching test using**		
				mg/l	**mg/kg**	**BS EN 12457-2 at L/S 10 l/kg (mg/kg)**		
Arsenic	A-T-025	N	N	0.014	**0.140**	0.5	2	25
Barium	A-T-025	N	N	0.033	**0.330**	20	100	300
Cadmium	A-T-025	N	N	<0.001	**<0.01**	0.04	1	5
Chromium	A-T-025	N	N	0.001	**0.010**	0.5	10	70
Copper	A-T-025	N	N	0.025	**0.250**	2	50	100
Mercury	A-T-025	N	N	<0.0005	**<0.005**	0.01	0.2	2
Molybdenum	A-T-025	N	N	0.010	**0.100**	0.5	10	30
Nickel	A-T-025	N	N	0.008	**0.080**	0.4	10	40
Lead	A-T-025	N	N	0.013	**0.130**	0.5	10	50
Antimony	A-T-025	N	N	<0.001	**<0.01**	0.06	0.7	5
Selenium	A-T-025	N	N	0.001	**0.010**	0.1	0.5	7
Zinc	A-T-025	N	N	0.033	**0.330**	4	50	200
Chloride	A-T-026	N	N	74	**740**	800	15000	25000
Fluoride	A-T-026	N	N	0.8	**8.0**	10	150	500
Sulphate as SO_4	A-T-026	N	N	160	**1598**	1000	20000	50000
Total Dissolved Solids	A-T-035	N	N	227	**2270**	4000	60000	100000
Phenol Index	A-T-050	N	N	<0.01	**<0.1**	1	-	-
Dissolved Organic Carbon	A-T-032	N	N	<2.0	**<200**	500	800	1000
Leach Test Information								
pH (pH Units)	A-T-031	N	N	7.9				
Conductivity (µS/cm)	A-T-037	N	N	455				
Mass Sample (kg)				0.247				
Dry Matter (%)	A-T-044	N	N	70.9				

Stated acceptance limits are for guidance only and Envirolab cannot be held responsible for any discrepancies with current legislation

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Units 7 & 8 Sandpits Business Park
Mottram Road, Hyde, Cheshire, SK14 3AR

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 23/10024
Issue Number: 1 **Date:** 26 October, 2023

Client: Structural Soils Limited (Hemel Hempstead)
18 Frogmore Road
Hemel Hempstead
UK
HP3 9RT

Project Manager: [redacted]
Project Name: Sealink Richborough
Project Ref: 563607
Order No: N/A
Date Samples Received: 11/10/23
Date Instructions Received: 11/10/23
Date Analysis Completed: 26/10/23

Approved by:

[redacted]

Deputy Client Services Supervisor

Envirolab Job Number: 23/10024

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10024/3	23/10024/4	23/10024/8					Units	Limit of Detection	Method ref
Client Sample No	103	101								
Client Sample ID	R22-TP205	RedP-BH-11	R22-TP103							
Depth to Top	1.00	0.20	0.5							
Depth To Bottom										
Date Sampled	06-Oct-23	06-Oct-23	09-Oct-23							
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES							
Sample Matrix Code	6A	6AE	3							
% Moisture at 105C$_A$	37.5	33.8	49.1					% w/w	0.1	A-T-044
% Stones >10mm$_A$	7.4	<0.1	<0.1					% w/w	0.1	A-T-044
pH$_D^{M\#}$	8.81	7.17	8.36					pH	0.01	A-T-031s
Sulphate (water sol 2:1)$_D^{M\#}$	0.03	<0.01	0.06					g/l	0.01	A-T-026s
Sulphur (total)$_D$	162	203	237					mg/kg	50	A-T-024s
Cyanide (free)$_A^{M\#}$	<1	<1	<1					mg/kg	1	A-T-042sFCN
Phenols - Total by HPLC$_A$	<0.2	<0.2	<0.2					mg/kg	0.2	A-T-050s
Organic Matter$_D^{M\#}$	0.7	2.2	1.8					% w/w	0.1	A-T-032s
Total Organic Carbon$_D^{M\#}$	0.41	1.25	1.05					% w/w	0.03	A-T-032s
Fraction of organic carbon$_D^{\#}$	0.0041	0.0125	0.0105					N/A	0.0003	A-T-032s
Arsenic$_D^{M\#}$	12	3	18					mg/kg	1	A-T-024s
Barium$_D$	44	34	45					mg/kg	1	A-T-024s
Beryllium$_D$	1.3	0.5	1.6					mg/kg	0.5	A-T-024s
Boron (water soluble)$_D^{M\#}$	5.9	<1.0	10.6					mg/kg	1	A-T-027s
Cadmium$_D^{M\#}$	1.4	<0.5	<0.5					mg/kg	0.5	A-T-024s
Copper$_D^{M\#}$	7	8	10					mg/kg	1	A-T-024s
Chromium$_D^{M\#}$	32	21	52					mg/kg	1	A-T-024s
Chromium (hexavalent)$_D$	<1	<1	<1					mg/kg	1	A-T-040s
Chromium (trivalent)	32	21	52					mg/kg	1	Calc
Lead$_D^{M\#}$	28	19	21					mg/kg	1	A-T-024s
Manganese$_D^{M\#}$	332	279	157					mg/kg	1	A-T-024s
Mercury$_D$	<0.17	<0.17	<0.17					mg/kg	0.17	A-T-024s
Molybdenum$_D^{M\#}$	<1	<1	4					mg/kg	1	A-T-024s
Nickel$_D^{M\#}$	18	10	25					mg/kg	1	A-T-024s
Selenium$_D^{M\#}$	<1	<1	<1					mg/kg	1	A-T-024s
Vanadium$_D^{M\#}$	59	26	93					mg/kg	1	A-T-024s
Zinc$_D^{M\#}$	86	41	61					mg/kg	5	A-T-024s
Leachate Prep BS EN 12457-1 (2:1) (1 no)$_A$	-	*	-							A-T-001
pH (leachable)$_A$	-	6.79	-					pH	0.01	A-T-031w
Ammoniacal nitrogen as N (leachable)$_A$	-	0.16	-					mg/l	0.05	A-T-033w
Chloride (leachable)$_A$	-	26.48	-					mg/l	1	A-T-026w
Fluoride (leachable)$_A$	-	0.94	-					mg/l	0.1	A-T-026w (F)
Sulphate (leachable)$_A$	-	28.20	-					mg/l	1	A-T-026w

Envirolab Job Number: 23/10024

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10024/3	23/10024/4	23/10024/8					Units	Limit of Detection	Method ref
Client Sample No	103	101								
Client Sample ID	R22-TP205	RedP-BH-11	R22-TP103							
Depth to Top	1.00	0.20	0.5							
Depth To Bottom										
Date Sampled	06-Oct-23	06-Oct-23	09-Oct-23							
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES							
Sample Matrix Code	6A	6AE	3							
Cyanide (free) (leachable)$_A$	-	<0.005	-					mg/l	0.005	A-T-042wFCN
Cyanide (total) (leachable)$_A$	-	<0.005	-					mg/l	0.005	A-T-042wTCN
Cyanide (complex) (leachable)	-	<0.005	-					mg/l	0.005	Calc
Phenol (leachable)$_A$	-	<0.01	-					mg/l	0.01	A-T-050w
Cresols (leachable)$_A$	-	<0.01	-					mg/l	0.01	A-T-050w
Resorcinol (leachable)$_A$	-	<0.01	-					mg/l	0.01	A-T-050w
Catechol (leachable)$_A$	-	<0.01	-					mg/l	0.01	A-T-050w
Xylenols & Ethylphenols (leachable)$_A$	-	<0.01	-					mg/l	0.01	A-T-050w
Naphthols (leachable)$_A$	-	<0.01	-					mg/l	0.01	A-T-050w
Trimethylphenol (leachable)$_A$	-	<0.01	-					mg/l	0.01	A-T-050w
Phenols (total by HPLC) (leachable)$_A$	-	<0.01	-					mg/l	0.01	A-T-050w
Antimony (leachable)$_A$	-	<1	-					µg/l	1	A-T-025w
Arsenic (leachable)$_A$	-	9	-					µg/l	1	A-T-025w
Boron (leachable)$_A$	-	89	-					µg/l	10	A-T-025w
Barium (leachable)$_A$	-	257	-					µg/l	1	A-T-025w
Beryllium (leachable)$_A$	-	2	-					µg/l	1	A-T-025w
Cadmium (leachable)$_A$	-	<1	-					µg/l	1	A-T-025w
Copper (leachable)$_A$	-	22	-					µg/l	4	A-T-025w
Chromium (leachable)$_A$	-	27	-					µg/l	1	A-T-025w
Chromium (hexavalent) (leachable)$_A$	-	<0.05	-					mg/l	0.05	A-T-040w
Chromium (trivalent)	-	<0.05	-					mg/l	0.05	Calc
Iron (leachable)$_A$	-	5380	-					µg/l	10	A-T-025w
Lead (leachable)$_A$	-	22	-					µg/l	1	A-T-025w
Manganese (leachable)$_A$	-	141	-					µg/l	1	A-T-025w
Magnesium (leachable)$_A$	-	56	-					mg/l	1	A-T-049w
Mercury (leachable)$_A$	-	<0.1	-					µg/l	0.1	A-T-025w
Molybdenum (leachable)$_A$	-	<1	-					µg/l	1	A-T-025w
Nickel (leachable)$_A$	-	15	-					µg/l	2	A-T-025w
Selenium (leachable)$_A$	-	<1	-					µg/l	1	A-T-025w
Vanadium (leachable)$_A$	-	47	-					µg/l	1	A-T-025w
Zinc (leachable)$_A$	-	63	-					µg/l	2	A-T-025w
Calcium (leachable)$_A$	-	55	-					mg/l	1	A-T-049w

Envirolab Job Number: 23/10024

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10024/3	23/10024/4	23/10024/8					Units	Limit of Detection	Method ref
Client Sample No	103	101								
Client Sample ID	R22-TP205	RedP-BH-11	R22-TP103							
Depth to Top	1.00	0.20	0.5							
Depth To Bottom										
Date Sampled	06-Oct-23	06-Oct-23	09-Oct-23							
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES							
Sample Matrix Code	6A	6AE	3							
Asbestos in Soil (inc. matrix) ^										
Asbestos in soil$_{D}^{\#}$	NAD	NAD	NAD							A-T-045
Asbestos Matrix (visual)$_{D}$	-	-	-							A-T-045
Asbestos Matrix (microscope)$_{D}$	-	-	-							A-T-045
Asbestos ACM - Suitable for Water Absorption Test?$_{D}$	N/A	N/A	N/A							A-T-045

Envirolab Job Number: 23/10024

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10024/3	23/10024/4	23/10024/8					Units	Limit of Detection	Method ref
Client Sample No	103	101								
Client Sample ID	R22-TP205	RedP-BH-11	R22-TP103							
Depth to Top	1.00	0.20	0.5							
Depth To Bottom										
Date Sampled	06-Oct-23	06-Oct-23	09-Oct-23							
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES							
Sample Matrix Code	6A	6AE	3							
PAH-16MS										
Acenaphthene$_A^{M\#}$	<0.01	<0.01	<0.01					mg/kg	0.01	A-T-019s
Acenaphthylene$_A^{M\#}$	<0.01	<0.01	<0.01					mg/kg	0.01	A-T-019s
Anthracene$_A^{M\#}$	<0.02	<0.02	<0.02					mg/kg	0.02	A-T-019s
Benzo(a)anthracene$_A^{M\#}$	<0.04	<0.04	<0.04					mg/kg	0.04	A-T-019s
Benzo(a)pyrene$_A^{M\#}$	<0.04	<0.04	<0.04					mg/kg	0.04	A-T-019s
Benzo(b)fluoranthene$_A^{M\#}$	<0.05	<0.05	<0.05					mg/kg	0.05	A-T-019s
Benzo(ghi)perylene$_A^{M\#}$	<0.05	<0.05	<0.05					mg/kg	0.05	A-T-019s
Benzo(k)fluoranthene$_A^{M\#}$	<0.07	<0.07	<0.07					mg/kg	0.07	A-T-019s
Chrysene$_A^{M\#}$	<0.06	<0.06	<0.06					mg/kg	0.06	A-T-019s
Dibenzo(ah)anthracene$_A$	<0.04	<0.04	<0.04					mg/kg	0.04	A-T-019s
Fluoranthene$_A^{M\#}$	<0.08	<0.08	<0.08					mg/kg	0.08	A-T-019s
Fluorene$_A^{M\#}$	<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					mg/kg	0.03	A-T-019s
Naphthalene $_A^{M\#}$	<0.03	<0.03	<0.03					mg/kg	0.03	A-T-019s
Phenanthrene$_A^{M\#}$	<0.03^U	<0.03^U	<0.03^U					mg/kg	0.03	A-T-019s
Pyrene$_A^{M\#}$	<0.07	<0.07	<0.07					mg/kg	0.07	A-T-019s
Total PAH-16MS$_A$	<0.08	<0.08	<0.08					mg/kg	0.01	A-T-019s

Report Notes

General
This report shall not be reproduced, except in full, without written approval from Envirolab.
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 **six 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.
The client Sample No, Client Sample ID, Depth to top, Depth to Bottom and Date Sampled are all provided by the client.
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.

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 "^"	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
N/A	Not applicable

Asbestos
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
Quantification of asbestos is a 3 stage process including visual identification, hand picking and weighing, and fibre counting by sedimentation/phase contrast optical microscopy if required. 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) quantification by sedimentation is performed. 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.

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^{o}C / 11550µS/cm @ 20^{o}C fall outside the accreditation range and as such are unaccredited.

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

Envirolab Deviating Samples Report

Units 7&8 Sandpits Business Park, Mottram Road, Hyde, SK14 3AR
Tel. 0161 368 4921 email. ask@envlab.co.uk

Client: Structural Soils Limited (Hemel Hempstead), 18 Frogmore Road, Hemel Hempstead, UK, HP3 9RT

Project: Sealink Richborough

Clients Project No: 563607

Project No: 23/10024

Date Received: 11/10/2023 (am)

Cool Box Temperatures (°C): 15.8 & 16.2

NO DEVIATIONS IDENTIFIED

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

Envirolab Analysis Dates

Lab Sample ID	23/10024/3	23/10024/4	23/10024/8
Client Sample No	103	101	
Client Sample ID/Depth	R22-TP205 1.00m	RedP-BH-11 0.20m	R22-TP103 0.5m
Date Sampled	06/10/23	06/10/23	09/10/23
A-T-004s		13/10/2023	
A-T-007s		18/10/2023	
A-T-019s	18/10/2023	18/10/2023	18/10/2023
A-T-022s		13/10/2023	
A-T-024s	20/10/2023	20/10/2023	20/10/2023
A-T-025w		23/10/2023	
A-T-026s	20/10/2023	20/10/2023	20/10/2023
A-T-026w		23/10/2023	
A-T-026w (F)		23/10/2023	
A-T-027s	19/10/2023	19/10/2023	26/10/2023
A-T-030s		24/10/2023	
A-T-031s	19/10/2023	19/10/2023	19/10/2023
A-T-031w		23/10/2023	
A-T-032s	24/10/2023	24/10/2023	24/10/2023
A-T-032w		23/10/2023	
A-T-033w		24/10/2023	
A-T-037w		23/10/2023	
A-T-040s	20/10/2023	20/10/2023	20/10/2023
A-T-040w		19/10/2023	
A-T-042sFCN	25/10/2023	25/10/2023	21/10/2023
A-T-042wFCN		20/10/2023	
A-T-042wTCN		21/10/2023	
A-T-044	19/10/2023	19/10/2023	19/10/2023
A-T-045	12/10/2023	12/10/2023	12/10/2023
A-T-049w		23/10/2023	
A-T-050s	16/10/2023	16/10/2023	16/10/2023
A-T-050w		23/10/2023	
A-T-ANCs		19/10/2023	
Calc	20/10/2023	21/10/2023	20/10/2023
Calc-no stones		23/10/2023	
Probe (w)		23/10/2023	

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

Units 7 & 8, Sandpits Business Park
Mottram Road, Hyde, Cheshire, SK14 3AR

Final Test Report

Envirolab Job Number:	23/10024
Issue Number:	1
Date:	26-Oct-23

Client: Structural Soils Limited (Hemel Hempstead)
18 Frogmore Road
Hemel Hempstead
UK
HP3 9RT

Project Manager:	[redacted]
Project Name:	Sealink Richborough
Project Ref:	563607
Order No:	N/A
Date Samples Received:	11-Oct-23
Date Instructions Received:	11-Oct-23
Date Analysis Completed:	26-Oct-23

Notes - Soil analysis

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

For samples with Matrix Codes 1 - 6 natural stones >10mm are removed or excluded from the sample prior to analysis and reported results corrected to a whole sample basis.

For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis.

Notes - General

This report shall not be reproduced, except in full, without written approval from Envirolab.

Subscript "A" indicates analysis performed on the sample as received. "D" indicates analysis performed on the dried sample, crushed to pass a 2mm sieve, unless asbestos is found to be present in which case all analysis is performed on the sample as received.

All analysis is performed on the dried and crushed sample for samples with Matrix Code 7 and this supercedes any "A" subscripts.

All analysis is performed on the sample as received for soil samples from outside the European Union and this supercedes any "D" subscripts

For complex, multi-compound analysis, quality control results do not always fall within chart limits for every compound and we have criteria for reporting in these situations.

If results are in italic font they are associated with such quality control failures and may be unreliable.

A deviating samples 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

Predominant Matrix Codes: 1 = SAND, 2 = LOAM, 3 = CLAY, 4 = LOAM/SAND, 5 = SAND/CLAY, 6 = CLAY/LOAM, 7 = OTHER, 8 = Asbestos bulk ID sample

Secondary Matrix Codes: A = contains stones, B = contains construction rubble, C = contains visible hydrocarbons, D = contains glass/metal, E = contains roots/twigs.

IS indicates Insufficient sample for analysis, NDP indicates No Determination Possible and NAD indicates No Asbestos Detected.

Analytical results reflect the quality of the sample at the time of analysis only. Opinions and interpretations expressed are outside the scope of our accreditation.

Please contact us if you need any further information.

HWOL TPH Code: EH_CU_1D_AL: Extractable hydrocarbons - i.e. everything extracted by the solvent(s), Clean-up - e.g. by florisil, silica gel, GC - Single coil gas chromatography, Aliphatics only

Approved by:

[redacted]

Deputy Client Services Supervisor

Landfill WAC analysis must not be used for hazardous waste classification purposes. This analysis is only applicable for landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Sample Details						Landfill Waste Acceptance Criteria Limits		
Lab Sample ID	Method	ISO17025	MCERTS	23/10024/4				
Client Sample Number				101		Inert Waste Landfill	Stable Non-reactive Hazardous Waste in Non-Hazardous Landfill	Hazardous Waste Landfill
Client Sample ID				RedP-BH-11				
Depth to Top				0.2				
Depth to Bottom								
Date Sampled				06/10/2023				
Sample Type				Soil - ES				
Sample Matrix Code				6AE				
Solid Waste Analysis								
pH (pH Units)$_D$	A-T-031	N	N	**7.17**		-	>6	-
ANC to pH 4 (mol/kg)$_D$	A-T-ANC	N	N	**0.08**		-	to be evaluated	to be evaluated
ANC to pH 6 (mol/kg)$_D$	A-T-ANC	N	N	**0.02**		-	to be evaluated	to be evaluated
Loss on Ignition (%)$_D$	A-T-030	N	N	**3.6**		-	-	10
Total Organic Carbon (%)$_D$	A-T-032	N	N	**1.25**		3	5	6
PAH Sum of 17 (mg/kg) $_A$	A-T-019	N	N	**<0.08**		100	-	-
Mineral Oil (mg/kg)$_{A\ EH_CU_1D_AL}$	A-T-007	N	N	**<10**		500	-	-
Sum of 7 PCBs (mg/kg)$_A$	A-T-004	N	N	**<0.007**		1	-	-
Sum of BTEX (mg/kg)$_A$	A-T-022	N	N	**<0.01**		6	-	-
Eluate Analysis				**10:1**	**10:1**	**Limit values for compliance leaching test using**		
				mg/l	**mg/kg**	**BS EN 12457-2 at L/S 10 l/kg (mg/kg)**		
Arsenic	A-T-025	N	N	0.004	**0.040**	0.5	2	25
Barium	A-T-025	N	N	0.089	**0.890**	20	100	300
Cadmium	A-T-025	N	N	<0.001	**<0.01**	0.04	1	5
Chromium	A-T-025	N	N	0.006	**0.060**	0.5	10	70
Copper	A-T-025	N	N	0.010	**0.100**	2	50	100
Mercury	A-T-025	N	N	<0.0005	**<0.005**	0.01	0.2	2
Molybdenum	A-T-025	N	N	<0.001	**<0.01**	0.5	10	30
Nickel	A-T-025	N	N	0.006	**0.060**	0.4	10	40
Lead	A-T-025	N	N	0.009	**0.090**	0.5	10	50
Antimony	A-T-025	N	N	<0.001	**<0.01**	0.06	0.7	5
Selenium	A-T-025	N	N	<0.001	**<0.01**	0.1	0.5	7
Zinc	A-T-025	N	N	0.020	**0.200**	4	50	200
Chloride	A-T-026	N	N	13	**129**	800	15000	25000
Fluoride	A-T-026	N	N	0.7	**7.0**	10	150	500
Sulphate as SO_4	A-T-026	N	N	121	**1211**	1000	20000	50000
Total Dissolved Solids	A-T-035	N	N	28	**280**	4000	60000	100000
Phenol Index	A-T-050	N	N	<0.01	**<0.1**	1	-	-
Dissolved Organic Carbon	A-T-032	N	N	21.60	**216**	500	800	1000
Leach Test Information								
pH (pH Units)	A-T-031	N	N	6.2				
Conductivity (µS/cm)	A-T-037	N	N	57				
Mass Sample (kg)				0.203				
Dry Matter (%)	A-T-044	N	N	86				

Stated acceptance limits are for guidance only and Envirolab cannot be held responsible for any discrepancies with current legislation

envirolab
Units 7 & 8 Sandpits Business Park
Mottram Road, Hyde, Cheshire, SK14 3AR

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 23/10028
Issue Number: 1 **Date:** 26 October, 2023

Client: Structural Soils Limited (Hemel Hempstead)
18 Frogmore Road
Hemel Hempstead
UK
HP3 9RT

Project Manager: [redacted]
Project Name: Sealink Richborough
Project Ref: 563607
Order No: N/A
Date Samples Received: 11/10/23
Date Instructions Received: 11/10/23
Date Analysis Completed: 26/10/23

Approved by:

[redacted]
Deputy Client Services Supervisor

Envirolab Job Number: 23/10028

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10028/4	23/10028/6	23/10028/8					Units	Limit of Detection	Method ref
Client Sample No	101	103	102							
Client Sample ID	R22-BH101	R22-BH101	R22-BH102							
Depth to Top	0.20	1.00	0.50							
Depth To Bottom										
Date Sampled	05-Oct-23	05-Oct-23	05-Oct-23							
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES							
Sample Matrix Code	6AE	3	3							
% Moisture at 105C$_A$	29.6	35.4	32.9					% w/w	0.1	A-T-044
% Stones >10mm$_A$	5.4	7.6	4.8					% w/w	0.1	A-T-044
pH$_D^{M\#}$	8.07	8.63	8.23					pH	0.01	A-T-031s
Sulphate (water sol 2:1)$_D^{M\#}$	0.04	0.06	0.03					g/l	0.01	A-T-026s
Sulphur (total)$_D$	424	157	223					mg/kg	50	A-T-024s
Cyanide (free)$_A^{M\#}$	<1	<1	<1					mg/kg	1	A-T-042sFCN
Phenols - Total by HPLC$_A$	<0.2	<0.2	<0.2					mg/kg	0.2	A-T-050s
Organic Matter$_D^{M\#}$	4.3	0.8	1.7					% w/w	0.1	A-T-032s
Total Organic Carbon$_D^{M\#}$	2.44	0.51	0.99					% w/w	0.03	A-T-032s
Fraction of organic carbon$_D^{\#}$	0.0244	0.0051	0.0099					N/A	0.0003	A-T-032s
Arsenic$_D^{M\#}$	9	7	13					mg/kg	1	A-T-024s
Barium$_D$	40	29	36					mg/kg	1	A-T-024s
Beryllium$_D$	1.0	1.1	1.2					mg/kg	0.5	A-T-024s
Boron (water soluble)$_D^{M\#}$	2.4	5.7	3.2					mg/kg	1	A-T-027s
Cadmium$_D^{M\#}$	0.7	0.6	0.8					mg/kg	0.5	A-T-024s
Copper$_D^{M\#}$	14	9	9					mg/kg	1	A-T-024s
Chromium$_D^{M\#}$	30	32	38					mg/kg	1	A-T-024s
Chromium (hexavalent)$_D$	<1	<1	<1					mg/kg	1	A-T-040s
Chromium (trivalent)	30	32	38					mg/kg	1	Calc
Lead$_D^{M\#}$	21	15	16					mg/kg	1	A-T-024s
Manganese$_D^{M\#}$	296	143	324					mg/kg	1	A-T-024s
Mercury$_D$	0.43	<0.17	<0.17					mg/kg	0.17	A-T-024s
Molybdenum$_D^{M\#}$	<1	<1	<1					mg/kg	1	A-T-024s
Nickel$_D^{M\#}$	18	19	24					mg/kg	1	A-T-024s
Selenium$_D^{M\#}$	<1	<1	<1					mg/kg	1	A-T-024s
Vanadium$_D^{M\#}$	52	59	69					mg/kg	1	A-T-024s
Zinc$_D^{M\#}$	63	58	60					mg/kg	5	A-T-024s
Leachate Prep BS EN 12457-1 (2:1) (1 no)$_A$	*	-	*							A-T-001
pH (leachable)$_A$	7.69	-	8.03					pH	0.01	A-T-031w
Ammoniacal nitrogen as N (leachable)$_A$	0.09	-	<0.05					mg/l	0.05	A-T-033w
Chloride (leachable)$_A$	24.67	-	19.42					mg/l	1	A-T-026w
Fluoride (leachable)$_A$	0.80	-	1.42					mg/l	0.1	A-T-026w (F)
Sulphate (leachable)$_A$	29.43	-	26.82					mg/l	1	A-T-026w

Envirolab Job Number: 23/10028

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10028/4	23/10028/6	23/10028/8					Units	Limit of Detection	Method ref
Client Sample No	101	103	102							
Client Sample ID	R22-BH101	R22-BH101	R22-BH102							
Depth to Top	0.20	1.00	0.50							
Depth To Bottom										
Date Sampled	05-Oct-23	05-Oct-23	05-Oct-23							
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES							
Sample Matrix Code	6AE	3	3							
Cyanide (free) (leachable)$_A$	<0.005	-	<0.005					mg/l	0.005	A-T-042wFCN
Cyanide (total) (leachable)$_A$	<0.005	-	<0.005					mg/l	0.005	A-T-042wTCN
Cyanide (complex) (leachable)	<0.005	-	<0.005					mg/l	0.005	Calc
Phenol (leachable)$_A$	<0.01	-	<0.01					mg/l	0.01	A-T-050w
Cresols (leachable)$_A$	<0.01	-	<0.01					mg/l	0.01	A-T-050w
Resorcinol (leachable)$_A$	<0.01	-	<0.01					mg/l	0.01	A-T-050w
Catechol (leachable)$_A$	<0.01	-	<0.01					mg/l	0.01	A-T-050w
Xylenols & Ethylphenols (leachable)$_A$	<0.01	-	<0.01					mg/l	0.01	A-T-050w
Naphthols (leachable)$_A$	<0.01	-	<0.01					mg/l	0.01	A-T-050w
Trimethylphenol (leachable)$_A$	<0.01	-	<0.01					mg/l	0.01	A-T-050w
Phenols (total by HPLC) (leachable)$_A$	<0.01	-	<0.01					mg/l	0.01	A-T-050w
Antimony (leachable)$_A$	<1	-	<1					µg/l	1	A-T-025w
Arsenic (leachable)$_A$	1	-	2					µg/l	1	A-T-025w
Boron (leachable)$_A$	121	-	175					µg/l	10	A-T-025w
Barium (leachable)$_A$	8	-	6					µg/l	1	A-T-025w
Beryllium (leachable)$_A$	<1	-	<1					µg/l	1	A-T-025w
Cadmium (leachable)$_A$	<1	-	<1					µg/l	1	A-T-025w
Copper (leachable)$_A$	<4	-	<4					µg/l	4	A-T-025w
Chromium (leachable)$_A$	<1	-	<1					µg/l	1	A-T-025w
Chromium (hexavalent) (leachable)$_A$	<0.05	-	<0.05					mg/l	0.05	A-T-040w
Chromium (trivalent)	<0.05	-	<0.05					mg/l	0.05	Calc
Iron (leachable)$_A$	31	-	68					µg/l	10	A-T-025w
Lead (leachable)$_A$	<1	-	3					µg/l	1	A-T-025w
Manganese (leachable)$_A$	<1	-	3					µg/l	1	A-T-025w
Magnesium (leachable)$_A$	4	-	6					mg/l	1	A-T-049w
Mercury (leachable)$_A$	<0.1	-	<0.1					µg/l	0.1	A-T-025w
Molybdenum (leachable)$_A$	5	-	4					µg/l	1	A-T-025w
Nickel (leachable)$_A$	3	-	4					µg/l	2	A-T-025w
Selenium (leachable)$_A$	<1	-	1					µg/l	1	A-T-025w
Vanadium (leachable)$_A$	2	-	3					µg/l	1	A-T-025w
Zinc (leachable)$_A$	5	-	6					µg/l	2	A-T-025w
Calcium (leachable)$_A$	47	-	29					mg/l	1	A-T-049w

Envirolab Job Number: 23/10028

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10028/4	23/10028/6	23/10028/8					Units	Limit of Detection	Method ref
Client Sample No	101	103	102							
Client Sample ID	R22-BH101	R22-BH101	R22-BH102							
Depth to Top	0.20	1.00	0.50							
Depth To Bottom										
Date Sampled	05-Oct-23	05-Oct-23	05-Oct-23							
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES							
Sample Matrix Code	6AE	3	3							
Asbestos in Soil (inc. matrix) ^										
Asbestos in soil$_{D}^{\#}$	NAD	NAD	NAD							A-T-045
Asbestos Matrix (visual)$_{D}$	-	-	-							A-T-045
Asbestos Matrix (microscope)$_{D}$	-	-	-							A-T-045
Asbestos ACM - Suitable for Water Absorption Test?$_{D}$	N/A	N/A	N/A							A-T-045

Envirolab Job Number: 23/10028

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10028/4	23/10028/6	23/10028/8					Units	Limit of Detection	Method ref
Client Sample No	101	103	102							
Client Sample ID	R22-BH101	R22-BH101	R22-BH102							
Depth to Top	0.20	1.00	0.50							
Depth To Bottom										
Date Sampled	05-Oct-23	05-Oct-23	05-Oct-23							
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES							
Sample Matrix Code	6AE	3	3							
PAH-16MS										
Acenaphthene$_A^{M\#}$	<0.01	<0.01	<0.01					mg/kg	0.01	A-T-019s
Acenaphthylene$_A^{M\#}$	<0.01	<0.01	<0.01					mg/kg	0.01	A-T-019s
Anthracene$_A^{M\#}$	<0.02	<0.02	<0.02					mg/kg	0.02	A-T-019s
Benzo(a)anthracene$_A^{M\#}$	<0.04	<0.04	<0.04					mg/kg	0.04	A-T-019s
Benzo(a)pyrene$_A^{M\#}$	<0.04	<0.04	<0.04					mg/kg	0.04	A-T-019s
Benzo(b)fluoranthene$_A^{M\#}$	<0.05	<0.05	<0.05					mg/kg	0.05	A-T-019s
Benzo(ghi)perylene$_A^{M\#}$	<0.05	<0.05	<0.05					mg/kg	0.05	A-T-019s
Benzo(k)fluoranthene$_A^{M\#}$	<0.07	<0.07	<0.07					mg/kg	0.07	A-T-019s
Chrysene$_A^{M\#}$	<0.06	<0.06	<0.06					mg/kg	0.06	A-T-019s
Dibenzo(ah)anthracene$_A$	<0.04	<0.04	<0.04					mg/kg	0.04	A-T-019s
Fluoranthene$_A^{M\#}$	<0.08	<0.08	<0.08					mg/kg	0.08	A-T-019s
Fluorene$_A^{M\#}$	<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					mg/kg	0.03	A-T-019s
Naphthalene $_A^{M\#}$	<0.03	<0.03	<0.03					mg/kg	0.03	A-T-019s
Phenanthrene$_A^{M\#}$	<0.03	<0.03	<0.03					mg/kg	0.03	A-T-019s
Pyrene$_A^{M\#}$	<0.07	<0.07	<0.07					mg/kg	0.07	A-T-019s
Total PAH-16MS$_A$	<0.08	<0.08	<0.08					mg/kg	0.01	A-T-019s

Envirolab Job Number: 23/10028

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10028/4	23/10028/6	23/10028/8					Units	Limit of Detection	Method ref
Client Sample No	101	103	102							
Client Sample ID	R22-BH101	R22-BH101	R22-BH102							
Depth to Top	0.20	1.00	0.50							
Depth To Bottom										
Date Sampled	05-Oct-23	05-Oct-23	05-Oct-23							
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES							
Sample Matrix Code	6AE	3	3							
Speciated PCB-WHO12										
PCB BZ 81$_{A}^{M\#}$	<0.005^{U}	-	-					mg/kg	0.005	A-T-004s
PCB BZ 105$_{A}^{M\#}$	<0.005^{U}	-	-					mg/kg	0.005	A-T-004s
PCB BZ 114$_{A}^{M\#}$	<0.005^{U}	-	-					mg/kg	0.005	A-T-004s
PCB BZ 118$_{A}^{M\#}$	<0.007	-	-					mg/kg	0.007	A-T-004s
PCB BZ 123$_{A}^{M\#}$	<0.005^{U}	-	-					mg/kg	0.005	A-T-004s
PCB BZ 126$_{A}^{M\#}$	<0.005^{U}	-	-					mg/kg	0.005	A-T-004s
PCB BZ 156$_{A}^{M\#}$	<0.005^{U}	-	-					mg/kg	0.005	A-T-004s
PCB BZ 157$_{A}^{M\#}$	<0.005^{U}	-	-					mg/kg	0.005	A-T-004s
PCB BZ 167$_{A}^{M\#}$	<0.005^{U}	-	-					mg/kg	0.005	A-T-004s
PCB BZ 169$_{A}^{M\#}$	<0.005^{U}	-	-					mg/kg	0.005	A-T-004s
PCB BZ 189$_{A}^{M\#}$	<0.005^{U}	-	-					mg/kg	0.005	A-T-004s
PCB BZ 77$_{A}^{M\#}$	<0.005^{U}	-	-					mg/kg	0.005	A-T-004s
Total Speciated PCB-WHO12$_{A}^{M\#}$	<0.007	-	-					mg/kg	0.005	A-T-004s

Envirolab Job Number: 23/10028

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Client Project Ref: 563607

Lab Sample ID	23/10028/4	23/10028/6	23/10028/8					Units	Limit of Detection	Method ref
Client Sample No	101	103	102							
Client Sample ID	R22-BH101	R22-BH101	R22-BH102							
Depth to Top	0.20	1.00	0.50							
Depth To Bottom										
Date Sampled	05-Oct-23	05-Oct-23	05-Oct-23							
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES							
Sample Matrix Code	6AE	3	3							
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$_A^{M\#}$	<1	-	-					mg/kg	1	A-T-055s
Ali >C21-C35$_A^{M\#}$	5	-	-					mg/kg	1	A-T-055s
Total Aliphatics$_A$	5	-	-					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$_A^{M\#}$	<1	-	-					mg/kg	1	A-T-055s
Aro >C16-C21$_A^{M\#}$	<1	-	-					mg/kg	1	A-T-055s
Aro >C21-C35$_A^{M\#}$	3	-	-					mg/kg	1	A-T-055s
Total Aromatics$_A$	3	-	-					mg/kg	1	Calc-As Recd
TPH (Ali & Aro >C5-C35)$_A$	8	-	-					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 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 **six 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.
The client Sample No, Client Sample ID, Depth to top, Depth to Bottom and Date Sampled are all provided by the client.
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.

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 "^"	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
N/A	Not applicable

Asbestos
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
Quantification of asbestos is a 3 stage process including visual identification, hand picking and weighing, and fibre counting by sedimentation/phase contrast optical microscopy if required. 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) quantification by sedimentation is performed. 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.

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^{o}C / 11550µS/cm @ 20^{o}C fall outside the accreditation range and as such are unaccredited.

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

Envirolab Deviating Samples Report

Units 7&8 Sandpits Business Park, Mottram Road, Hyde, SK14 3AR
Tel. 0161 368 4921 email. ask@envlab.co.uk

Client: Structural Soils Limited (Hemel Hempstead), 18 Frogmore Road, Hemel Hempstead, UK, HP3 9RT

Project: Sealink Richborough

Clients Project No: 563607

Project No: 23/10028

Date Received: 11/10/2023 (am)

Cool Box Temperatures (°C): 14.6 & 15.9

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	23/10028/4	23/10028/6	23/10028/8
Client Sample No	101	103	102
Client Sample ID/Depth	R22-BH101 0.20m	R22-BH101 1.00m	R22-BH102 0.50m
Date Sampled	05/10/23	05/10/23	05/10/23
A-T-004s	13/10/2023		
A-T-019s	13/10/2023	13/10/2023	13/10/2023
A-T-022s	17/10/2023		
A-T-024s	13/10/2023	13/10/2023	13/10/2023
A-T-025w	17/10/2023		17/10/2023
A-T-026s	13/10/2023	13/10/2023	13/10/2023
A-T-026w	19/10/2023		19/10/2023
A-T-026w (F)	20/10/2023		20/10/2023
A-T-027s	13/10/2023	13/10/2023	13/10/2023
A-T-031s	13/10/2023	13/10/2023	13/10/2023
A-T-031w	26/10/2023		26/10/2023
A-T-032s	12/10/2023	12/10/2023	12/10/2023
A-T-033w	23/10/2023		23/10/2023
A-T-040s	13/10/2023	13/10/2023	13/10/2023
A-T-040w	19/10/2023		19/10/2023
A-T-042sFCN	16/10/2023	16/10/2023	16/10/2023
A-T-042wFCN	19/10/2023		19/10/2023
A-T-042wTCN	19/10/2023		19/10/2023
A-T-044	14/10/2023	14/10/2023	14/10/2023
A-T-045	12/10/2023	12/10/2023	12/10/2023
A-T-049w	13/10/2023		13/10/2023
A-T-050s	16/10/2023	16/10/2023	16/10/2023
A-T-050w	16/10/2023		16/10/2023
A-T-055s	16/10/2023		
Calc	19/10/2023	13/10/2023	19/10/2023
Calc-As Recd	17/10/2023		

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

Units 7 & 8 Sandpits Business Park
Mottram Road, Hyde, Cheshire, SK14 3AR

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 23/10115
Issue Number: 1 **Date:** 02 November, 2023

Client: Structural Soils Limited (Hemel Hempstead)
18 Frogmore Road
Hemel Hempstead
UK
HP3 9RT

Project Manager: [redacted]
Project Name: Sealink Richborough
Project Ref: 563607
Order No: N/A
Date Samples Received: 13/10/23
Date Instructions Received: 13/10/23
Date Analysis Completed: 02/11/23

Approved by:

[redacted]

Deputy Client Services Supervisor

Envirolab Job Number: 23/10115

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10115/1	23/10115/4						Units	Limit of Detection	Method ref
Client Sample No	101	101								
Client Sample ID	R22-TP105	R22-BH203								
Depth to Top	0.20	0.20								
Depth To Bottom										
Date Sampled	10-Oct-23	10-Oct-23								
Sample Type	SOIL - ES	SOIL - ES								
Sample Matrix Code	4AE	3A								
% Moisture at 105C$_A$	61.9	66.3						% w/w	0.1	A-T-044
% Stones >10mm$_A$	<0.1	<0.1						% w/w	0.1	A-T-044
pH$_D^{M\#}$	8.03	8.06						pH	0.01	A-T-031s
Sulphate (water sol 2:1)$_D^{M\#}$	<0.01	<0.01						g/l	0.01	A-T-026s
Sulphur (total)$_D$	797	152						mg/kg	50	A-T-024s
Cyanide (free)$_A^{M\#}$	<1	<1						mg/kg	1	A-T-042sFCN
Phenols - Total by HPLC$_A$	<0.2	<0.2						mg/kg	0.2	A-T-050s
Organic Matter$_D^{M\#}$	4.1	1.7						% w/w	0.1	A-T-032s
Total Organic Carbon$_D^{M\#}$	2.37	1.00						% w/w	0.03	A-T-032s
Fraction of organic carbon$_D^{\#}$	0.0237	0.0100						N/A	0.0003	A-T-032s
Arsenic$_D^{M\#}$	8	3						mg/kg	1	A-T-024s
Barium$_D$	39	32						mg/kg	1	A-T-024s
Beryllium$_D$	0.8	<0.5						mg/kg	0.5	A-T-024s
Boron (water soluble)$_D^{M\#}$	3.9	<1.0						mg/kg	1	A-T-027s
Cadmium$_D^{M\#}$	<0.5	<0.5						mg/kg	0.5	A-T-024s
Copper$_D^{M\#}$	11	8						mg/kg	1	A-T-024s
Chromium$_D^{M\#}$	30	16						mg/kg	1	A-T-024s
Chromium (hexavalent)$_D$	<1	<1						mg/kg	1	A-T-040s
Chromium (trivalent)	30	16						mg/kg	1	Calc
Lead$_D^{M\#}$	19	13						mg/kg	1	A-T-024s
Manganese$_D^{M\#}$	265	282						mg/kg	1	A-T-024s
Mercury$_D$	<0.17	<0.17						mg/kg	0.17	A-T-024s
Molybdenum$_D^{M\#}$	<1	<1						mg/kg	1	A-T-024s
Nickel$_D^{M\#}$	18	8						mg/kg	1	A-T-024s
Selenium$_D^{M\#}$	<1	<1						mg/kg	1	A-T-024s
Vanadium$_D^{M\#}$	51	20						mg/kg	1	A-T-024s
Zinc$_D^{M\#}$	61	38						mg/kg	5	A-T-024s
Leachate Prep BS EN 12457-1 (2:1) (1 no)$_A$	-	*								A-T-001
pH (leachable)$_A$	-	7.90						pH	0.01	A-T-031w
Ammoniacal nitrogen as N (leachable)$_A$	-	<0.05						mg/l	0.05	A-T-033w
Chloride (leachable)$_A$	-	6.62						mg/l	1	A-T-026w
Fluoride (leachable)$_A$	-	1.33						mg/l	0.1	A-T-026w (F)
Sulphate (leachable)$_A$	-	13.65						mg/l	1	A-T-026w

Envirolab Job Number: 23/10115

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10115/1	23/10115/4						Units	Limit of Detection	Method ref
Client Sample No	101	101								
Client Sample ID	R22-TP105	R22-BH203								
Depth to Top	0.20	0.20								
Depth To Bottom										
Date Sampled	10-Oct-23	10-Oct-23								
Sample Type	SOIL - ES	SOIL - ES								
Sample Matrix Code	4AE	3A								
Cyanide (free) (leachable)$_A$	-	<0.005						mg/l	0.005	A-T-042wFCN
Cyanide (total) (leachable)$_A$	-	<0.005						mg/l	0.005	A-T-042wTCN
Cyanide (complex) (leachable)	-	<0.005						mg/l	0.005	Calc
Phenol (leachable)$_A$	-	<0.01						mg/l	0.01	A-T-050w
Cresols (leachable)$_A$	-	<0.01						mg/l	0.01	A-T-050w
Resorcinol (leachable)$_A$	-	<0.01						mg/l	0.01	A-T-050w
Catechol (leachable)$_A$	-	<0.01						mg/l	0.01	A-T-050w
Xylenols & Ethylphenols (leachable)$_A$	-	<0.01						mg/l	0.01	A-T-050w
Naphthols (leachable)$_A$	-	<0.01						mg/l	0.01	A-T-050w
Trimethylphenol (leachable)$_A$	-	<0.01						mg/l	0.01	A-T-050w
Phenols (total by HPLC) (leachable)$_A$	-	<0.01						mg/l	0.01	A-T-050w
Antimony (leachable)$_A$	-	<1						µg/l	1	A-T-025w
Arsenic (leachable)$_A$	-	3						µg/l	1	A-T-025w
Boron (leachable)$_A$	-	36						µg/l	10	A-T-025w
Barium (leachable)$_A$	-	35						µg/l	1	A-T-025w
Beryllium (leachable)$_A$	-	<1						µg/l	1	A-T-025w
Cadmium (leachable)$_A$	-	<1						µg/l	1	A-T-025w
Copper (leachable)$_A$	-	5						µg/l	4	A-T-025w
Chromium (leachable)$_A$	-	<1						µg/l	1	A-T-025w
Chromium (hexavalent) (leachable)$_A$	-	<0.10						mg/l	0.05	A-T-040w
Chromium (trivalent)	-	<0.10						mg/l	0.05	Calc
Iron (leachable)$_A$	-	486						µg/l	10	A-T-025w
Lead (leachable)$_A$	-	5						µg/l	1	A-T-025w
Manganese (leachable)$_A$	-	25						µg/l	1	A-T-025w
Magnesium (leachable)$_A$	-	4						mg/l	1	A-T-049w
Mercury (leachable)$_A$	-	<0.1						µg/l	0.1	A-T-025w
Molybdenum (leachable)$_A$	-	<1						µg/l	1	A-T-025w
Nickel (leachable)$_A$	-	3						µg/l	2	A-T-025w
Selenium (leachable)$_A$	-	<1						µg/l	1	A-T-025w
Vanadium (leachable)$_A$	-	11						µg/l	1	A-T-025w
Zinc (leachable)$_A$	-	43						µg/l	2	A-T-025w
Bentazone$_A$	-	<0.10						mg/kg	0.1	Subcon RPS MH
Cypermethrin$_A$	-	<0.10						mg/kg	0.1	Subcon RPS MH

Envirolab Job Number: 23/10115

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10115/1	23/10115/4						Units	Limit of Detection	Method ref
Client Sample No	101	101								
Client Sample ID	R22-TP105	R22-BH203								
Depth to Top	0.20	0.20								
Depth To Bottom										
Date Sampled	10-Oct-23	10-Oct-23								
Sample Type	SOIL - ES	SOIL - ES								
Sample Matrix Code	4AE	3A								
Linuron$_A$	-	<0.10						mg/kg	0.1	Subcon RPS MH
Alachlor$_A$	-	<0.02						mg/kg	0.02	Subcon RPS MH
Carbaryl$_A$	-	<0.10						mg/kg	0.1	Subcon RPS MH
Diuron$_A$	-	<0.10						mg/kg	0.1	Subcon RPS MH
Isoproturon$_A$	-	<0.10						mg/kg	0.1	Subcon RPS MH
MCPP; (Mecoprop)$_A$	-	<0.10						mg/kg	0.1	Subcon RPS MH
Calcium (leachable)$_A$	-	23						mg/l	1	A-T-049w

Lab Sample ID	23/10115/1	23/10115/4						Units	Limit of Detection	Method ref
Client Sample No	101	101								
Client Sample ID	R22-TP105	R22-BH203								
Depth to Top	0.20	0.20								
Depth To Bottom										
Date Sampled	10-Oct-23	10-Oct-23								
Sample Type	SOIL - ES	SOIL - ES								
Sample Matrix Code	4AE	3A								
Asbestos in Soil (inc. matrix) ^										
Asbestos in soil$_D^{\#}$	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								A-T-045
OCP+OPP Combined Pest Suite (incl. Atrazine and Simazine)										
Dichlobenil$_A$	-	<0.01						mg/kg	0.01	A-T-056
Tecnazene$_A$	-	<0.01						mg/kg	0.01	A-T-056
Trifluralin$_A$	-	<0.01						mg/kg	0.01	A-T-056
alpha-Hexachlorocyclohexane (HCH)$_A$	-	<0.01						mg/kg	0.01	A-T-056
Hexachlorobenzene (HCB) $_A$	-	<0.01						mg/kg	0.01	A-T-056
Simazine$_A$	-	<0.01						mg/kg	0.01	A-T-056
Atrazine$_A$	-	<0.01						mg/kg	0.01	A-T-056
beta-Hexachlorocyclohexane (HCH)$_A$	-	<0.01						mg/kg	0.01	A-T-056
Quintozene (PCNB)$_A$	-	<0.01						mg/kg	0.01	A-T-056
Chlorothalonil$_A$	-	<0.01						mg/kg	0.01	A-T-056
delta-Hexachlorocyclohexane (HCH)$_A$	-	<0.01						mg/kg	0.01	A-T-056
Triallate$_A$	-	<0.01						mg/kg	0.01	A-T-056
Heptachlor$_A$	-	<0.01						mg/kg	0.01	A-T-056
Aldrin$_A$	-	<0.01						mg/kg	0.01	A-T-056
Triadimefon$_A$	-	<0.01						mg/kg	0.01	A-T-056
Telodrin$_A$	-	<0.01						mg/kg	0.01	A-T-056
Isodrin$_A$	-	<0.01						mg/kg	0.01	A-T-056
Pendimethalin$_A$	-	<0.01						mg/kg	0.01	A-T-056
Heptachlor epoxide$_A$	-	<0.01						mg/kg	0.01	A-T-056
trans-Chlordane (Gamma)$_A$	-	<0.01						mg/kg	0.01	A-T-056
o,p-DDE (2,4)$_A$	-	<0.01						mg/kg	0.01	A-T-056
Endosulphan I (Alpha)$_A$	-	<0.01						mg/kg	0.01	A-T-056
cis-Chlordane (Alpha)$_A$	-	<0.01						mg/kg	0.01	A-T-056
p,p-DDE (4,4)$_A$	-	0.18						mg/kg	0.01	A-T-056
Dieldrin$_A$	-	<0.01						mg/kg	0.01	A-T-056

Lab Sample ID	23/10115/1	23/10115/4						Units	Limit of Detection	Method ref
Client Sample No	101	101								
Client Sample ID	R22-TP105	R22-BH203								
Depth to Top	0.20	0.20								
Depth To Bottom										
Date Sampled	10-Oct-23	10-Oct-23								
Sample Type	SOIL - ES	SOIL - ES								
Sample Matrix Code	4AE	3A								
o,p-DDD (2,4)$_A$	-	<0.01						mg/kg	0.01	A-T-056
Endrin$_A$	-	<0.01						mg/kg	0.01	A-T-056
Endosulphan II (Beta)$_A$	-	<0.01						mg/kg	0.01	A-T-056
p,p-DDD (4,4)$_A$	-	<0.01						mg/kg	0.01	A-T-056
o,p-DDT (2,4)$_A$	-	<0.01						mg/kg	0.01	A-T-056
Endrin Aldehyde$_A$	-	<0.01						mg/kg	0.01	A-T-056
Endrin Ketone$_A$	-	<0.01						mg/kg	0.01	A-T-056
Endosulphan Sulphate$_A$	-	<0.01						mg/kg	0.01	A-T-056
p,p-DDT (4,4)$_A$	-	0.09						mg/kg	0.01	A-T-056
o,p-Methoxychlor$_A$	-	<0.01						mg/kg	0.01	A-T-056
p,p-Methoxychlor$_A$	-	<0.01						mg/kg	0.01	A-T-056
Permethrin I (cis)$_A$	-	<0.01						mg/kg	0.01	A-T-056
Permethrin II (trans)$_A$	-	<0.01						mg/kg	0.01	A-T-056
Dichlorvos$_A$	-	<0.01						mg/kg	0.01	A-T-056
Mevinphos$_A$	-	<0.01						mg/kg	0.01	A-T-056
Demeton-S$_A$	-	<0.50						mg/kg	0.5	A-T-056
Demeton-O$_A$	-	<0.50						mg/kg	0.5	A-T-056
Phorate$_A$	-	<0.01						mg/kg	0.01	A-T-056
Dimethoate$_A$	-	<0.01						mg/kg	0.01	A-T-056
Propetamphos$_A$	-	<0.01						mg/kg	0.01	A-T-056
Diazinon (Dimpylate)$_A$	-	<0.01						mg/kg	0.01	A-T-056
Disulfoton$_A$	-	<0.10						mg/kg	0.1	A-T-056
Chlorpyrifos-methyl$_A$	-	<0.01						mg/kg	0.01	A-T-056
Parathion (Ethyl Parathion)$_A$	-	<0.01						mg/kg	0.01	A-T-056
Methyl Parathion$_A$	-	<0.01						mg/kg	0.01	A-T-056
Pirimiphos-methyl$_A$	-	<0.01						mg/kg	0.01	A-T-056
Fenitrothion$_A$	-	<0.01						mg/kg	0.01	A-T-056
Fensulphothion$_A$	-	<0.01						mg/kg	0.01	A-T-056
Fenthion$_A$	-	<0.01						mg/kg	0.01	A-T-056
Malathion$_A$	-	<0.01						mg/kg	0.01	A-T-056
Chlorfenvinphos$_A$	-	<0.01						mg/kg	0.01	A-T-056
Chlorpyrifos$_A$	-	<0.01						mg/kg	0.01	A-T-056
Trichloronate$_A$	-	<0.01						mg/kg	0.01	A-T-056
Prothiofos (Tokuthion)$_A$	-	<0.01						mg/kg	0.01	A-T-056

Lab Sample ID	23/10115/1	23/10115/4						Units	Limit of Detection	Method ref
Client Sample No	101	101								
Client Sample ID	R22-TP105	R22-BH203								
Depth to Top	0.20	0.20								
Depth To Bottom										
Date Sampled	10-Oct-23	10-Oct-23								
Sample Type	SOIL - ES	SOIL - ES								
Sample Matrix Code	4AE	3A								
Ethion$_A$	-	<0.01						mg/kg	0.01	A-T-056
Triazophos$_A$	-	<0.01						mg/kg	0.01	A-T-056
Carbophenothion$_A$	-	<0.01						mg/kg	0.01	A-T-056
Phosalone$_A$	-	<0.01						mg/kg	0.01	A-T-056
Azinphos-methyl$_A$	-	<0.01						mg/kg	0.01	A-T-056
Azinphos-ethyl$_A$	-	<0.01						mg/kg	0.01	A-T-056
Coumaphos$_A$	-	<0.01						mg/kg	0.01	A-T-056
gamma-Hexachlorocyclohexane (HCH)$_A$	-	<0.01						mg/kg	0.01	A-T-056

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Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10115/1	23/10115/4						Units	Limit of Detection	Method ref
Client Sample No	101	101								
Client Sample ID	R22-TP105	R22-BH203								
Depth to Top	0.20	0.20								
Depth To Bottom										
Date Sampled	10-Oct-23	10-Oct-23								
Sample Type	SOIL - ES	SOIL - ES								
Sample Matrix Code	4AE	3A								
PAH-16MS										
Acenaphthene$_A^{M\#}$	<0.01	<0.01						mg/kg	0.01	A-T-019s
Acenaphthylene$_A^{M\#}$	<0.01	<0.01						mg/kg	0.01	A-T-019s
Anthracene$_A^{M\#}$	<0.02	<0.02						mg/kg	0.02	A-T-019s
Benzo(a)anthracene$_A^{M\#}$	0.21	<0.04						mg/kg	0.04	A-T-019s
Benzo(a)pyrene$_A^{M\#}$	0.21	<0.04						mg/kg	0.04	A-T-019s
Benzo(b)fluoranthene$_A^{M\#}$	0.26^U	<0.05^U						mg/kg	0.05	A-T-019s
Benzo(ghi)perylene$_A^{M\#}$	0.13	<0.05						mg/kg	0.05	A-T-019s
Benzo(k)fluoranthene$_A^{M\#}$	<0.07	<0.07						mg/kg	0.07	A-T-019s
Chrysene$_A^{M\#}$	0.29	<0.06						mg/kg	0.06	A-T-019s
Dibenzo(ah)anthracene$_A$	<0.04	<0.04						mg/kg	0.04	A-T-019s
Fluoranthene$_A^{M\#}$	0.50	<0.08						mg/kg	0.08	A-T-019s
Fluorene$_A^{M\#}$	<0.01	<0.01						mg/kg	0.01	A-T-019s
Indeno(123-cd)pyrene$_A^{M\#}$	0.16	<0.03						mg/kg	0.03	A-T-019s
Naphthalene $_A^{M\#}$	<0.03	<0.03						mg/kg	0.03	A-T-019s
Phenanthrene$_A^{M\#}$	0.16	<0.03						mg/kg	0.03	A-T-019s
Pyrene$_A^{M\#}$	0.42	<0.07						mg/kg	0.07	A-T-019s
Total PAH-16MS$_A$	2.34	<0.08						mg/kg	0.01	A-T-019s

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Lab Sample ID	23/10115/1	23/10115/4						Units	Limit of Detection	Method ref
Client Sample No	101	101								
Client Sample ID	R22-TP105	R22-BH203								
Depth to Top	0.20	0.20								
Depth To Bottom										
Date Sampled	10-Oct-23	10-Oct-23								
Sample Type	SOIL - ES	SOIL - ES								
Sample Matrix Code	4AE	3A								
Speciated PCB-WHO12										
PCB BZ 81$_{A}^{M\#}$	-	<0.005^{U}						mg/kg	0.005	A-T-004s
PCB BZ 105$_{A}^{M\#}$	-	<0.005^{U}						mg/kg	0.005	A-T-004s
PCB BZ 114$_{A}^{M\#}$	-	<0.005^{U}						mg/kg	0.005	A-T-004s
PCB BZ 118$_{A}^{M\#}$	-	<0.007						mg/kg	0.007	A-T-004s
PCB BZ 123$_{A}^{M\#}$	-	<0.005^{U}						mg/kg	0.005	A-T-004s
PCB BZ 126$_{A}^{M\#}$	-	<0.005^{U}						mg/kg	0.005	A-T-004s
PCB BZ 156$_{A}^{M\#}$	-	<0.005^{U}						mg/kg	0.005	A-T-004s
PCB BZ 157$_{A}^{M\#}$	-	<0.005^{U}						mg/kg	0.005	A-T-004s
PCB BZ 167$_{A}^{M\#}$	-	<0.005^{U}						mg/kg	0.005	A-T-004s
PCB BZ 169$_{A}^{M\#}$	-	<0.005^{U}						mg/kg	0.005	A-T-004s
PCB BZ 189$_{A}^{M\#}$	-	<0.005^{U}						mg/kg	0.005	A-T-004s
PCB BZ 77$_{A}^{M\#}$	-	<0.005^{U}						mg/kg	0.005	A-T-004s
Total Speciated PCB-WHO12$_{A}^{M\#}$	-	<0.007						mg/kg	0.005	A-T-004s

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Client Sample No	101	101								
Client Sample ID	R22-TP105	R22-BH203								
Depth to Top	0.20	0.20								
Depth To Bottom										
Date Sampled	10-Oct-23	10-Oct-23								
Sample Type	SOIL - ES	SOIL - ES								
Sample Matrix Code	4AE	3A								
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$_A^{M\#}$	-	<1						mg/kg	1	A-T-055s
Ali >C21-C35$_A^{M\#}$	-	6						mg/kg	1	A-T-055s
Total Aliphatics$_A$	-	6						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$_A$	-	12						mg/kg	1	A-T-055s
Aro >C10-C12$_A$	-	<1						mg/kg	1	A-T-055s
Aro >C12-C16$_A^{M\#}$	-	<1						mg/kg	1	A-T-055s
Aro >C16-C21$_A^{M\#}$	-	3						mg/kg	1	A-T-055s
Aro >C21-C35$_A^{M\#}$	-	12						mg/kg	1	A-T-055s
Total Aromatics$_A$	-	27						mg/kg	1	Calc-As Recd
TPH (Ali & Aro >C5-C35)$_A$	-	33						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^U						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 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 **six 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.
The client Sample No, Client Sample ID, Depth to top, Depth to Bottom and Date Sampled are all provided by the client.
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.

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 "^"	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
N/A	Not applicable

Asbestos
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
Quantification of asbestos is a 3 stage process including visual identification, hand picking and weighing, and fibre counting by sedimentation/phase contrast optical microscopy if required. 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) quantification by sedimentation is performed. 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.

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^{o}C / 11550µS/cm @ 20^{o}C fall outside the accreditation range and as such are unaccredited.

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

Envirolab Deviating Samples Report

Units 7&8 Sandpits Business Park, Mottram Road, Hyde, SK14 3AR
Tel. 0161 368 4921 email. ask@envlab.co.uk

Client: Structural Soils Limited (Hemel Hempstead), 18 Frogmore Road, Hemel Hempstead, UK, HP3 9RT

Project: Sealink Richborough

Clients Project No: 563607

Project No: 23/10115

Date Received: 13/10/2023 (am)

Cool Box Temperatures (°C): 14.7, 13.7

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	23/10115/1	23/10115/4
Client Sample No	101	101
Client Sample ID/Depth	R22-TP105 0.20m	R22-BH203 0.20m
Date Sampled	10/10/23	10/10/23
A-T-004s		23/10/2023
A-T-007s		18/10/2023
A-T-019s	19/10/2023	19/10/2023
A-T-022s		18/10/2023
A-T-024s	24/10/2023	24/10/2023
A-T-025w		30/10/2023
A-T-026s	20/10/2023	20/10/2023
A-T-026w		30/10/2023
A-T-026w (F)		30/10/2023
A-T-027s	20/10/2023	20/10/2023
A-T-030s		24/10/2023
A-T-031s	19/10/2023	19/10/2023
A-T-031w		30/10/2023
A-T-032s	27/10/2023	27/10/2023
A-T-032w		30/10/2023
A-T-033w		24/10/2023
A-T-037w		30/10/2023
A-T-040s	20/10/2023	20/10/2023
A-T-040w		23/10/2023
A-T-042sFCN	24/10/2023	24/10/2023
A-T-042wFCN		21/10/2023
A-T-042wTCN		21/10/2023
A-T-044	23/10/2023	23/10/2023
A-T-045	16/10/2023	16/10/2023
A-T-049w		23/10/2023
A-T-050s	24/10/2023	24/10/2023
A-T-050w		30/10/2023
A-T-055s		26/10/2023
A-T-056		24/10/2023
A-T-ANCs		19/10/2023
Calc	24/10/2023	26/10/2023
Calc-As Recd		26/10/2023

Lab Sample ID	23/10115/1	23/10115/4
Client Sample No	101	101
Client Sample ID/Depth	R22-TP105 0.20m	R22-BH203 0.20m
Date Sampled	10/10/23	10/10/23
Calc-no stones		30/10/2023
Probe (w)		30/10/2023

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

Certificate of Analysis

Report No.: **23-07096-2**

Issue No.: **2**
Date of Issue **08/04/2024**

Customer Details:	Envirolab Ltd, 7 - 8 Sandpits Business Park, Mottram Road, Hyde, Greater Manchester, SK14 3AR, United Kingdom
Customer Contact:	[redacted]
Customer Order No.:	P0752535
Customer Reference:	Not Supplied
Quotation Reference:	Q22-00104 (Issue: 36)
Description:	1 geo sample
Date Received:	16/10/2023
Date Started:	18/10/2023
Date Completed:	02/11/2023
Test Methods:	Details available on request (refer to SOP code against relevant result/s)
Notes:	This report replaces issue 1 in its entirety

[redacted]

Approved By: [redacted] **LIMS Administrator**

This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service.
This certificate shall not be reproduced except in full without the prior written approval of the laboratory.
Observations and interpretations are outside of the scope of UKAS accreditation.
Results reported herein relate only to the items supplied to the laboratory for testing.
Results on an Interim Report are not dry-weight corrected.
Where the laboratory is not responsible for the sampling, results apply to the sample(s) as they were received.
The laboratory shall not be responsible for any information that is supplied by the customer that may affect the validity of results.

RPS Environmental Management Limited trading as RPS Mountainheath. Registered in England No. 01756175.
13 St Martins Way, Bedford, Bedfordshire, MK42 0LF. T +44 1462 480 400
A member of the RPS Group plc. Terms and conditions apply - copy on request

Results Summary

Report No.: 23-07096-2

Customer Reference: Not Supplied

Customer Order No: P0752535

Customer Sample No	**R22-BHJ203 0.20m**
RPS Sample No	34764
Sample Type	**GEO**
Sample Matrix	SOIL
Sampling Date	10/10/2023

Determinand	CAS No	Codes	SOP	RL	Units	
carbaryl	63-25-2	N	L001	0.1	mg/kg DW	< 0.10 (T)
2,4,5-trichlorophenoxyacetic acid (2,4,5-T)	93-76-5	N	L340	0.1	mg/kg DW	< 0.10 (T)
2,4,5-TP (Fenoprop)	93-72-1	N	L340	0.1	mg/kg DW	< 0.10 (T)
2,4-dichlorophenoxyacetic acid (2,4-D)	94-75-7	N	L340	0.1	mg/kg DW	< 0.10 (T)
acifluorfen	50594-66-6	N	L340	0.1	mg/kg DW	< 0.10 (T)
bentazone	25057-89-0	N	L340	0.1	mg/kg DW	< 0.10 (T)
clopyralid	1702-17-6	N	L340	0.1	mg/kg DW	< 0.10 (T)
dichlorprop (2,4-DP)	120-36-5	N	L340	0.1	mg/kg DW	< 0.10 (T)
dinoseb (DNBP)	88-85-7	N	L340	0.1	mg/kg DW	< 0.10 (T)
2-methyl-4-chlorophenoxyacetic acid (MCPA)	94-74-6	N	L340	0.1	mg/kg DW	< 0.10 (T)
mecoprop (MCPP)	7085-19-0	N	L340	0.1	mg/kg DW	< 0.10 (T)
pentachlorophenol (PCP)	87-86-5	N	L340	0.1	mg/kg DW	< 0.10 (T)
2,3,6-trichlorobenzoic acid (2,3,6-TBA)	50-31-7	N	L340	0.1	mg/kg DW	< 0.10 (T)
4-(2,4-dichlorophenoxy)butanoic acid (2,4-DB)	94-82-6	N	L340	0.1	mg/kg DW	< 0.10 (T)
4-chlorophenoxyacetic acid (4-CPA)	122-88-3	N	L340	0.1	mg/kg DW	< 0.10 (T)
benazolin	3813-05-6	N	L340	0.1	mg/kg DW	< 0.10 (T)
bromoxynil	1689-84-5	N	L340	0.1	mg/kg DW	< 0.10 (T)
dicamba	1918-00-9	N	L340	0.1	mg/kg DW	< 0.10 (T)
diclofop	40843-25-2	N	L340	0.1	mg/kg DW	< 0.10 (T)
2-methyl-4,6-dinitrophenol (DNOC)	534-52-1	N	L340	0.1	mg/kg DW	< 0.10 (T)
flamprop	58667-63-3	N	L340	0.1	mg/kg DW	< 0.10 (T)
fluroxypyr	69377-81-7	N	L340	0.1	mg/kg DW	< 0.10 (T)
ioxynil	1689-83-4	N	L340	0.1	mg/kg DW	< 0.10 (T)
MCPB	94-81-5	N	L340	0.1	mg/kg DW	< 0.10 (T)
picloram	1918-02-1	N	L340	0.1	mg/kg DW	< 0.10 (T)
triclopyr	55335-06-3	N	L340	0.1	mg/kg DW	< 0.10 (T)
alachlor	15972-60-8	N	G029	0.02	mg/kg AR	< 0.02 (T)
chloroxuron	1982-47-4	N	L025	0.1	mg/kg DW	< 0.10 (T)
chlortoluron	15545-48-9	N	L025	0.1	mg/kg DW	< 0.10 (T)
diflubenzuron	35367-38-5	N	L025	0.1	mg/kg DW	< 0.10 (T)
dimefuron	34205-21-5	N	L025	0.1	mg/kg DW	< 0.10 (T)
diuron	330-54-1	N	L025	0.1	mg/kg DW	< 0.10 (T)
isoproturon	34123-59-6	N	L025	0.1	mg/kg DW	< 0.10 (T)
linuron	330-55-2	N	L025	0.1	mg/kg DW	< 0.10 (T)
methabenzthiazuron	18691-97-9	N	L025	0.1	mg/kg DW	< 0.10 (T)
metoxuron	19937-59-8	N	L025	0.1	mg/kg DW	< 0.10 (T)
monolinuron	1746-81-2	N	L025	0.1	mg/kg DW	< 0.10 (T)
monuron	150-68-5	N	L025	0.1	mg/kg DW	< 0.10 (T)

Results Summary

Report No.: 23-07096-2

Customer Reference: Not Supplied

Customer Order No: P0752535

Customer Sample No	**R22-BHJ203 0.20m**
RPS Sample No	34764
Sample Type	**GEO**
Sample Matrix	SOIL
Sampling Date	10/10/2023

Determinand	CAS No	Codes	SOP	RL	Units	
pencycuron	66063-05-6	N	L025	0.1	mg/kg DW	< 0.10 (T)
bifenthrin	82657-04-3	N	G127	0.1	mg/kg DW	< 0.10 (T)
cyfluthrin, total	68359-37-5	N	G127	0.1	mg/kg DW	< 0.10 (T)
cyhalothrin, total	68085-85-8	N	G127	0.1	mg/kg DW	< 0.10 (T)
cypermethrin, total	52315-07-8	N	G127	0.1	mg/kg DW	< 0.10 (T)
deltamethrin	52918-63-5	N	G127	0.1	mg/kg DW	< 0.10 (T)
fenvalerate	51630-58-1	N	G127	0.1	mg/kg DW	< 0.10 (T)
permethrin, total	52645-53-1	N	G127	0.1	mg/kg DW	< 0.10 (T)
resmethrin	10453-86-8	N	G127	0.1	mg/kg DW	< 0.10 (T)
tetramethrin	7696-12-0	N	G127	0.1	mg/kg DW	< 0.10 (T)

Comments

Report No.: 23-07096-2

Customer Reference: Not Supplied

Customer Order No: P0752535

Job	Description	Document History
23-07096	n/a	Sample numbers changed as per client request

Deviating Samples

Report No.: 23-07096-2

Customer Reference: Not Supplied

Customer Order No: P0752535

Our policy on Deviating Samples has been implemented in accordance with UKAS Policy on Deviating Samples (TPS63).
RPS is not responsible for the integrity of samples as received, unless RPS personnel performed the sampling. Samples submitted may be declared to be deviating.
Where applicable the analysis method remains UKAS accredited, however results reported for a deviating sample may be compromised.
Where no sampling date was supplied, samples have been declared to be deviating. If the date can be supplied, results may be reissued if assessed not deviating.
Where the sample container used was unsuitable or broken, the sample is flagged as deviating and re-sampling/re-submisson may be required.

RPS No.	Customer No.	Customer ID	Date Sampled	Containers Received	Deviating	Reason for Deviation
34764	R22-BHJ203 0.20m		10/10/2023	250 mL amber glass jar	**Yes**	No sampling time provided.

Report No.: 23-07096-2

Type	Matrix Code	Description
Food	CEREALPROD	Cereals, grains & products
Food	DRIEDFRUIT	Dried fruits
Food	FRIEDBAKED	Fried or baked food
Food	LEGUME	Legumes
Food	MEAT	Meat
Food	POWDERED	Powdered food
Food	PULSE	Pulses (dried legumes)
Food	VEGETABLES	Vegetables
Gas	TDTUBE	TD Tube
Gas	TENAX	Tenax Tube
Gas	TUBE	Tube
Gas	VAPOUR	Gas
Geological	SED_MAR	Marine Sediment
Geological	SED_RIV	River Sediment
Geological	SLUDG_SOL	Sludge (solid only)
Geological	SOIL	Soil
Liquid	BEVERAGE	Beverage
Liquid	BLOOD	Blood
Liquid	CONDENSATE	Condensate
Liquid	FOAM_LIQ	Liquid foam
Liquid	FORMULATN	Formula
Liquid	LEACHATE	Leachate
Liquid	OIL/GREASE	Oil or grease
Liquid	SLUDG_LIQ	Sludge (liquid only)
Liquid	SOLVENT	Solvent
Liquid	URINE	Urine
Sludge	SLUDG_WHL	Sludge for bulk route
Solid	BADGE	Badge
Solid	BEDDING	Bedding
Solid	BIOTA	Biota (general)
Solid	BIOTA_F	Biota (fish)
Solid	BIOTA_SF	Biota (shellfish)
Solid	CONSTRCTN	Construction materials
Solid	FABRIC	Fabrics & furnishing materials
Solid	FEED	Animal feed
Solid	FERTILISER	Fertiliser
Solid	FILTER	Filter
Solid	FOAM	Solid foam material
Solid	PACKAGING	Packaging material
Solid	PAPER	Paper
Solid	PLANT	Plant (vegetation)
Solid	POWDER	Powder
Solid	SWAB	Swab
Water	BAL	Ballast Water
Water	BIL	Bilge Water
Water	DW	Drinking Water
Water	EFFLUENT	Effluent
Water	GW	Ground Water
Water	INFLUENT	Influent
Water	SALTW	Salt Water
Water	SW	Surface Water
Water	TW	Tap Water
Water	W	Water

Report No.: 23-07096-2

Key Code	Description
N	Not Accredited Test
U	UKAS Accredited Test - UKAS accreditation is only implied if the report carries the UKAS logo
UF	UKAS Flexible Scope Test
M	MCERTS Accredited Test - MCERTS accreditation is only implied if the report carries the MCERTS logo
O	Marine Management Organisation (MMO) Validated
SN	Subcontracted to approved laboratory not accredited for the test
SU	Subcontracted to approved laboratory UKAS Accredited for the test
SM	Subcontracted to approved laboratory MCERTS/UKAS Accredited for the test
SIN	Subcontracted to internal RPS Group laboratory not accredited for the test
SIU	Subcontracted to internal RPS Group laboratory UKAS Accredited for the test
SIM	Subcontracted to internal RPS Group laboratory MCERTS/UKAS Accredited for the test
*	Modified standard method
I/S (in results)	Insufficient Sample
U/S (in results)	Unsuitable Sample
S/C (in results)	See Comments
ND (in results)	Not Detected
DW (in units)	Results are expressed on a dry weight basis
L (in results)	Result is outside normal limits

Sample Type	Sample Retention and Disposal Period
Foodstuff	1 month (if frozen) from the issue date of this report
Waters	2 weeks from the issue date of this report
Other Liquids	1 month from the issue date of this report
Solids / Soils	1 month from the issue date of this report
Sediments	1 month from the issue date of this report

Note: Sample retention may be subject to agreement with the customer for particular projects

Where the dry solids value of a sample is low (<50%), reporting limits are automatically raised for all determinants analysed on an as-received basis.

Soil Typing	Description
Type 1	Clay - Brown
Type 2	Clay - Grey/Black
Type 3	Sand
Type 4	Top Soil (Standard)
Type 5	Top Soil (High Peat)
Type 6	Made Ground (>50% Clay)
Type 7	Made Ground (>50% Sand)
Type 8	Made Ground (>50% Top Soil)
Type X	Other

Dev code	Description
D	No sampling date provided.
T	No sampling time provided.
Z	Temperature of samples exceeded in transit/storage.
V	Excessive headspace for volatile determinands.
P	Sample submitted without required preservative(s).
C	Incorrect container.
H	Holding time exceeded (sampling to extraction).
X	Holding time exceeded (sampling to receipt).

Note: Where the following information is included in this certificate, it has usually been supplied by the customer: Customer Sample ID, Sample Location, Sample Depth, Sampling Date and Sampling Time. The laboratory shall not be responsible for any information that is supplied by the customer that may affect the validity of results.

Units 7 & 8, Sandpits Business Park
Mottram Road, Hyde, Cheshire, SK14 3AR

Final Test Report

Envirolab Job Number:	23/10115		
Issue Number:	1	Date:	2-Nov-23

Client: Structural Soils Limited (Hemel Hempstead)
18 Frogmore Road
Hemel Hempstead
UK
HP3 9RT

Project Manager:	[redacted]
Project Name:	Sealink Richborough
Project Ref:	563607
Order No:	N/A
Date Samples Received:	13-Oct-23
Date Instructions Received:	13-Oct-23
Date Analysis Completed:	2-Nov-23

Notes - Soil analysis

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

For samples with Matrix Codes 1 - 6 natural stones >10mm are removed or excluded from the sample prior to analysis and reported results corrected to a whole sample basis.

For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis.

Notes - General

This report shall not be reproduced, except in full, without written approval from Envirolab.

Subscript "A" indicates analysis performed on the sample as received. "D" indicates analysis performed on the dried sample, crushed to pass a 2mm sieve, unless asbestos is found to be present in which case all analysis is performed on the sample as received.

All analysis is performed on the dried and crushed sample for samples with Matrix Code 7 and this supercedes any "A" subscripts.

All analysis is performed on the sample as received for soil samples from outside the European Union and this supercedes any "D" subscripts

For complex, multi-compound analysis, quality control results do not always fall within chart limits for every compound and we have criteria for reporting in these situations.

If results are in italic font they are associated with such quality control failures and may be unreliable.

A deviating samples 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

Predominant Matrix Codes: 1 = SAND, 2 = LOAM, 3 = CLAY, 4 = LOAM/SAND, 5 = SAND/CLAY, 6 = CLAY/LOAM, 7 = OTHER, 8 = Asbestos bulk ID sample

Secondary Matrix Codes: A = contains stones, B = contains construction rubble, C = contains visible hydrocarbons, D = contains glass/metal, E = contains roots/twigs.

IS indicates Insufficient sample for analysis, NDP indicates No Determination Possible and NAD indicates No Asbestos Detected.

Analytical results reflect the quality of the sample at the time of analysis only. Opinions and interpretations expressed are outside the scope of our accreditation.

Please contact us if you need any further information.

HWOL TPH Code: EH_CU_1D_AL: Extractable hydrocarbons - i.e. everything extracted by the solvent(s), Clean-up - e.g. by florisil, silica gel, GC - Single coil gas chromatography, Aliphatics only

Approved by:

[redacted]

Deputy Client Services Supervisor

Landfill WAC analysis must not be used for hazardous waste classification purposes. This analysis is only applicable for landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Sample Details						Landfill Waste Acceptance Criteria Limits		
Lab Sample ID	Method	ISO17025	MCERTS	23/10115/4				
Client Sample Number				101		Inert Waste Landfill	Stable Non-reactive Hazardous Waste in Non-Hazardous Landfill	Hazardous Waste Landfill
Client Sample ID				R22-BH203				
Depth to Top				0.2				
Depth to Bottom								
Date Sampled				10/10/2023				
Sample Type				Soil - ES				
Sample Matrix Code				3A				
Solid Waste Analysis								
pH (pH Units)$_D$	A-T-031	N	N	**8.06**		-	>6	-
ANC to pH 4 (mol/kg)$_D$	A-T-ANC	N	N	**0.11**		-	to be evaluated	to be evaluated
ANC to pH 6 (mol/kg)$_D$	A-T-ANC	N	N	**0.06**		-	to be evaluated	to be evaluated
Loss on Ignition (%)$_D$	A-T-030	N	N	**3.6**		-	-	10
Total Organic Carbon (%)$_D$	A-T-032	N	N	**1**		3	5	6
PAH Sum of 17 (mg/kg) $_A$	A-T-019	N	N	**<0.08**		100	-	-
Mineral Oil (mg/kg)$_{A\ EH_CU_1D_AL}$	A-T-007	N	N	**<10**		500	-	-
Sum of 7 PCBs (mg/kg)$_A$	A-T-004	N	N	**<0.007**		1	-	-
Sum of BTEX (mg/kg)$_A$	A-T-022	N	N	**<0.01**		6	-	-
Eluate Analysis				**10:1**	**10:1**	**Limit values for compliance leaching test using**		
				mg/l	**mg/kg**	**BS EN 12457-2 at L/S 10 l/kg (mg/kg)**		
Arsenic	A-T-025	N	N	0.005	**0.050**	0.5	2	25
Barium	A-T-025	N	N	0.079	**0.790**	20	100	300
Cadmium	A-T-025	N	N	<0.001	**<0.01**	0.04	1	5
Chromium	A-T-025	N	N	0.001	**0.010**	0.5	10	70
Copper	A-T-025	N	N	0.010	**0.100**	2	50	100
Mercury	A-T-025	N	N	<0.0005	**<0.005**	0.01	0.2	2
Molybdenum	A-T-025	N	N	<0.001	**<0.01**	0.5	10	30
Nickel	A-T-025	N	N	0.003	**0.030**	0.4	10	40
Lead	A-T-025	N	N	0.015	**0.150**	0.5	10	50
Antimony	A-T-025	N	N	<0.001	**<0.01**	0.06	0.7	5
Selenium	A-T-025	N	N	<0.001	**<0.01**	0.1	0.5	7
Zinc	A-T-025	N	N	0.053	**0.530**	4	50	200
Chloride	A-T-026	N	N	7	**71**	800	15000	25000
Fluoride	A-T-026	N	N	0.4	**4.0**	10	150	500
Sulphate as SO_4	A-T-026	N	N	<1.00	**<10**	1000	20000	50000
Total Dissolved Solids	A-T-035	N	N	44	**440**	4000	60000	100000
Phenol Index	A-T-050	N	N	<0.01	**<0.1**	1	-	-
Dissolved Organic Carbon	A-T-032	N	N	<2.0	**<200**	500	800	1000
Leach Test Information								
pH (pH Units)	A-T-031	N	N	7.5				
Conductivity (µS/cm)	A-T-037	N	N	88				
Mass Sample (kg)				0.198				
Dry Matter (%)	A-T-044	N	N	88.4				

Stated acceptance limits are for guidance only and Envirolab cannot be held responsible for any discrepancies with current legislation

envirolab
Units 7 & 8 Sandpits Business Park
Mottram Road, Hyde, Cheshire, SK14 3AR

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 23/10117
Issue Number: 1 **Date:** 02 November, 2023

Client: Structural Soils Limited (Hemel Hempstead)
18 Frogmore Road
Hemel Hempstead
UK
HP3 9RT

Project Manager: [redacted]
Project Name: Sealink Richborough
Project Ref: 563607
Order No: N/A
Date Samples Received: 13/10/23
Date Instructions Received: 13/10/23
Date Analysis Completed: 02/11/23

Approved by:

[redacted]

Deputy Client Services Supervisor

Envirolab Job Number: 23/10117

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10117/1	23/10117/2						Units	Limit of Detection	Method ref
Client Sample No	101	102								
Client Sample ID	R22-TP101	R22-TP101								
Depth to Top	0.20	0.50								
Depth To Bottom										
Date Sampled	11-Oct-23	11-Oct-23								
Sample Type	SOIL - ES	SOIL - ES								
Sample Matrix Code	5A	5A								
% Moisture at 105C$_A$	34.1	-						% w/w	0.1	A-T-044
% Stones >10mm$_A$	<0.1	<0.1						% w/w	0.1	A-T-044
pH$_D^{M\#}$	8.17	-						pH	0.01	A-T-031s
Sulphate (water sol 2:1)$_D^{M\#}$	0.02	-						g/l	0.01	A-T-026s
Sulphur (total)$_D$	328	-						mg/kg	50	A-T-024s
Cyanide (free)$_A^{M\#}$	<1	-						mg/kg	1	A-T-042sFCN
Phenols - Total by HPLC$_A$	<0.2	-						mg/kg	0.2	A-T-050s
Organic Matter$_D^{M\#}$	2.5	-						% w/w	0.1	A-T-032s
Total Organic Carbon$_D^{M\#}$	1.46	-						% w/w	0.03	A-T-032s
Fraction of organic carbon$_D^{\#}$	0.0146	-						N/A	0.0003	A-T-032s
Arsenic$_D^{M\#}$	15	-						mg/kg	1	A-T-024s
Barium$_D$	36	-						mg/kg	1	A-T-024s
Beryllium$_D$	1.3	-						mg/kg	0.5	A-T-024s
Boron (water soluble)$_D^{M\#}$	4.5	-						mg/kg	1	A-T-027s
Cadmium$_D^{M\#}$	<0.5	-						mg/kg	0.5	A-T-024s
Copper$_D^{M\#}$	13	-						mg/kg	1	A-T-024s
Chromium$_D^{M\#}$	39	-						mg/kg	1	A-T-024s
Chromium (hexavalent)$_D$	<1	-						mg/kg	1	A-T-040s
Chromium (trivalent)	39	-						mg/kg	1	Calc
Lead$_D^{M\#}$	17	-						mg/kg	1	A-T-024s
Manganese$_D^{M\#}$	343	-						mg/kg	1	A-T-024s
Mercury$_D$	<0.17	-						mg/kg	0.17	A-T-024s
Molybdenum$_D^{M\#}$	<1	-						mg/kg	1	A-T-024s
Nickel$_D^{M\#}$	22	-						mg/kg	1	A-T-024s
Selenium$_D^{M\#}$	<1	-						mg/kg	1	A-T-024s
Vanadium$_D^{M\#}$	71	-						mg/kg	1	A-T-024s
Zinc$_D^{M\#}$	60	-						mg/kg	5	A-T-024s
Leachate Prep BS EN 12457-1 (2:1) (1 no)$_A$	-	*								A-T-001
pH (leachable)$_A$	-	8.02						pH	0.01	A-T-031w
Ammoniacal nitrogen as N (leachable)$_A$	-	<0.05						mg/l	0.05	A-T-033w
Chloride (leachable)$_A$	-	9.14						mg/l	1	A-T-026w
Fluoride (leachable)$_A$	-	1.46						mg/l	0.1	A-T-026w (F)
Sulphate (leachable)$_A$	-	17.43						mg/l	1	A-T-026w

Envirolab Job Number: 23/10117

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10117/1	23/10117/2						Units	Limit of Detection	Method ref
Client Sample No	101	102								
Client Sample ID	R22-TP101	R22-TP101								
Depth to Top	0.20	0.50								
Depth To Bottom										
Date Sampled	11-Oct-23	11-Oct-23								
Sample Type	SOIL - ES	SOIL - ES								
Sample Matrix Code	5A	5A								
Cyanide (free) (leachable)$_A$	-	<0.005						mg/l	0.005	A-T-042wFCN
Cyanide (total) (leachable)$_A$	-	<0.005						mg/l	0.005	A-T-042wTCN
Cyanide (complex) (leachable)	-	<0.005						mg/l	0.005	Calc
Phenol (leachable)$_A$	-	<0.01						mg/l	0.01	A-T-050w
Cresols (leachable)$_A$	-	<0.01						mg/l	0.01	A-T-050w
Resorcinol (leachable)$_A$	-	<0.01						mg/l	0.01	A-T-050w
Catechol (leachable)$_A$	-	<0.01						mg/l	0.01	A-T-050w
Xylenols & Ethylphenols (leachable)$_A$	-	<0.01						mg/l	0.01	A-T-050w
Naphthols (leachable)$_A$	-	<0.01						mg/l	0.01	A-T-050w
Trimethylphenol (leachable)$_A$	-	<0.01						mg/l	0.01	A-T-050w
Phenols (total by HPLC) (leachable)$_A$	-	<0.01						mg/l	0.01	A-T-050w
Antimony (leachable)$_A$	-	<1						µg/l	1	A-T-025w
Arsenic (leachable)$_A$	-	3						µg/l	1	A-T-025w
Boron (leachable)$_A$	-	160						µg/l	10	A-T-025w
Barium (leachable)$_A$	-	4						µg/l	1	A-T-025w
Beryllium (leachable)$_A$	-	<1						µg/l	1	A-T-025w
Cadmium (leachable)$_A$	-	<1						µg/l	1	A-T-025w
Copper (leachable)$_A$	-	<4						µg/l	4	A-T-025w
Chromium (leachable)$_A$	-	<1						µg/l	1	A-T-025w
Chromium (hexavalent) (leachable)$_A$	-	<0.10						mg/l	0.05	A-T-040w
Chromium (trivalent)	-	<0.10						mg/l	0.05	Calc
Iron (leachable)$_A$	-	148						µg/l	10	A-T-025w
Lead (leachable)$_A$	-	5						µg/l	1	A-T-025w
Manganese (leachable)$_A$	-	5						µg/l	1	A-T-025w
Magnesium (leachable)$_A$	-	4						mg/l	1	A-T-049w
Mercury (leachable)$_A$	-	<0.1						µg/l	0.1	A-T-025w
Molybdenum (leachable)$_A$	-	5						µg/l	1	A-T-025w
Nickel (leachable)$_A$	-	3						µg/l	2	A-T-025w
Selenium (leachable)$_A$	-	<1						µg/l	1	A-T-025w
Vanadium (leachable)$_A$	-	8						µg/l	1	A-T-025w
Zinc (leachable)$_A$	-	24						µg/l	2	A-T-025w
Bentazone$_A$	<0.10	-						mg/kg	0.1	Subcon RPS MH
Cypermethrin$_A$	<0.10	-						mg/kg	0.1	Subcon RPS MH

Envirolab Job Number: 23/10117

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10117/1	23/10117/2						Units	Limit of Detection	Method ref
Client Sample No	101	102								
Client Sample ID	R22-TP101	R22-TP101								
Depth to Top	0.20	0.50								
Depth To Bottom										
Date Sampled	11-Oct-23	11-Oct-23								
Sample Type	SOIL - ES	SOIL - ES								
Sample Matrix Code	5A	5A								
Linuron$_A$	<0.10	-						mg/kg	0.1	Subcon RPS MH
Alachlor$_A$	<0.02	-						mg/kg	0.02	Subcon RPS MH
Carbaryl$_A$	<0.10	-						mg/kg	0.1	Subcon RPS MH
Diuron$_A$	<0.10	-						mg/kg	0.1	Subcon RPS MH
Isoproturon$_A$	<0.10	-						mg/kg	0.1	Subcon RPS MH
MCPP; (Mecoprop)$_A$	<0.10	-						mg/kg	0.1	Subcon RPS MH
Calcium (leachable)$_A$	-	17						mg/l	1	A-T-049w

Lab Sample ID	23/10117/1	23/10117/2						Units	Limit of Detection	Method ref
Client Sample No	101	102								
Client Sample ID	R22-TP101	R22-TP101								
Depth to Top	0.20	0.50								
Depth To Bottom										
Date Sampled	11-Oct-23	11-Oct-23								
Sample Type	SOIL - ES	SOIL - ES								
Sample Matrix Code	5A	5A								
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
OCP+OPP Combined Pest Suite (incl. Atrazine and Simazine)										
Dichlobenil$_{A}$	<0.01	-						mg/kg	0.01	A-T-056
Tecnazene$_{A}$	<0.01	-						mg/kg	0.01	A-T-056
Trifluralin$_{A}$	<0.01	-						mg/kg	0.01	A-T-056
alpha-Hexachlorocyclohexane (HCH)$_{A}$	<0.01	-						mg/kg	0.01	A-T-056
Hexachlorobenzene (HCB) $_{A}$	<0.01	-						mg/kg	0.01	A-T-056
Simazine$_{A}$	<0.01	-						mg/kg	0.01	A-T-056
Atrazine$_{A}$	<0.01	-						mg/kg	0.01	A-T-056
beta-Hexachlorocyclohexane (HCH)$_{A}$	<0.01	-						mg/kg	0.01	A-T-056
Quintozene (PCNB)$_{A}$	<0.01	-						mg/kg	0.01	A-T-056
Chlorothalonil$_{A}$	<0.01	-						mg/kg	0.01	A-T-056
delta-Hexachlorocyclohexane (HCH)$_{A}$	<0.01	-						mg/kg	0.01	A-T-056
Triallate$_{A}$	<0.01	-						mg/kg	0.01	A-T-056
Heptachlor$_{A}$	<0.01	-						mg/kg	0.01	A-T-056
Aldrin$_{A}$	<0.01	-						mg/kg	0.01	A-T-056
Triadimefon$_{A}$	<0.01	-						mg/kg	0.01	A-T-056
Telodrin$_{A}$	<0.01	-						mg/kg	0.01	A-T-056
Isodrin$_{A}$	<0.01	-						mg/kg	0.01	A-T-056
Pendimethalin$_{A}$	<0.01	-						mg/kg	0.01	A-T-056
Heptachlor epoxide$_{A}$	<0.01	-						mg/kg	0.01	A-T-056
trans-Chlordane (Gamma)$_{A}$	<0.01	-						mg/kg	0.01	A-T-056
o,p-DDE (2,4)$_{A}$	<0.01	-						mg/kg	0.01	A-T-056
Endosulphan I (Alpha)$_{A}$	<0.01	-						mg/kg	0.01	A-T-056
cis-Chlordane (Alpha)$_{A}$	<0.01	-						mg/kg	0.01	A-T-056
p,p-DDE (4,4)$_{A}$	<0.01	-						mg/kg	0.01	A-T-056
Dieldrin$_{A}$	<0.01	-						mg/kg	0.01	A-T-056

Lab Sample ID	23/10117/1	23/10117/2						Units	Limit of Detection	Method ref
Client Sample No	101	102								
Client Sample ID	R22-TP101	R22-TP101								
Depth to Top	0.20	0.50								
Depth To Bottom										
Date Sampled	11-Oct-23	11-Oct-23								
Sample Type	SOIL - ES	SOIL - ES								
Sample Matrix Code	5A	5A								
o,p-DDD (2,4)$_A$	<0.01	-						mg/kg	0.01	A-T-056
Endrin$_A$	<0.01	-						mg/kg	0.01	A-T-056
Endosulphan II (Beta)$_A$	<0.01	-						mg/kg	0.01	A-T-056
p,p-DDD (4,4)$_A$	<0.01	-						mg/kg	0.01	A-T-056
o,p-DDT (2,4)$_A$	<0.01	-						mg/kg	0.01	A-T-056
Endrin Aldehyde$_A$	<0.01	-						mg/kg	0.01	A-T-056
Endrin Ketone$_A$	<0.01	-						mg/kg	0.01	A-T-056
Endosulphan Sulphate$_A$	<0.01	-						mg/kg	0.01	A-T-056
p,p-DDT (4,4)$_A$	<0.01	-						mg/kg	0.01	A-T-056
o,p-Methoxychlor$_A$	<0.01	-						mg/kg	0.01	A-T-056
p,p-Methoxychlor$_A$	<0.01	-						mg/kg	0.01	A-T-056
Permethrin I (cis)$_A$	<0.01	-						mg/kg	0.01	A-T-056
Permethrin II (trans)$_A$	<0.01	-						mg/kg	0.01	A-T-056
Dichlorvos$_A$	<0.01	-						mg/kg	0.01	A-T-056
Mevinphos$_A$	<0.01	-						mg/kg	0.01	A-T-056
Demeton-S$_A$	<0.50	-						mg/kg	0.5	A-T-056
Demeton-O$_A$	<0.50	-						mg/kg	0.5	A-T-056
Phorate$_A$	<0.01	-						mg/kg	0.01	A-T-056
Dimethoate$_A$	<0.01	-						mg/kg	0.01	A-T-056
Propetamphos$_A$	<0.01	-						mg/kg	0.01	A-T-056
Diazinon (Dimpylate)$_A$	<0.01	-						mg/kg	0.01	A-T-056
Disulfoton$_A$	<0.10	-						mg/kg	0.1	A-T-056
Chlorpyrifos-methyl$_A$	<0.01	-						mg/kg	0.01	A-T-056
Parathion (Ethyl Parathion)$_A$	<0.01	-						mg/kg	0.01	A-T-056
Methyl Parathion$_A$	<0.01	-						mg/kg	0.01	A-T-056
Pirimiphos-methyl$_A$	<0.01	-						mg/kg	0.01	A-T-056
Fenitrothion$_A$	<0.01	-						mg/kg	0.01	A-T-056
Fensulphothion$_A$	<0.01	-						mg/kg	0.01	A-T-056
Fenthion$_A$	<0.01	-						mg/kg	0.01	A-T-056
Malathion$_A$	<0.01	-						mg/kg	0.01	A-T-056
Chlorfenvinphos$_A$	<0.01	-						mg/kg	0.01	A-T-056
Chlorpyrifos$_A$	<0.01	-						mg/kg	0.01	A-T-056
Trichloronate$_A$	<0.01	-						mg/kg	0.01	A-T-056
Prothiofos (Tokuthion)$_A$	<0.01	-						mg/kg	0.01	A-T-056

Envirolab Job Number: 23/10117

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10117/1	23/10117/2						Units	Limit of Detection	Method ref
Client Sample No	101	102								
Client Sample ID	R22-TP101	R22-TP101								
Depth to Top	0.20	0.50								
Depth To Bottom										
Date Sampled	11-Oct-23	11-Oct-23								
Sample Type	SOIL - ES	SOIL - ES								
Sample Matrix Code	5A	5A								
Ethion$_A$	<0.01	-						mg/kg	0.01	A-T-056
Triazophos$_A$	<0.01	-						mg/kg	0.01	A-T-056
Carbophenothion$_A$	<0.01	-						mg/kg	0.01	A-T-056
Phosalone$_A$	<0.01	-						mg/kg	0.01	A-T-056
Azinphos-methyl$_A$	<0.01	-						mg/kg	0.01	A-T-056
Azinphos-ethyl$_A$	<0.01	-						mg/kg	0.01	A-T-056
Coumaphos$_A$	<0.01	-						mg/kg	0.01	A-T-056
gamma-Hexachlorocyclohexane (HCH)$_A$	<0.01	-						mg/kg	0.01	A-T-056

Envirolab Job Number: 23/10117

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10117/1	23/10117/2						Units	Limit of Detection	Method ref
Client Sample No	101	102								
Client Sample ID	R22-TP101	R22-TP101								
Depth to Top	0.20	0.50								
Depth To Bottom										
Date Sampled	11-Oct-23	11-Oct-23								
Sample Type	SOIL - ES	SOIL - ES								
Sample Matrix Code	5A	5A								
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^U	-						mg/kg	0.07	A-T-019s
Chrysene$_A^{M\#}$	<0.06	-						mg/kg	0.06	A-T-019s
Dibenzo(ah)anthracene$_A$	<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$_A^{M\#}$	<0.03	-						mg/kg	0.03	A-T-019s
Pyrene$_A^{M\#}$	<0.07	-						mg/kg	0.07	A-T-019s
Total PAH-16MS$_A$	<0.08	-						mg/kg	0.01	A-T-019s

Report Notes

General
This report shall not be reproduced, except in full, without written approval from Envirolab.
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 **six 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.
The client Sample No, Client Sample ID, Depth to top, Depth to Bottom and Date Sampled are all provided by the client.
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.

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 "^"	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
N/A	Not applicable

Asbestos
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
Quantification of asbestos is a 3 stage process including visual identification, hand picking and weighing, and fibre counting by sedimentation/phase contrast optical microscopy if required. 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) quantification by sedimentation is performed. 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.

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^{o}C / 11550µS/cm @ 20^{o}C fall outside the accreditation range and as such are unaccredited.

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

Envirolab Deviating Samples Report

Units 7&8 Sandpits Business Park, Mottram Road, Hyde, SK14 3AR
Tel. 0161 368 4921 email. ask@envlab.co.uk

Client: Structural Soils Limited (Hemel Hempstead), 18 Frogmore Road, Hemel Hempstead, UK, HP3 9RT

Project: Sealink Richborough

Clients Project No: 563607

Project No: 23/10117

Date Received: 13/10/2023 (am)

Cool Box Temperatures (°C): 14.7

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	23/10117/1	23/10117/2
Client Sample No	101	102
Client Sample ID/Depth	R22-TP101 0.20m	R22-TP101 0.50m
Date Sampled	11/10/23	11/10/23
A-T-019s	19/10/2023	
A-T-024s	24/10/2023	
A-T-025w		26/10/2023
A-T-026s	24/10/2023	
A-T-026w		23/10/2023
A-T-026w (F)		24/10/2023
A-T-027s	24/10/2023	
A-T-031s	24/10/2023	
A-T-031w		23/10/2023
A-T-032s	30/10/2023	
A-T-033w		24/10/2023
A-T-040s	24/10/2023	
A-T-040w		23/10/2023
A-T-042sFCN	24/10/2023	
A-T-042wFCN		21/10/2023
A-T-042wTCN		21/10/2023
A-T-044	23/10/2023	23/10/2023
A-T-045	16/10/2023	
A-T-049w		23/10/2023
A-T-050s	24/10/2023	
A-T-050w		23/10/2023
A-T-056	24/10/2023	
Calc	24/10/2023	27/10/2023

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

Certificate of Analysis

Report No.: **23-07083-2**

Issue No.: **2**
Date of Issue **08/04/2024**

Customer Details:	Envirolab Ltd, 7 - 8 Sandpits Business Park, Mottram Road, Hyde, Greater Manchester, SK14 3AR, United Kingdom
Customer Contact:	[redacted]
Customer Order No.:	P0752537
Customer Reference:	Not Supplied
Quotation Reference:	Q22-00104 (Issue: 36)
Description:	1 geo sample
Date Received:	16/10/2023
Date Started:	18/10/2023
Date Completed:	02/11/2023
Test Methods:	Details available on request (refer to SOP code against relevant result/s)
Notes:	This report replaces issue 1 in its entirety

[redacted]

Approved By: [redacted] **LIMS Administrator**

This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service.
This certificate shall not be reproduced except in full without the prior written approval of the laboratory.
Observations and interpretations are outside of the scope of UKAS accreditation.
Results reported herein relate only to the items supplied to the laboratory for testing.
Results on an Interim Report are not dry-weight corrected.
Where the laboratory is not responsible for the sampling, results apply to the sample(s) as they were received.
The laboratory shall not be responsible for any information that is supplied by the customer that may affect the validity of results.

RPS Environmental Management Limited trading as RPS Mountainheath. Registered in England No. 01756175.
13 St Martins Way, Bedford, Bedfordshire, MK42 0LF. T +44 1462 480 400
A member of the RPS Group plc. Terms and conditions apply - copy on request

Results Summary

Report No.: 23-07083-2

Customer Reference: Not Supplied

Customer Order No: P0752537

Customer Sample No	**R22-TP101 0.20m**
RPS Sample No	34730
Sample Type	**GEO**
Sample Matrix	SOIL
Sampling Date	11/10/2023

Determinand	CAS No	Codes	SOP	RL	Units	
carbaryl	63-25-2	N	L001	0.1	mg/kg AR	< 0.10 (T)
2,4,5-trichlorophenoxyacetic acid (2,4,5-T)	93-76-5	N	L340	0.1	mg/kg DW	< 0.10 (T)
2,4,5-TP (Fenoprop)	93-72-1	N	L340	0.1	mg/kg DW	< 0.10 (T)
2,4-dichlorophenoxyacetic acid (2,4-D)	94-75-7	N	L340	0.1	mg/kg DW	< 0.10 (T)
acifluorfen	50594-66-6	N	L340	0.1	mg/kg DW	< 0.10 (T)
bentazone	25057-89-0	N	L340	0.1	mg/kg DW	< 0.10 (T)
clopyralid	1702-17-6	N	L340	0.1	mg/kg DW	< 0.10 (T)
dichlorprop (2,4-DP)	120-36-5	N	L340	0.1	mg/kg DW	< 0.10 (T)
dinoseb (DNBP)	88-85-7	N	L340	0.1	mg/kg DW	< 0.10 (T)
2-methyl-4-chlorophenoxyacetic acid (MCPA)	94-74-6	N	L340	0.1	mg/kg DW	< 0.10 (T)
mecoprop (MCPP)	7085-19-0	N	L340	0.1	mg/kg DW	< 0.10 (T)
pentachlorophenol (PCP)	87-86-5	N	L340	0.1	mg/kg DW	< 0.10 (T)
2,3,6-trichlorobenzoic acid (2,3,6-TBA)	50-31-7	N	L340	0.1	mg/kg DW	< 0.10 (T)
4-(2,4-dichlorophenoxy)butanoic acid (2,4-DB)	94-82-6	N	L340	0.1	mg/kg DW	< 0.10 (T)
4-chlorophenoxyacetic acid (4-CPA)	122-88-3	N	L340	0.1	mg/kg DW	< 0.10 (T)
benazolin	3813-05-6	N	L340	0.1	mg/kg DW	< 0.10 (T)
bromoxynil	1689-84-5	N	L340	0.1	mg/kg DW	< 0.10 (T)
dicamba	1918-00-9	N	L340	0.1	mg/kg DW	< 0.10 (T)
diclofop	40843-25-2	N	L340	0.1	mg/kg DW	< 0.10 (T)
2-methyl-4,6-dinitrophenol (DNOC)	534-52-1	N	L340	0.1	mg/kg DW	< 0.10 (T)
flamprop	58667-63-3	N	L340	0.1	mg/kg DW	< 0.10 (T)
fluroxypyr	69377-81-7	N	L340	0.1	mg/kg DW	< 0.10 (T)
ioxynil	1689-83-4	N	L340	0.1	mg/kg DW	< 0.10 (T)
MCPB	94-81-5	N	L340	0.1	mg/kg DW	< 0.10 (T)
picloram	1918-02-1	N	L340	0.1	mg/kg DW	< 0.10 (T)
triclopyr	55335-06-3	N	L340	0.1	mg/kg DW	< 0.10 (T)
alachlor	15972-60-8	N	G029	0.02	mg/kg AR	< 0.02 (T)
chloroxuron	1982-47-4	N	L025	0.1	mg/kg DW	< 0.10 (T)
chlortoluron	15545-48-9	N	L025	0.1	mg/kg DW	< 0.10 (T)
diflubenzuron	35367-38-5	N	L025	0.1	mg/kg DW	< 0.10 (T)
dimefuron	34205-21-5	N	L025	0.1	mg/kg DW	< 0.10 (T)
diuron	330-54-1	N	L025	0.1	mg/kg DW	< 0.10 (T)
isoproturon	34123-59-6	N	L025	0.1	mg/kg DW	< 0.10 (T)
linuron	330-55-2	N	L025	0.1	mg/kg DW	< 0.10 (T)
methabenzthiazuron	18691-97-9	N	L025	0.1	mg/kg DW	< 0.10 (T)
metoxuron	19937-59-8	N	L025	0.1	mg/kg DW	< 0.10 (T)
monolinuron	1746-81-2	N	L025	0.1	mg/kg DW	< 0.10 (T)
monuron	150-68-5	N	L025	0.1	mg/kg DW	< 0.10 (T)

Results Summary

Report No.: 23-07083-2

Customer Reference: Not Supplied

Customer Order No: P0752537

Customer Sample No	**R22-TP101 0.20m**
RPS Sample No	34730
Sample Type	**GEO**
Sample Matrix	SOIL
Sampling Date	11/10/2023

Determinand	CAS No	Codes	SOP	RL	Units	
pencycuron	66063-05-6	N	L025	0.1	mg/kg DW	< 0.10 (T)
bifenthrin	82657-04-3	N	G127	0.1	mg/kg DW	< 0.10 (T)
cyfluthrin, total	68359-37-5	N	G127	0.1	mg/kg DW	< 0.10 (T)
cyhalothrin, total	68085-85-8	N	G127	0.1	mg/kg DW	< 0.10 (T)
cypermethrin, total	52315-07-8	N	G127	0.1	mg/kg DW	< 0.10 (T)
deltamethrin	52918-63-5	N	G127	0.1	mg/kg DW	< 0.10 (T)
fenvalerate	51630-58-1	N	G127	0.1	mg/kg DW	< 0.10 (T)
permethrin, total	52645-53-1	N	G127	0.1	mg/kg DW	< 0.10 (T)
resmethrin	10453-86-8	N	G127	0.1	mg/kg DW	< 0.10 (T)
tetramethrin	7696-12-0	N	G127	0.1	mg/kg DW	< 0.10 (T)

Comments

Report No.: 23-07083-2

Customer Reference: Not Supplied

Customer Order No: P0752537

Job	Description	Document History
23-07083	n/a	Sample numbers changed as per client request

Deviating Samples

Report No.: 23-07083-2

Customer Reference: Not Supplied

Customer Order No: P0752537

Our policy on Deviating Samples has been implemented in accordance with UKAS Policy on Deviating Samples (TPS63).
RPS is not responsible for the integrity of samples as received, unless RPS personnel performed the sampling. Samples submitted may be declared to be deviating.
Where applicable the analysis method remains UKAS accredited, however results reported for a deviating sample may be compromised.
Where no sampling date was supplied, samples have been declared to be deviating. If the date can be supplied, results may be reissued if assessed not deviating.
Where the sample container used was unsuitable or broken, the sample is flagged as deviating and re-sampling/re-submisson may be required.

RPS No.	Customer No.	Customer ID	Date Sampled	Containers Received	Deviating	Reason for Deviation
34730	R22-TP101 0.20m		11/10/2023	250 mL amber glass jar	**Yes**	No sampling time provided.

Report No.: 23-07083-2

Type	Matrix Code	Description
Food	CEREALPROD	Cereals, grains & products
Food	DRIEDFRUIT	Dried fruits
Food	FRIEDBAKED	Fried or baked food
Food	LEGUME	Legumes
Food	MEAT	Meat
Food	POWDERED	Powdered food
Food	PULSE	Pulses (dried legumes)
Food	VEGETABLES	Vegetables
Gas	TDTUBE	TD Tube
Gas	TENAX	Tenax Tube
Gas	TUBE	Tube
Gas	VAPOUR	Gas
Geological	SED_MAR	Marine Sediment
Geological	SED_RIV	River Sediment
Geological	SLUDG_SOL	Sludge (solid only)
Geological	SOIL	Soil
Liquid	BEVERAGE	Beverage
Liquid	BLOOD	Blood
Liquid	CONDENSATE	Condensate
Liquid	FOAM_LIQ	Liquid foam
Liquid	FORMULATN	Formula
Liquid	LEACHATE	Leachate
Liquid	OIL/GREASE	Oil or grease
Liquid	SLUDG_LIQ	Sludge (liquid only)
Liquid	SOLVENT	Solvent
Liquid	URINE	Urine
Sludge	SLUDG_WHL	Sludge for bulk route
Solid	BADGE	Badge
Solid	BEDDING	Bedding
Solid	BIOTA	Biota (general)
Solid	BIOTA_F	Biota (fish)
Solid	BIOTA_SF	Biota (shellfish)
Solid	CONSTRCTN	Construction materials
Solid	FABRIC	Fabrics & furnishing materials
Solid	FEED	Animal feed
Solid	FERTILISER	Fertiliser
Solid	FILTER	Filter
Solid	FOAM	Solid foam material
Solid	PACKAGING	Packaging material
Solid	PAPER	Paper
Solid	PLANT	Plant (vegetation)
Solid	POWDER	Powder
Solid	SWAB	Swab
Water	BAL	Ballast Water
Water	BIL	Bilge Water
Water	DW	Drinking Water
Water	EFFLUENT	Effluent
Water	GW	Ground Water
Water	INFLUENT	Influent
Water	SALTW	Salt Water
Water	SW	Surface Water
Water	TW	Tap Water
Water	W	Water

Report No.: 23-07083-2

Key Code	Description
N	Not Accredited Test
U	UKAS Accredited Test - UKAS accreditation is only implied if the report carries the UKAS logo
UF	UKAS Flexible Scope Test
M	MCERTS Accredited Test - MCERTS accreditation is only implied if the report carries the MCERTS logo
O	Marine Management Organisation (MMO) Validated
SN	Subcontracted to approved laboratory not accredited for the test
SU	Subcontracted to approved laboratory UKAS Accredited for the test
SM	Subcontracted to approved laboratory MCERTS/UKAS Accredited for the test
SIN	Subcontracted to internal RPS Group laboratory not accredited for the test
SIU	Subcontracted to internal RPS Group laboratory UKAS Accredited for the test
SIM	Subcontracted to internal RPS Group laboratory MCERTS/UKAS Accredited for the test
*	Modified standard method
I/S (in results)	Insufficient Sample
U/S (in results)	Unsuitable Sample
S/C (in results)	See Comments
ND (in results)	Not Detected
DW (in units)	Results are expressed on a dry weight basis
L (in results)	Result is outside normal limits

Sample Type	Sample Retention and Disposal Period
Foodstuff	1 month (if frozen) from the issue date of this report
Waters	2 weeks from the issue date of this report
Other Liquids	1 month from the issue date of this report
Solids / Soils	1 month from the issue date of this report
Sediments	1 month from the issue date of this report

Note: Sample retention may be subject to agreement with the customer for particular projects

Where the dry solids value of a sample is low (<50%), reporting limits are automatically raised for all determinants analysed on an as-received basis.

Soil Typing	Description
Type 1	Clay - Brown
Type 2	Clay - Grey/Black
Type 3	Sand
Type 4	Top Soil (Standard)
Type 5	Top Soil (High Peat)
Type 6	Made Ground (>50% Clay)
Type 7	Made Ground (>50% Sand)
Type 8	Made Ground (>50% Top Soil)
Type X	Other

Dev code	Description
D	No sampling date provided.
T	No sampling time provided.
Z	Temperature of samples exceeded in transit/storage.
V	Excessive headspace for volatile determinands.
P	Sample submitted without required preservative(s).
C	Incorrect container.
H	Holding time exceeded (sampling to extraction).
X	Holding time exceeded (sampling to receipt).

Note: Where the following information is included in this certificate, it has usually been supplied by the customer: Customer Sample ID, Sample Location, Sample Depth, Sampling Date and Sampling Time. The laboratory shall not be responsible for any information that is supplied by the customer that may affect the validity of results.

Units 7 & 8 Sandpits Business Park
Mottram Road, Hyde, Cheshire, SK14 3AR

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 23/10278
Issue Number: 1 **Date:** 31 October, 2023

Client: Structural Soils Limited (Hemel Hempstead)
18 Frogmore Road
Hemel Hempstead
UK
HP3 9RT

Project Manager: [redacted]
Project Name: Sealink Richborough
Project Ref: 563607
Order No: N/A
Date Samples Received: 18/10/23
Date Instructions Received: 18/10/23
Date Analysis Completed: 31/10/23

Approved by:

[redacted]
Deputy Client Services Supervisor

Envirolab Job Number: 23/10278

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10278/2							Units	Limit of Detection	Method ref
Client Sample No	102									
Client Sample ID	R22-TP508									
Depth to Top	0.50									
Depth To Bottom										
Date Sampled	16-Oct-23									
Sample Type	SOIL - ES									
Sample Matrix Code	4AE									
% Moisture at 105C$_A$	33.5							% w/w	0.1	A-T-044
% Stones >10mm$_A$	<0.1							% w/w	0.1	A-T-044
pH$_D^{M\#}$	8.03							pH	0.01	A-T-031s
Sulphate (water sol 2:1)$_D^{M\#}$	0.14							g/l	0.01	A-T-026s
Sulphur (total)$_D$	1320							mg/kg	50	A-T-024s
Cyanide (free)$_A^{M\#}$	<1							mg/kg	1	A-T-042sFCN
Phenols - Total by HPLC$_A$	<0.2							mg/kg	0.2	A-T-050s
Organic Matter$_D^{M\#}$	8.4							% w/w	0.1	A-T-032s
Total Organic Carbon$_D^{M\#}$	4.88							% w/w	0.03	A-T-032s
Fraction of organic carbon$_D^{\#}$	0.0488							N/A	0.0003	A-T-032s
Arsenic$_D^{M\#}$	7							mg/kg	1	A-T-024s
Barium$_D$	67							mg/kg	1	A-T-024s
Beryllium$_D$	1.2							mg/kg	0.5	A-T-024s
Boron (water soluble)$_D^{M\#}$	7.6							mg/kg	1	A-T-027s
Cadmium$_D^{M\#}$	<0.5							mg/kg	0.5	A-T-024s
Copper$_D^{M\#}$	19							mg/kg	1	A-T-024s
Chromium$_D^{M\#}$	42							mg/kg	1	A-T-024s
Chromium (hexavalent)$_D$	<1							mg/kg	1	A-T-040s
Chromium (trivalent)	42							mg/kg	1	Calc
Lead$_D^{M\#}$	30							mg/kg	1	A-T-024s
Manganese$_D$	252							mg/kg	1	A-T-024s
Mercury$_D$	<0.17							mg/kg	0.17	A-T-024s
Molybdenum$_D^{M\#}$	<1							mg/kg	1	A-T-024s
Nickel$_D^{M\#}$	23							mg/kg	1	A-T-024s
Selenium$_D^{M\#}$	<1							mg/kg	1	A-T-024s
Vanadium$_D^{M\#}$	68							mg/kg	1	A-T-024s
Zinc$_D^{M\#}$	83							mg/kg	5	A-T-024s

Envirolab Job Number: 23/10278

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	**23/10278/2**							**Units**	**Limit of Detection**	**Method ref**
Client Sample No	**102**									
Client Sample ID	**R22-TP508**									
Depth to Top	**0.50**									
Depth To Bottom										
Date Sampled	**16-Oct-23**									
Sample Type	**SOIL - ES**									
Sample Matrix Code	**4AE**									
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: 23/10278

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10278/2							Units	Limit of Detection	Method ref
Client Sample No	102									
Client Sample ID	R22-TP508									
Depth to Top	0.50									
Depth To Bottom										
Date Sampled	16-Oct-23									
Sample Type	SOIL - ES									
Sample Matrix Code	4AE									
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$_A^{M\#}$	0.09							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$_A$	<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$_A^{M\#}$	0.06							mg/kg	0.03	A-T-019s
Naphthalene $_A^{M\#}$	<0.03							mg/kg	0.03	A-T-019s
Phenanthrene$_A^{M\#}$	<0.03							mg/kg	0.03	A-T-019s
Pyrene$_A^{M\#}$	<0.07							mg/kg	0.07	A-T-019s
Total PAH-16MS$_A$	0.15							mg/kg	0.01	A-T-019s

Report Notes

General
This report shall not be reproduced, except in full, without written approval from Envirolab.
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 **six 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.
The client Sample No, Client Sample ID, Depth to top, Depth to Bottom and Date Sampled are all provided by the client.
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.

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 "^"	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
N/A	Not applicable

Asbestos
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
Quantification of asbestos is a 3 stage process including visual identification, hand picking and weighing, and fibre counting by sedimentation/phase contrast optical microscopy if required. 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) quantification by sedimentation is performed. 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.

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^{o}C / 11550µS/cm @ 20^{o}C fall outside the accreditation range and as such are unaccredited.

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

Envirolab Deviating Samples Report

Units 7&8 Sandpits Business Park, Mottram Road, Hyde, SK14 3AR
Tel. 0161 368 4921 email. ask@envlab.co.uk

Client: Structural Soils Limited (Hemel Hempstead), 18 Frogmore Road, Hemel Hempstead, UK, HP3 9RT

Project: Sealink Richborough

Clients Project No: 563607

Project No: 23/10278

Date Received: 18/10/2023 (am)

Cool Box Temperatures (°C): 12.8

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	23/10278/2
Client Sample No	102
Client Sample ID/Depth	R22-TP508 0.50m
Date Sampled	16/10/23
A-T-019s	30/10/2023
A-T-024s	26/10/2023
A-T-026s	25/10/2023
A-T-027s	26/10/2023
A-T-031s	25/10/2023
A-T-032s	31/10/2023
A-T-040s	25/10/2023
A-T-042sFCN	25/10/2023
A-T-044	26/10/2023
A-T-045	20/10/2023
A-T-050s	27/10/2023
Calc	26/10/2023

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

envirolab
Units 7 & 8 Sandpits Business Park
Mottram Road, Hyde, Cheshire, SK14 3AR

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 23/10279
Issue Number: 1 **Date:** 01 November, 2023

Client: Structural Soils Limited (Hemel Hempstead)
18 Frogmore Road
Hemel Hempstead
UK
HP3 9RT

Project Manager: [redacted]
Project Name: Sealink Richborough
Project Ref: 563607
Order No: N/A
Date Samples Received: 18/10/23
Date Instructions Received: 18/10/23
Date Analysis Completed: 31/10/23

Approved by:

[redacted]

Client Manager

Envirolab Job Number: 23/10279

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10279/3							Units	Limit of Detection	Method ref
Client Sample No	103									
Client Sample ID	R22-TP106									
Depth to Top	1.00									
Depth To Bottom										
Date Sampled	13-Oct-23									
Sample Type	SOIL - ES									
Sample Matrix Code	3									
% Moisture at 105C$_A$	45.6							% w/w	0.1	A-T-044
% Stones >10mm$_A$	<0.1							% w/w	0.1	A-T-044
pH$_D$$^{M\#}$	9.02							pH	0.01	A-T-031s
Sulphate (water sol 2:1)$_D$$^{M\#}$	0.08							g/l	0.01	A-T-026s
Sulphur (total)$_D$	224							mg/kg	50	A-T-024s
Cyanide (free)$_A$$^{M\#}$	<1							mg/kg	1	A-T-042sFCN
Phenols - Total by HPLC$_A$	<0.2							mg/kg	0.2	A-T-050s
Organic Matter$_D$$^{M\#}$	0.7							% w/w	0.1	A-T-032s
Total Organic Carbon$_D$$^{M\#}$	0.43							% w/w	0.03	A-T-032s
Fraction of organic carbon$_D$$^{\#}$	0.0043							N/A	0.0003	A-T-032s
Arsenic$_D$$^{M\#}$	7							mg/kg	1	A-T-024s
Barium$_D$	33							mg/kg	1	A-T-024s
Beryllium$_D$	1.2							mg/kg	0.5	A-T-024s
Boron (water soluble)$_D$$^{M\#}$	11.2							mg/kg	1	A-T-027s
Cadmium$_D$$^{M\#}$	<0.5							mg/kg	0.5	A-T-024s
Copper$_D$$^{M\#}$	12							mg/kg	1	A-T-024s
Chromium$_D$$^{M\#}$	39							mg/kg	1	A-T-024s
Chromium (hexavalent)$_D$	<1							mg/kg	1	A-T-040s
Chromium (trivalent)	39							mg/kg	1	Calc
Lead$_D$$^{M\#}$	16							mg/kg	1	A-T-024s
Manganese$_D$	182							mg/kg	1	A-T-024s
Mercury$_D$	<0.17							mg/kg	0.17	A-T-024s
Molybdenum$_D$$^{M\#}$	2							mg/kg	1	A-T-024s
Nickel$_D$$^{M\#}$	25							mg/kg	1	A-T-024s
Selenium$_D$$^{M\#}$	<1							mg/kg	1	A-T-024s
Vanadium$_D$$^{M\#}$	69							mg/kg	1	A-T-024s
Zinc$_D$$^{M\#}$	60							mg/kg	5	A-T-024s

Envirolab Job Number: 23/10279

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10279/3							Units	Limit of Detection	Method ref
Client Sample No	103									
Client Sample ID	R22-TP106									
Depth to Top	1.00									
Depth To Bottom										
Date Sampled	13-Oct-23									
Sample Type	SOIL - ES									
Sample Matrix Code	3									
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: 23/10279

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10279/3							Units	Limit of Detection	Method ref
Client Sample No	103									
Client Sample ID	R22-TP106									
Depth to Top	1.00									
Depth To Bottom										
Date Sampled	13-Oct-23									
Sample Type	SOIL - ES									
Sample Matrix Code	3									
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$_A$	<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$_A^{M\#}$	<0.03							mg/kg	0.03	A-T-019s
Pyrene$_A^{M\#}$	<0.07							mg/kg	0.07	A-T-019s
Total PAH-16MS$_A$	<0.08							mg/kg	0.01	A-T-019s

Report Notes

General
This report shall not be reproduced, except in full, without written approval from Envirolab.
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 **six 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.
The client Sample No, Client Sample ID, Depth to top, Depth to Bottom and Date Sampled are all provided by the client.
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.

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 "^"	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
N/A	Not applicable

Asbestos
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
Quantification of asbestos is a 3 stage process including visual identification, hand picking and weighing, and fibre counting by sedimentation/phase contrast optical microscopy if required. 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) quantification by sedimentation is performed. 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.

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^{o}C / 11550µS/cm @ 20^{o}C fall outside the accreditation range and as such are unaccredited.

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

Envirolab Deviating Samples Report

Units 7&8 Sandpits Business Park, Mottram Road, Hyde, SK14 3AR
Tel. 0161 368 4921 email. ask@envlab.co.uk

Client: Structural Soils Limited (Hemel Hempstead), 18 Frogmore Road, Hemel Hempstead, UK, HP3 9RT

Project: Sealink Richborough

Clients Project No: 563607

Project No: 23/10279

Date Received: 18/10/2023 (am)

Cool Box Temperatures (°C): 12.8

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	23/10279/3
Client Sample No	103
Client Sample ID/Depth	R22-TP106 1.00m
Date Sampled	13/10/23
A-T-019s	30/10/2023
A-T-024s	26/10/2023
A-T-026s	25/10/2023
A-T-027s	26/10/2023
A-T-031s	25/10/2023
A-T-032s	31/10/2023
A-T-040s	25/10/2023
A-T-042sFCN	25/10/2023
A-T-044	26/10/2023
A-T-045	20/10/2023
A-T-050s	31/10/2023
Calc	26/10/2023

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

envirolab
Units 7 & 8 Sandpits Business Park
Mottram Road, Hyde, Cheshire, SK14 3AR

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 23/10280
Issue Number: 1 **Date:** 17 November, 2023

Client: Structural Soils Limited (Hemel Hempstead)
18 Frogmore Road
Hemel Hempstead
UK
HP3 9RT

Project Manager: [redacted]
Project Name: Sealink Richborough
Project Ref: 563607
Order No: N/A
Date Samples Received: 18/10/23
Date Instructions Received: 18/10/23
Date Analysis Completed: 17/11/23

Approved by:

[redacted]

Client Manager

Envirolab Job Number: 23/10280

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10280/1	23/10280/5	23/10280/9	23/10280/10	23/10280/11	23/10280/12	23/10280/13	Units	Limit of Detection	Method ref
Client Sample No	101	102	103	101	102	103	104			
Client Sample ID	R22-TP102	R22-BH106	R22-BH205	RedP-BH-10	RedP-BH-10	RedP-BH-10	RedP-BH-10			
Depth to Top	0.20	0.50	1.00	0.20	0.50	1.00	1.50			
Depth To Bottom										
Date Sampled	12-Oct-23	12-Oct-23	12-Oct-23	12-Oct-23	12-Oct-23	12-Oct-23	12-Oct-23			
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES			
Sample Matrix Code	6ABE	3	3	6AE	6ABDE	6AB	6AB			
% Moisture at 105C$_A$	31.8	33.1	34.6	-	-	26.5	30.0	% w/w	0.1	A-T-044
% Stones >10mm$_A$	<0.1	<0.1	<0.1	<0.1	17.9	6.5	5.0	% w/w	0.1	A-T-044
pH$_D^{M\#}$	8.42	8.47	9.26	-	8.22	8.21	8.44	pH	0.01	A-T-031s
Sulphate (water sol 2:1)$_D^{M\#}$	0.02	0.03	0.06	-	-	0.41	0.15	g/l	0.01	A-T-026s
Sulphur (total)$_D$	438	273	149	-	-	782	713	mg/kg	50	A-T-024s
Cyanide (free)$_A^{M\#}$	<1	<1	<1	-	-	<1	<1	mg/kg	1	A-T-042sFCN
Phenols - Total by HPLC$_A$	<0.2	<0.2	<0.2	-	-	<0.2	<0.2	mg/kg	0.2	A-T-050s
Organic Matter$_D^{M\#}$	5.4	2.0	0.8	-	-	1.7	2.0	% w/w	0.1	A-T-032s
Total Organic Carbon$_D^{M\#}$	3.11	1.18	0.46	-	1.48	0.98	1.13	% w/w	0.03	A-T-032s
Fraction of organic carbon$_D^{\#}$	0.0311	0.0118	0.0046	-	-	0.0098	0.0113	N/A	0.0003	A-T-032s
Arsenic$_D^{M\#}$	9	15	13	-	-	5	4	mg/kg	1	A-T-024s
Barium$_D$	49	52	33	-	-	75	69	mg/kg	1	A-T-024s
Beryllium$_D$	1.2	1.6	1.2	-	-	0.6	0.6	mg/kg	0.5	A-T-024s
Boron (water soluble)$_D^{M\#}$	3.1	3.2	6.1	-	-	1.8	1.8	mg/kg	1	A-T-027s
Cadmium$_D^{M\#}$	<0.5	<0.5	<0.5	-	-	<0.5	<0.5	mg/kg	0.5	A-T-024s
Copper$_D^{M\#}$	16	11	10	-	-	13	14	mg/kg	1	A-T-024s
Chromium$_D^{M\#}$	36	52	37	-	-	23	20	mg/kg	1	A-T-024s
Chromium (hexavalent)$_D$	<1	<1	<1	-	-	<1	<1	mg/kg	1	A-T-040s
Chromium (trivalent)	36	52	37	-	-	23	20	mg/kg	1	Calc
Lead$_D^{M\#}$	21	15	15	-	-	52	66	mg/kg	1	A-T-024s
Manganese$_D$	308	374	119	-	-	358	311	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
Molybdenum$_D^{M\#}$	<1	1	<1	-	-	2	<1	mg/kg	1	A-T-024s
Nickel$_D^{M\#}$	20	25	22	-	-	13	13	mg/kg	1	A-T-024s
Selenium$_D^{M\#}$	<1	<1	<1	-	-	<1	<1	mg/kg	1	A-T-024s
Vanadium$_D^{M\#}$	63	92	68	-	-	31	30	mg/kg	1	A-T-024s
Zinc$_D^{M\#}$	63	68	57	-	-	69	79	mg/kg	5	A-T-024s
Leachate Prep BS EN 12457-1 (2:1) (1 no)$_A$	-	*	-	-	-	-	*			A-T-001
pH (leachable)$_A$	-	7.88	-	-	-	-	7.81	pH	0.01	A-T-031w
Ammoniacal nitrogen as N (leachable)$_A$	-	0.13	-	-	-	-	4.55	mg/l	0.05	A-T-033w
Chloride (leachable)$_A$	-	6.61	-	-	-	-	8.50	mg/l	1	A-T-026w
Fluoride (leachable)$_A$	-	1.07	-	-	-	-	0.40	mg/l	0.1	A-T-026w (F)
Sulphate (leachable)$_A$	-	21.53	-	-	-	-	169.64	mg/l	1	A-T-026w

Envirolab Job Number: 23/10280

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10280/1	23/10280/5	23/10280/9	23/10280/10	23/10280/11	23/10280/12	23/10280/13	Units	Limit of Detection	Method ref
Client Sample No	101	102	103	101	102	103	104			
Client Sample ID	R22-TP102	R22-BH106	R22-BH205	RedP-BH-10	RedP-BH-10	RedP-BH-10	RedP-BH-10			
Depth to Top	0.20	0.50	1.00	0.20	0.50	1.00	1.50			
Depth To Bottom										
Date Sampled	12-Oct-23	12-Oct-23	12-Oct-23	12-Oct-23	12-Oct-23	12-Oct-23	12-Oct-23			
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES			
Sample Matrix Code	6ABE	3	3	6AE	6ABDE	6AB	6AB			
Cyanide (free) (leachable)$_A$	-	<0.005	-	-	-	-	<0.005	mg/l	0.005	A-T-042wFCN
Cyanide (total) (leachable)$_A$	-	<0.005	-	-	-	-	<0.005	mg/l	0.005	A-T-042wTCN
Cyanide (complex) (leachable)	-	<0.005	-	-	-	-	<0.005	mg/l	0.005	Calc
Phenol (leachable)$_A$	-	<0.01	-	-	-	-	<0.01	mg/l	0.01	A-T-050w
Cresols (leachable)$_A$	-	<0.01	-	-	-	-	<0.01	mg/l	0.01	A-T-050w
Resorcinol (leachable)$_A$	-	<0.01	-	-	-	-	<0.01	mg/l	0.01	A-T-050w
Catechol (leachable)$_A$	-	<0.01	-	-	-	-	<0.01	mg/l	0.01	A-T-050w
Xylenols & Ethylphenols (leachable)$_A$	-	<0.01	-	-	-	-	<0.01	mg/l	0.01	A-T-050w
Naphthols (leachable)$_A$	-	<0.01	-	-	-	-	<0.01	mg/l	0.01	A-T-050w
Trimethylphenol (leachable)$_A$	-	<0.01	-	-	-	-	<0.01	mg/l	0.01	A-T-050w
Phenols (total by HPLC) (leachable)$_A$	-	<0.01	-	-	-	-	<0.01	mg/l	0.01	A-T-050w
Antimony (leachable)$_A$	-	<1	-	-	-	-	8	µg/l	1	A-T-025w
Arsenic (leachable)$_A$	-	4	-	-	-	-	3	µg/l	1	A-T-025w
Boron (leachable)$_A$	-	180	-	-	-	-	226	µg/l	10	A-T-025w
Barium (leachable)$_A$	-	6	-	-	-	-	84	µg/l	1	A-T-025w
Beryllium (leachable)$_A$	-	<1	-	-	-	-	<1	µg/l	1	A-T-025w
Cadmium (leachable)$_A$	-	<1	-	-	-	-	<1	µg/l	1	A-T-025w
Copper (leachable)$_A$	-	5	-	-	-	-	4	µg/l	4	A-T-025w
Chromium (leachable)$_A$	-	<1	-	-	-	-	<1	µg/l	1	A-T-025w
Chromium (hexavalent) (leachable)$_A$	-	<0.05	-	-	-	-	<0.05	mg/l	0.05	A-T-040w
Chromium (trivalent)	-	<0.05	-	-	-	-	<0.05	mg/l	0.05	Calc
Iron (leachable)$_A$	-	251	-	-	-	-	48	µg/l	10	A-T-025w
Lead (leachable)$_A$	-	4	-	-	-	-	3	µg/l	1	A-T-025w
Manganese (leachable)$_A$	-	4	-	-	-	-	164	µg/l	1	A-T-025w
Magnesium (leachable)$_A$	-	5	-	-	-	-	7	mg/l	1	A-T-049w
Mercury (leachable)$_A$	-	<0.1	-	-	-	-	<0.1	µg/l	0.1	A-T-025w
Molybdenum (leachable)$_A$	-	7	-	-	-	-	18	µg/l	1	A-T-025w
Nickel (leachable)$_A$	-	3	-	-	-	-	5	µg/l	2	A-T-025w
Selenium (leachable)$_A$	-	<1	-	-	-	-	<1	µg/l	1	A-T-025w
Vanadium (leachable)$_A$	-	11	-	-	-	-	5	µg/l	1	A-T-025w
Zinc (leachable)$_A$	-	20	-	-	-	-	30	µg/l	2	A-T-025w
Bentazone$_A$	-	-	-	<0.10	-	-	-	mg/kg	0.1	Subcon RPS MH
Cypermethrin$_A$	-	-	-	<0.10	-	-	-	mg/kg	0.1	Subcon RPS MH

Envirolab Job Number: 23/10280

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10280/1	23/10280/5	23/10280/9	23/10280/10	23/10280/11	23/10280/12	23/10280/13	Units	Limit of Detection	Method ref
Client Sample No	101	102	103	101	102	103	104			
Client Sample ID	R22-TP102	R22-BH106	R22-BH205	RedP-BH-10	RedP-BH-10	RedP-BH-10	RedP-BH-10			
Depth to Top	0.20	0.50	1.00	0.20	0.50	1.00	1.50			
Depth To Bottom										
Date Sampled	12-Oct-23	12-Oct-23	12-Oct-23	12-Oct-23	12-Oct-23	12-Oct-23	12-Oct-23			
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES			
Sample Matrix Code	6ABE	3	3	6AE	6ABDE	6AB	6AB			
Linuron$_A$	-	-	-	<0.10	-	-	-	mg/kg	0.1	Subcon RPS MH
Alachlor$_A$	-	-	-	<0.02	-	-	-	mg/kg	0.02	Subcon RPS MH
Carbaryl$_A$	-	-	-	<0.10	-	-	-	mg/kg	0.1	Subcon RPS MH
Diuron$_A$	-	-	-	<0.10	-	-	-	mg/kg	0.1	Subcon RPS MH
Isoproturon$_A$	-	-	-	<0.10	-	-	-	mg/kg	0.1	Subcon RPS MH
MCPP; (Mecoprop)$_A$	-	-	-	<0.10	-	-	-	mg/kg	0.1	Subcon RPS MH
Calcium (leachable)$_A$	-	23	-	-	-	-	65	mg/l	1	A-T-049w

Envirolab Job Number: 23/10280

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10280/1	23/10280/5	23/10280/9	23/10280/10	23/10280/11	23/10280/12	23/10280/13	Units	Limit of Detection	Method ref
Client Sample No	101	102	103	101	102	103	104			
Client Sample ID	R22-TP102	R22-BH106	R22-BH205	RedP-BH-10	RedP-BH-10	RedP-BH-10	RedP-BH-10			
Depth to Top	0.20	0.50	1.00	0.20	0.50	1.00	1.50			
Depth To Bottom										
Date Sampled	12-Oct-23	12-Oct-23	12-Oct-23	12-Oct-23	12-Oct-23	12-Oct-23	12-Oct-23			
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES			
Sample Matrix Code	6ABE	3	3	6AE	6ABDE	6AB	6AB			
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
OCP+OPP Combined Pest Suite (incl. Atrazine and Simazine)										
Dichlobenil$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
Tecnazene$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
Trifluralin$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
alpha-Hexachlorocyclohexane (HCH)$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
Hexachlorobenzene (HCB) $_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
Simazine$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
Atrazine$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
beta-Hexachlorocyclohexane (HCH)$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
Quintozene (PCNB)$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
Chlorothalonil$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
delta-Hexachlorocyclohexane (HCH)$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
Triallate$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
Heptachlor$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
Aldrin$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
Triadimefon$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
Telodrin$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
Isodrin$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
Pendimethalin$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
Heptachlor epoxide$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
trans-Chlordane (Gamma)$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
o,p-DDE (2,4)$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
Endosulphan I (Alpha)$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
cis-Chlordane (Alpha)$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
p,p-DDE (4,4)$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
Dieldrin$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056

Lab Sample ID	23/10280/1	23/10280/5	23/10280/9	23/10280/10	23/10280/11	23/10280/12	23/10280/13	Units	Limit of Detection	Method ref
Client Sample No	101	102	103	101	102	103	104			
Client Sample ID	R22-TP102	R22-BH106	R22-BH205	RedP-BH-10	RedP-BH-10	RedP-BH-10	RedP-BH-10			
Depth to Top	0.20	0.50	1.00	0.20	0.50	1.00	1.50			
Depth To Bottom										
Date Sampled	12-Oct-23	12-Oct-23	12-Oct-23	12-Oct-23	12-Oct-23	12-Oct-23	12-Oct-23			
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES			
Sample Matrix Code	6ABE	3	3	6AE	6ABDE	6AB	6AB			
o,p-DDD (2,4)$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
Endrin$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
Endosulphan II (Beta)$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
p,p-DDD (4,4)$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
o,p-DDT (2,4)$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
Endrin Aldehyde$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
Endrin Ketone$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
Endosulphan Sulphate$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
p,p-DDT (4,4)$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
o,p-Methoxychlor$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
p,p-Methoxychlor$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
Permethrin I (cis)$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
Permethrin II (trans)$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
Dichlorvos$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
Mevinphos$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
Demeton-S$_A$	-	-	-	<0.50	-	-	-	mg/kg	0.5	A-T-056
Demeton-O$_A$	-	-	-	<0.50	-	-	-	mg/kg	0.5	A-T-056
Phorate$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
Dimethoate$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
Propetamphos$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
Diazinon (Dimpylate)$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
Disulfoton$_A$	-	-	-	<0.10	-	-	-	mg/kg	0.1	A-T-056
Chlorpyrifos-methyl$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
Parathion (Ethyl Parathion)$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
Methyl Parathion$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
Pirimiphos-methyl$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
Fenitrothion$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
Fensulphothion$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
Fenthion$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
Malathion$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
Chlorfenvinphos$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
Chlorpyrifos$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
Trichloronate$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
Prothiofos (Tokuthion)$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056

Envirolab Job Number: 23/10280

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10280/1	23/10280/5	23/10280/9	23/10280/10	23/10280/11	23/10280/12	23/10280/13	Units	Limit of Detection	Method ref
Client Sample No	101	102	103	101	102	103	104			
Client Sample ID	R22-TP102	R22-BH106	R22-BH205	RedP-BH-10	RedP-BH-10	RedP-BH-10	RedP-BH-10			
Depth to Top	0.20	0.50	1.00	0.20	0.50	1.00	1.50			
Depth To Bottom										
Date Sampled	12-Oct-23	12-Oct-23	12-Oct-23	12-Oct-23	12-Oct-23	12-Oct-23	12-Oct-23			
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES			
Sample Matrix Code	6ABE	3	3	6AE	6ABDE	6AB	6AB			
Ethion$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
Triazophos$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
Carbophenothion$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
Phosalone$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
Azinphos-methyl$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
Azinphos-ethyl$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
Coumaphos$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056
gamma-Hexachlorocyclohexane (HCH)$_A$	-	-	-	<0.01	-	-	-	mg/kg	0.01	A-T-056

Envirolab Job Number: 23/10280

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10280/1	23/10280/5	23/10280/9	23/10280/10	23/10280/11	23/10280/12	23/10280/13	Units	Limit of Detection	Method ref
Client Sample No	101	102	103	101	102	103	104			
Client Sample ID	R22-TP102	R22-BH106	R22-BH205	RedP-BH-10	RedP-BH-10	RedP-BH-10	RedP-BH-10			
Depth to Top	0.20	0.50	1.00	0.20	0.50	1.00	1.50			
Depth To Bottom										
Date Sampled	12-Oct-23	12-Oct-23	12-Oct-23	12-Oct-23	12-Oct-23	12-Oct-23	12-Oct-23			
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES			
Sample Matrix Code	6ABE	3	3	6AE	6ABDE	6AB	6AB			
PAH-16MS										
Acenaphthene$_A^{M\#}$	<0.01	<0.01	<0.01	-	-	0.06	0.11	mg/kg	0.01	A-T-019s
Acenaphthylene$_A^{M\#}$	<0.01	<0.01	<0.01	-	-	0.05	0.09	mg/kg	0.01	A-T-019s
Anthracene$_A^{M\#}$	<0.02	<0.02	<0.02	-	-	0.18	0.31	mg/kg	0.02	A-T-019s
Benzo(a)anthracene$_A^{M\#}$	<0.04	<0.04	<0.04	-	-	0.85	1.68	mg/kg	0.04	A-T-019s
Benzo(a)pyrene$_A^{M\#}$	0.06	<0.04	<0.04	-	-	0.88	1.78	mg/kg	0.04	A-T-019s
Benzo(b)fluoranthene$_A^{M\#}$	0.07	<0.05	<0.05	-	-	1.12	2.21	mg/kg	0.05	A-T-019s
Benzo(ghi)perylene$_A^{M\#}$	<0.05	<0.05	<0.05	-	-	0.60	1.06	mg/kg	0.05	A-T-019s
Benzo(k)fluoranthene$_A^{M\#}$	<0.07	<0.07	<0.07	-	-	0.46	0.87	mg/kg	0.07	A-T-019s
Chrysene$_A^{M\#}$	<0.06	<0.06	<0.06	-	-	0.85	1.66	mg/kg	0.06	A-T-019s
Dibenzo(ah)anthracene$_A$	<0.04	<0.04	<0.04	-	-	0.13	0.24	mg/kg	0.04	A-T-019s
Fluoranthene$_A^{M\#}$	<0.08	<0.08	<0.08	-	-	1.74	3.54	mg/kg	0.08	A-T-019s
Fluorene$_A^{M\#}$	<0.01	<0.01	<0.01	-	-	0.06	0.12	mg/kg	0.01	A-T-019s
Indeno(123-cd)pyrene$_A^{M\#}$	0.04	<0.03	<0.03	-	-	0.67	1.26	mg/kg	0.03	A-T-019s
Naphthalene $_A^{M\#}$	<0.03^U	<0.03^U	<0.03^U	-	-	<0.03^U	0.04^U	mg/kg	0.03	A-T-019s
Phenanthrene$_A^{M\#}$	<0.03	<0.03	<0.03	-	-	0.65	1.15	mg/kg	0.03	A-T-019s
Pyrene$_A^{M\#}$	<0.07	<0.07	<0.07	-	-	1.44	2.77	mg/kg	0.07	A-T-019s
Total PAH-16MS$_A$	0.17	<0.08	<0.08	-	-	9.74	18.9	mg/kg	0.01	A-T-019s

Envirolab Job Number: 23/10280

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10280/1	23/10280/5	23/10280/9	23/10280/10	23/10280/11	23/10280/12	23/10280/13	Units	Limit of Detection	Method ref
Client Sample No	101	102	103	101	102	103	104			
Client Sample ID	R22-TP102	R22-BH106	R22-BH205	RedP-BH-10	RedP-BH-10	RedP-BH-10	RedP-BH-10			
Depth to Top	0.20	0.50	1.00	0.20	0.50	1.00	1.50			
Depth To Bottom										
Date Sampled	12-Oct-23	12-Oct-23	12-Oct-23	12-Oct-23	12-Oct-23	12-Oct-23	12-Oct-23			
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES			
Sample Matrix Code	6ABE	3	3	6AE	6ABDE	6AB	6AB			
Speciated PCB-WHO12										
PCB BZ 81$_{A}^{M\#}$	-	-	-	-	-	<0.005^{U}	-	mg/kg	0.005	A-T-004s
PCB BZ 105$_{A}^{M\#}$	-	-	-	-	-	<0.005^{U}	-	mg/kg	0.005	A-T-004s
PCB BZ 114$_{A}^{M\#}$	-	-	-	-	-	<0.005^{U}	-	mg/kg	0.005	A-T-004s
PCB BZ 118$_{A}^{M\#}$	-	-	-	-	-	<0.007	-	mg/kg	0.007	A-T-004s
PCB BZ 123$_{A}^{M\#}$	-	-	-	-	-	<0.005^{U}	-	mg/kg	0.005	A-T-004s
PCB BZ 126$_{A}^{M\#}$	-	-	-	-	-	<0.005^{U}	-	mg/kg	0.005	A-T-004s
PCB BZ 156$_{A}^{M\#}$	-	-	-	-	-	<0.005^{U}	-	mg/kg	0.005	A-T-004s
PCB BZ 157$_{A}^{M\#}$	-	-	-	-	-	<0.005^{U}	-	mg/kg	0.005	A-T-004s
PCB BZ 167$_{A}^{M\#}$	-	-	-	-	-	<0.005^{U}	-	mg/kg	0.005	A-T-004s
PCB BZ 169$_{A}^{M\#}$	-	-	-	-	-	<0.005^{U}	-	mg/kg	0.005	A-T-004s
PCB BZ 189$_{A}^{M\#}$	-	-	-	-	-	<0.005^{U}	-	mg/kg	0.005	A-T-004s
PCB BZ 77$_{A}^{M\#}$	-	-	-	-	-	<0.005^{U}	-	mg/kg	0.005	A-T-004s
Total Speciated PCB-WHO12$_{A}^{M\#}$	-	-	-	-	-	<0.007	-	mg/kg	0.005	A-T-004s

Envirolab Job Number: 23/10280

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10280/1	23/10280/5	23/10280/9	23/10280/10	23/10280/11	23/10280/12	23/10280/13	Units	Limit of Detection	Method ref
Client Sample No	101	102	103	101	102	103	104			
Client Sample ID	R22-TP102	R22-BH106	R22-BH205	RedP-BH-10	RedP-BH-10	RedP-BH-10	RedP-BH-10			
Depth to Top	0.20	0.50	1.00	0.20	0.50	1.00	1.50			
Depth To Bottom										
Date Sampled	12-Oct-23	12-Oct-23	12-Oct-23	12-Oct-23	12-Oct-23	12-Oct-23	12-Oct-23			
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES			
Sample Matrix Code	6ABE	3	3	6AE	6ABDE	6AB	6AB			
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$$^{M\#}$	-	-	-	-	-	5	-	mg/kg	1	A-T-055s
Ali >C21-C35$_A$$^{M\#}$	-	-	-	-	-	22	-	mg/kg	1	A-T-055s
Total Aliphatics$_A$	-	-	-	-	-	28	-	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$$^{M\#}$	-	-	-	-	-	4	-	mg/kg	1	A-T-055s
Aro >C16-C21$_A$$^{M\#}$	-	-	-	-	-	18	-	mg/kg	1	A-T-055s
Aro >C21-C35$_A$$^{M\#}$	-	-	-	-	-	61	-	mg/kg	1	A-T-055s
Total Aromatics$_A$	-	-	-	-	-	83	-	mg/kg	1	Calc-As Recd
TPH (Ali & Aro >C5-C35)$_A$	-	-	-	-	-	111	-	mg/kg	1	Calc-As Recd
BTEX - Benzene$_A$$^{\#}$	-	-	-	-	-	<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

Envirolab Job Number: 23/10280

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10280/14	23/10280/15						Units	Limit of Detection	Method ref
Client Sample No	105	106								
Client Sample ID	RedP-BH-10	RedP-BH-10								
Depth to Top	2.50	3.50								
Depth To Bottom										
Date Sampled	12-Oct-23	12-Oct-23								
Sample Type	SOIL - ES	SOLID								
Sample Matrix Code	6A	7								
% Stones >10mm$_A$	<0.1	<0.1						% w/w	0.1	A-T-044
pH$_D^{M\#}$	-	8.22^U						pH	0.01	A-T-031s
Total Organic Carbon$_D^{M\#}$	-	0.91^U						% w/w	0.03	A-T-032s
Leachate Prep BS EN 12457-1 (2:1) (1 no)$_A$	*	-								A-T-001
pH (leachable)$_A$	7.88	-						pH	0.01	A-T-031w
Ammoniacal nitrogen as N (leachable)$_A$	8.25	-						mg/l	0.05	A-T-033w
Chloride (leachable)$_A$	14.48	-						mg/l	1	A-T-026w
Fluoride (leachable)$_A$	0.47	-						mg/l	0.1	A-T-026w (F)
Sulphate (leachable)$_A$	113.85	-						mg/l	1	A-T-026w
Cyanide (free) (leachable)$_A$	<0.005	-						mg/l	0.005	A-T-042wFCN
Cyanide (total) (leachable)$_A$	<0.005	-						mg/l	0.005	A-T-042wTCN
Cyanide (complex) (leachable)	<0.005	-						mg/l	0.005	Calc
Phenol (leachable)$_A$	<0.01	-						mg/l	0.01	A-T-050w
Cresols (leachable)$_A$	<0.01	-						mg/l	0.01	A-T-050w
Resorcinol (leachable)$_A$	<0.01	-						mg/l	0.01	A-T-050w
Catechol (leachable)$_A$	<0.01	-						mg/l	0.01	A-T-050w
Xylenols & Ethylphenols (leachable)$_A$	<0.01	-						mg/l	0.01	A-T-050w
Naphthols (leachable)$_A$	<0.01	-						mg/l	0.01	A-T-050w
Trimethylphenol (leachable)$_A$	<0.01	-						mg/l	0.01	A-T-050w
Phenols (total by HPLC) (leachable)$_A$	<0.01	-						mg/l	0.01	A-T-050w
Antimony (leachable)$_A$	7	-						µg/l	1	A-T-025w
Arsenic (leachable)$_A$	4	-						µg/l	1	A-T-025w
Boron (leachable)$_A$	204	-						µg/l	10	A-T-025w
Barium (leachable)$_A$	67	-						µg/l	1	A-T-025w
Beryllium (leachable)$_A$	<1	-						µg/l	1	A-T-025w
Cadmium (leachable)$_A$	<1	-						µg/l	1	A-T-025w
Copper (leachable)$_A$	9	-						µg/l	4	A-T-025w
Chromium (leachable)$_A$	<1	-						µg/l	1	A-T-025w
Chromium (hexavalent) (leachable)$_A$	<0.05	-						mg/l	0.05	A-T-040w
Chromium (trivalent)	<0.05	-						mg/l	0.05	Calc
Iron (leachable)$_A$	211	-						µg/l	10	A-T-025w
Lead (leachable)$_A$	11	-						µg/l	1	A-T-025w
Manganese (leachable)$_A$	254	-						µg/l	1	A-T-025w

Envirolab Job Number: 23/10280

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10280/14	23/10280/15						Units	Limit of Detection	Method ref
Client Sample No	105	106								
Client Sample ID	RedP-BH-10	RedP-BH-10								
Depth to Top	2.50	3.50								
Depth To Bottom										
Date Sampled	12-Oct-23	12-Oct-23								
Sample Type	SOIL - ES	SOLID								
Sample Matrix Code	6A	7								
Magnesium (leachable)$_A$	5	-						mg/l	1	A-T-049w
Mercury (leachable)$_A$	<0.1	-						µg/l	0.1	A-T-025w
Molybdenum (leachable)$_A$	38	-						µg/l	1	A-T-025w
Nickel (leachable)$_A$	6	-						µg/l	2	A-T-025w
Selenium (leachable)$_A$	<1	-						µg/l	1	A-T-025w
Vanadium (leachable)$_A$	4	-						µg/l	1	A-T-025w
Zinc (leachable)$_A$	26	-						µg/l	2	A-T-025w
Calcium (leachable)$_A$	47	-						mg/l	1	A-T-049w

Report Notes

General
This report shall not be reproduced, except in full, without written approval from Envirolab.
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 **six 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.
The client Sample No, Client Sample ID, Depth to top, Depth to Bottom and Date Sampled are all provided by the client.
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.

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 "^"	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
N/A	Not applicable

Asbestos
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
Quantification of asbestos is a 3 stage process including visual identification, hand picking and weighing, and fibre counting by sedimentation/phase contrast optical microscopy if required. 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) quantification by sedimentation is performed. 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.

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^{o}C / 11550µS/cm @ 20^{o}C fall outside the accreditation range and as such are unaccredited.

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

Envirolab Deviating Samples Report

Units 7&8 Sandpits Business Park, Mottram Road, Hyde, SK14 3AR
Tel. 0161 368 4921 email. ask@envlab.co.uk

Client: Structural Soils Limited (Hemel Hempstead), 18 Frogmore Road, Hemel Hempstead, UK, HP3 9RT

Project: Sealink Richborough

Clients Project No: 563607

Project No: 23/10280

Date Received: 18/10/2023 (am)

Cool Box Temperatures (°C): 12.4 - 12.7

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	23/10280/1	23/10280/5	23/10280/9	23/10280/10	23/10280/11	23/10280/12	23/10280/13	23/10280/14	23/10280/15
Client Sample No	101	102	103	101	102	103	104	105	106
Client Sample ID/Depth	R22-TP102 0.20m	R22-BH106 0.50m	R22-BH205 1.00m	RedP-BH-10 0.20m	RedP-BH-10 0.50m	RedP-BH-10 1.00m	RedP-BH-10 1.50m	RedP-BH-10 2.50m	RedP-BH-10 3.50m
Date Sampled	12/10/23	12/10/23	12/10/23	12/10/23	12/10/23	12/10/23	12/10/23	12/10/23	12/10/23
A-T-004s					26/10/2023	26/10/2023			26/10/2023
A-T-007s					25/10/2023				25/10/2023
A-T-019s	27/10/2023	27/10/2023	27/10/2023		27/10/2023	27/10/2023	27/10/2023		27/10/2023
A-T-022s					27/10/2023	27/10/2023			27/10/2023
A-T-024s	26/10/2023	26/10/2023	26/10/2023			26/10/2023	26/10/2023		
A-T-025w		26/10/2023			30/10/2023		26/10/2023	26/10/2023	30/10/2023
A-T-026s	30/10/2023	30/10/2023	30/10/2023			30/10/2023	30/10/2023		
A-T-026w		25/10/2023			30/10/2023		25/10/2023	25/10/2023	30/10/2023
A-T-026w (F)		25/10/2023			30/10/2023		25/10/2023	25/10/2023	30/10/2023
A-T-027s	26/10/2023	26/10/2023	26/10/2023			26/10/2023	26/10/2023		
A-T-030s					26/10/2023				26/10/2023
A-T-031s	26/10/2023	26/10/2023	26/10/2023		26/10/2023	26/10/2023	26/10/2023		26/10/2023
A-T-031w		25/10/2023			30/10/2023		25/10/2023	25/10/2023	30/10/2023
A-T-032s	31/10/2023	31/10/2023	31/10/2023		31/10/2023	31/10/2023	31/10/2023		31/10/2023
A-T-032w					30/10/2023				30/10/2023
A-T-033w		27/10/2023					27/10/2023	27/10/2023	
A-T-037w					30/10/2023				30/10/2023
A-T-040s	26/10/2023	26/10/2023	26/10/2023			26/10/2023	26/10/2023		
A-T-040w		25/10/2023					25/10/2023	25/10/2023	
A-T-042sFCN	25/10/2023	25/10/2023	25/10/2023			25/10/2023	25/10/2023		
A-T-042wFCN		27/10/2023					27/10/2023	27/10/2023	
A-T-042wTCN		27/10/2023					27/10/2023	27/10/2023	
A-T-044	26/10/2023	26/10/2023	26/10/2023	26/10/2023	26/10/2023	26/10/2023	26/10/2023	26/10/2023	26/10/2023
A-T-045	20/10/2023	20/10/2023	20/10/2023			20/10/2023	20/10/2023		
A-T-049w		26/10/2023					26/10/2023	26/10/2023	
A-T-050s	27/10/2023	27/10/2023	27/10/2023			27/10/2023	27/10/2023		
A-T-050w		27/10/2023			30/10/2023		27/10/2023	27/10/2023	30/10/2023
A-T-055s						29/10/2023			
A-T-056				30/10/2023					
A-T-ANCs					26/10/2023				26/10/2023
Calc	26/10/2023	27/10/2023	26/10/2023			26/10/2023	27/10/2023	27/10/2023	
Calc-As Recd						29/10/2023			

Lab Sample ID	23/10280/1	23/10280/5	23/10280/9	23/10280/10	23/10280/11	23/10280/12	23/10280/13	23/10280/14	23/10280/15
Client Sample No	101	102	103	101	102	103	104	105	106
Client Sample ID/Depth	R22-TP102 0.20m	R22-BH106 0.50m	R22-BH205 1.00m	RedP-BH-10 0.20m	RedP-BH-10 0.50m	RedP-BH-10 1.00m	RedP-BH-10 1.50m	RedP-BH-10 2.50m	RedP-BH-10 3.50m
Date Sampled	12/10/23	12/10/23	12/10/23	12/10/23	12/10/23	12/10/23	12/10/23	12/10/23	12/10/23
Calc-no stones					30/10/2023				30/10/2023
Probe (w)					30/10/2023				30/10/2023

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

Certificate of Analysis

Report No.: **23-07242-2**

Issue No.: **2**
Date of Issue **08/04/2024**

Customer Details:	Envirolab Ltd, 7 - 8 Sandpits Business Park, Mottram Road, Hyde, Greater Manchester, SK14 3AR, United Kingdom
Customer Contact:	[redacted]
Customer Order No.:	P0752565
Customer Reference:	Not Supplied
Quotation Reference:	Q22-00104 (Issue: 36)
Description:	1 geo sample
Date Received:	20/10/2023
Date Started:	23/10/2023
Date Completed:	16/11/2023
Test Methods:	Details available on request (refer to SOP code against relevant result/s)
Notes:	This report replaces issue 1 in its entirety

[redacted]

Approved By: [redacted], **LIMS Administrator**

This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service.
This certificate shall not be reproduced except in full without the prior written approval of the laboratory.
Observations and interpretations are outside of the scope of UKAS accreditation.
Results reported herein relate only to the items supplied to the laboratory for testing.
Results on an Interim Report are not dry-weight corrected.
Where the laboratory is not responsible for the sampling, results apply to the sample(s) as they were received.
The laboratory shall not be responsible for any information that is supplied by the customer that may affect the validity of results.

RPS Environmental Management Limited trading as RPS Mountainheath. Registered in England No. 01756175.
13 St Martins Way, Bedford, Bedfordshire, MK42 0LF. T +44 1462 480 400
A member of the RPS Group plc. Terms and conditions apply - copy on request

Results Summary

Report No.: 23-07242-2

Customer Reference: Not Supplied

Customer Order No: P0752565

Customer Sample No	**RedP-BH-10 0.20m**
RPS Sample No	35184
Sample Type	**GEO**
Sample Matrix	SOIL
Sampling Date	12/10/2023

Determinand	CAS No	Codes	SOP	RL	Units	
carbaryl	63-25-2	N	L001	0.1	mg/kg DW	< 0.10 (T)
2,4,5-trichlorophenoxyacetic acid (2,4,5-T)	93-76-5	N	L340	0.1	mg/kg DW	< 0.10 (T)
2,4,5-TP (Fenoprop)	93-72-1	N	L340	0.1	mg/kg DW	< 0.10 (T)
2,4-dichlorophenoxyacetic acid (2,4-D)	94-75-7	N	L340	0.1	mg/kg DW	< 0.10 (T)
acifluorfen	50594-66-6	N	L340	0.1	mg/kg DW	< 0.10 (T)
bentazone	25057-89-0	N	L340	0.1	mg/kg DW	< 0.10 (T)
clopyralid	1702-17-6	N	L340	0.1	mg/kg DW	< 0.10 (T)
dichlorprop (2,4-DP)	120-36-5	N	L340	0.1	mg/kg DW	< 0.10 (T)
dinoseb (DNBP)	88-85-7	N	L340	0.1	mg/kg DW	< 0.10 (T)
2-methyl-4-chlorophenoxyacetic acid (MCPA)	94-74-6	N	L340	0.1	mg/kg DW	< 0.10 (T)
mecoprop (MCPP)	7085-19-0	N	L340	0.1	mg/kg DW	< 0.10 (T)
pentachlorophenol (PCP)	87-86-5	N	L340	0.1	mg/kg DW	< 0.10 (T)
2,3,6-trichlorobenzoic acid (2,3,6-TBA)	50-31-7	N	L340	0.1	mg/kg DW	< 0.10 (T)
4-(2,4-dichlorophenoxy)butanoic acid (2,4-DB)	94-82-6	N	L340	0.1	mg/kg DW	< 0.10 (T)
4-chlorophenoxyacetic acid (4-CPA)	122-88-3	N	L340	0.1	mg/kg DW	< 0.10 (T)
benazolin	3813-05-6	N	L340	0.1	mg/kg DW	< 0.10 (T)
bromoxynil	1689-84-5	N	L340	0.1	mg/kg DW	< 0.10 (T)
dicamba	1918-00-9	N	L340	0.1	mg/kg DW	< 0.10 (T)
diclofop	40843-25-2	N	L340	0.1	mg/kg DW	< 0.10 (T)
2-methyl-4,6-dinitrophenol (DNOC)	534-52-1	N	L340	0.1	mg/kg DW	< 0.10 (T)
flamprop	58667-63-3	N	L340	0.1	mg/kg DW	< 0.10 (T)
fluroxypyr	69377-81-7	N	L340	0.1	mg/kg DW	< 0.10 (T)
ioxynil	1689-83-4	N	L340	0.1	mg/kg DW	< 0.10 (T)
MCPB	94-81-5	N	L340	0.1	mg/kg DW	< 0.10 (T)
picloram	1918-02-1	N	L340	0.1	mg/kg DW	< 0.10 (T)
triclopyr	55335-06-3	N	L340	0.1	mg/kg DW	< 0.10 (T)
alachlor	15972-60-8	N	G029	0.02	mg/kg AR	< 0.02 (T)
chloroxuron	1982-47-4	N	L025	0.1	mg/kg DW	< 0.10 (T)
chlortoluron	15545-48-9	N	L025	0.1	mg/kg DW	< 0.10 (T)
diflubenzuron	35367-38-5	N	L025	0.1	mg/kg DW	< 0.10 (T)
dimefuron	34205-21-5	N	L025	0.1	mg/kg DW	< 0.10 (T)
diuron	330-54-1	N	L025	0.1	mg/kg DW	< 0.10 (T)
isoproturon	34123-59-6	N	L025	0.1	mg/kg DW	< 0.10 (T)
linuron	330-55-2	N	L025	0.1	mg/kg DW	< 0.10 (T)
methabenzthiazuron	18691-97-9	N	L025	0.1	mg/kg DW	< 0.10 (T)
metoxuron	19937-59-8	N	L025	0.1	mg/kg DW	< 0.10 (T)
monolinuron	1746-81-2	N	L025	0.1	mg/kg DW	< 0.10 (T)
monuron	150-68-5	N	L025	0.1	mg/kg DW	< 0.10 (T)

Results Summary

Report No.: 23-07242-2

Customer Reference: Not Supplied

Customer Order No: P0752565

Customer Sample No	**RedP-BH-10 0.20m**
RPS Sample No	35184
Sample Type	**GEO**
Sample Matrix	SOIL
Sampling Date	12/10/2023

Determinand	CAS No	Codes	SOP	RL	Units	
pencycuron	66063-05-6	N	L025	0.1	mg/kg DW	< 0.10 (T)
bifenthrin	82657-04-3	N	G127	0.1	mg/kg DW	< 0.10 (T)
cyfluthrin, total	68359-37-5	N	G127	0.1	mg/kg DW	< 0.10 (T)
cyhalothrin, total	68085-85-8	N	G127	0.1	mg/kg DW	< 0.10 (T)
cypermethrin, total	52315-07-8	N	G127	0.1	mg/kg DW	< 0.10 (T)
deltamethrin	52918-63-5	N	G127	0.1	mg/kg DW	< 0.10 (T)
fenvalerate	51630-58-1	N	G127	0.1	mg/kg DW	< 0.10 (T)
permethrin, total	52645-53-1	N	G127	0.1	mg/kg DW	< 0.10 (T)
resmethrin	10453-86-8	N	G127	0.1	mg/kg DW	< 0.10 (T)
tetramethrin	7696-12-0	N	G127	0.1	mg/kg DW	< 0.10 (T)

Comments

Report No.: 23-07242-2

Customer Reference: Not Supplied

Customer Order No: P0752565

Job	Description	Document History
23-07242	n/a	Sample numbers changed as per client request

Deviating Samples

Report No.: 23-07242-2

Customer Reference: Not Supplied

Customer Order No: P0752565

Our policy on Deviating Samples has been implemented in accordance with UKAS Policy on Deviating Samples (TPS63).
RPS is not responsible for the integrity of samples as received, unless RPS personnel performed the sampling. Samples submitted may be declared to be deviating.
Where applicable the analysis method remains UKAS accredited, however results reported for a deviating sample may be compromised.
Where no sampling date was supplied, samples have been declared to be deviating. If the date can be supplied, results may be reissued if assessed not deviating.
Where the sample container used was unsuitable or broken, the sample is flagged as deviating and re-sampling/re-submisson may be required.

RPS No.	Customer No.	Customer ID	Date Sampled	Containers Received	Deviating	Reason for Deviation
35184	RedP-BH-10 0.20m		12/10/2023	100 mL amber glass jar	**Yes**	No sampling time provided.

Report No.: 23-07242-2

Type	Matrix Code	Description
Food	CEREALPROD	Cereals, grains & products
Food	DRIEDFRUIT	Dried fruits
Food	FRIEDBAKED	Fried or baked food
Food	LEGUME	Legumes
Food	MEAT	Meat
Food	POWDERED	Powdered food
Food	PULSE	Pulses (dried legumes)
Food	VEGETABLES	Vegetables
Gas	TDTUBE	TD Tube
Gas	TENAX	Tenax Tube
Gas	TUBE	Tube
Gas	VAPOUR	Gas
Geological	SED_MAR	Marine Sediment
Geological	SED_RIV	River Sediment
Geological	SLUDG_SOL	Sludge (solid only)
Geological	SOIL	Soil
Liquid	BEVERAGE	Beverage
Liquid	BLOOD	Blood
Liquid	CONDENSATE	Condensate
Liquid	FOAM_LIQ	Liquid foam
Liquid	FORMULATN	Formula
Liquid	LEACHATE	Leachate
Liquid	OIL/GREASE	Oil or grease
Liquid	SLUDG_LIQ	Sludge (liquid only)
Liquid	SOLVENT	Solvent
Liquid	URINE	Urine
Sludge	SLUDG_WHL	Sludge for bulk route
Solid	BADGE	Badge
Solid	BEDDING	Bedding
Solid	BIOTA	Biota (general)
Solid	BIOTA_F	Biota (fish)
Solid	BIOTA_SF	Biota (shellfish)
Solid	CONSTRCTN	Construction materials
Solid	FABRIC	Fabrics & furnishing materials
Solid	FEED	Animal feed
Solid	FERTILISER	Fertiliser
Solid	FILTER	Filter
Solid	FOAM	Solid foam material
Solid	PACKAGING	Packaging material
Solid	PAPER	Paper
Solid	PLANT	Plant (vegetation)
Solid	POWDER	Powder
Solid	SWAB	Swab
Water	BAL	Ballast Water
Water	BIL	Bilge Water
Water	DW	Drinking Water
Water	EFFLUENT	Effluent
Water	GW	Ground Water
Water	INFLUENT	Influent
Water	SALTW	Salt Water
Water	SW	Surface Water
Water	TW	Tap Water
Water	W	Water

Key Code	Description
N	Not Accredited Test
U	UKAS Accredited Test - UKAS accreditation is only implied if the report carries the UKAS logo
UF	UKAS Flexible Scope Test
M	MCERTS Accredited Test - MCERTS accreditation is only implied if the report carries the MCERTS logo
O	Marine Management Organisation (MMO) Validated
SN	Subcontracted to approved laboratory not accredited for the test
SU	Subcontracted to approved laboratory UKAS Accredited for the test
SM	Subcontracted to approved laboratory MCERTS/UKAS Accredited for the test
SIN	Subcontracted to internal RPS Group laboratory not accredited for the test
SIU	Subcontracted to internal RPS Group laboratory UKAS Accredited for the test
SIM	Subcontracted to internal RPS Group laboratory MCERTS/UKAS Accredited for the test
*	Modified standard method
I/S (in results)	Insufficient Sample
U/S (in results)	Unsuitable Sample
S/C (in results)	See Comments
ND (in results)	Not Detected
DW (in units)	Results are expressed on a dry weight basis
L (in results)	Result is outside normal limits

Sample Type	Sample Retention and Disposal Period
Foodstuff	1 month (if frozen) from the issue date of this report
Waters	2 weeks from the issue date of this report
Other Liquids	1 month from the issue date of this report
Solids / Soils	1 month from the issue date of this report
Sediments	1 month from the issue date of this report

Note: Sample retention may be subject to agreement with the customer for particular projects

Where the dry solids value of a sample is low (<50%), reporting limits are automatically raised for all determinants analysed on an as-received basis.

Soil Typing	Description
Type 1	Clay - Brown
Type 2	Clay - Grey/Black
Type 3	Sand
Type 4	Top Soil (Standard)
Type 5	Top Soil (High Peat)
Type 6	Made Ground (>50% Clay)
Type 7	Made Ground (>50% Sand)
Type 8	Made Ground (>50% Top Soil)
Type X	Other

Dev code	Description
D	No sampling date provided.
T	No sampling time provided.
Z	Temperature of samples exceeded in transit/storage.
V	Excessive headspace for volatile determinands.
P	Sample submitted without required preservative(s).
C	Incorrect container.
H	Holding time exceeded (sampling to extraction).
X	Holding time exceeded (sampling to receipt).

Note: Where the following information is included in this certificate, it has usually been supplied by the customer: Customer Sample ID, Sample Location, Sample Depth, Sampling Date and Sampling Time. The laboratory shall not be responsible for any information that is supplied by the customer that may affect the validity of results.

Units 7 & 8, Sandpits Business Park
Mottram Road, Hyde, Cheshire, SK14 3AR

Final Test Report

Envirolab Job Number:	23/10280
Issue Number:	1 Date: 17-Nov-23
Client:	Structural Soils Limited (Hemel Hempstead) 18 Frogmore Road Hemel Hempstead UK HP3 9RT
Project Manager:	[redacted]
Project Name:	Sealink Richborough
Project Ref:	563607
Order No:	N/A
Date Samples Received:	18-Oct-23
Date Instructions Received:	18-Oct-23
Date Analysis Completed:	17-Nov-23

Notes - Soil analysis

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

For samples with Matrix Codes 1 - 6 natural stones >10mm are removed or excluded from the sample prior to analysis and reported results corrected to a whole sample basis.

For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis.

Notes - General

This report shall not be reproduced, except in full, without written approval from Envirolab.

Subscript "A" indicates analysis performed on the sample as received. "D" indicates analysis performed on the dried sample, crushed to pass a 2mm sieve, unless asbestos is found to be present in which case all analysis is performed on the sample as received.

All analysis is performed on the dried and crushed sample for samples with Matrix Code 7 and this supercedes any "A" subscripts.

All analysis is performed on the sample as received for soil samples from outside the European Union and this supercedes any "D" subscripts

For complex, multi-compound analysis, quality control results do not always fall within chart limits for every compound and we have criteria for reporting in these situations.

If results are in italic font they are associated with such quality control failures and may be unreliable.

A deviating samples 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

Predominant Matrix Codes: 1 = SAND, 2 = LOAM, 3 = CLAY, 4 = LOAM/SAND, 5 = SAND/CLAY, 6 = CLAY/LOAM, 7 = OTHER, 8 = Asbestos bulk ID sample

Secondary Matrix Codes: A = contains stones, B = contains construction rubble, C = contains visible hydrocarbons, D = contains glass/metal, E = contains roots/twigs.

IS indicates Insufficient sample for analysis, NDP indicates No Determination Possible and NAD indicates No Asbestos Detected.

Analytical results reflect the quality of the sample at the time of analysis only. Opinions and interpretations expressed are outside the scope of our accreditation.

Please contact us if you need any further information.

HWOL TPH Code: EH_CU_1D_AL: Extractable hydrocarbons - i.e. everything extracted by the solvent(s), Clean-up - e.g. by florisil, silica gel, GC - Single coil gas chromatography, Aliphatics only

[redacted]

Client Manager

envirolab

Landfill WAC analysis must not be used for hazardous waste classification purposes. This analysis is only applicable for landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Sample Details						Landfill Waste Acceptance Criteria Limits		
Lab Sample ID	Method	ISO17025	MCERTS	23/10280/11				
Client Sample Number				102		Inert Waste Landfill	Stable Non-reactive Hazardous Waste in Non-Hazardous Landfill	Hazardous Waste Landfill
Client Sample ID				RedP-BH-10				
Depth to Top				0.5				
Depth to Bottom								
Date Sampled				12/10/2023				
Sample Type				Soil - ES				
Sample Matrix Code				6ABDE				
Solid Waste Analysis								
pH (pH Units)$_D$	A-T-031	N	N	**8.22**		-	>6	-
ANC to pH 4 (mol/kg)$_D$	A-T-ANC	N	N	**0.76**		-	to be evaluated	to be evaluated
ANC to pH 6 (mol/kg)$_D$	A-T-ANC	N	N	**0.13**		-	to be evaluated	to be evaluated
Loss on Ignition (%)$_D$	A-T-030	N	N	**4.1**		-	-	10
Total Organic Carbon (%)$_D$	A-T-032	N	N	**1.48**		3	5	6
PAH Sum of 17 (mg/kg) $_A$	A-T-019	N	N	**7.88**		100	-	-
Mineral Oil (mg/kg)$_{A\ EH_CU_1D_AL}$	A-T-007	N	N	**17**		500	-	-
Sum of 7 PCBs (mg/kg)$_A$	A-T-004	N	N	**<0.007**		1	-	-
Sum of BTEX (mg/kg)$_A$	A-T-022	N	N	**<0.01**		6	-	-
Eluate Analysis				**10:1**	**10:1**	**Limit values for compliance leaching test using**		
				mg/l	**mg/kg**	**BS EN 12457-2 at L/S 10 l/kg (mg/kg)**		
Arsenic	A-T-025	N	N	<0.001	**<0.01**	0.5	2	25
Barium	A-T-025	N	N	0.017	**0.170**	20	100	300
Cadmium	A-T-025	N	N	<0.001	**<0.01**	0.04	1	5
Chromium	A-T-025	N	N	<0.001	**<0.01**	0.5	10	70
Copper	A-T-025	N	N	<0.004	**<0.04**	2	50	100
Mercury	A-T-025	N	N	<0.0005	**<0.005**	0.01	0.2	2
Molybdenum	A-T-025	N	N	0.008	**0.080**	0.5	10	30
Nickel	A-T-025	N	N	<0.002	**<0.02**	0.4	10	40
Lead	A-T-025	N	N	0.004	**0.040**	0.5	10	50
Antimony	A-T-025	N	N	<0.001	**<0.01**	0.06	0.7	5
Selenium	A-T-025	N	N	<0.001	**<0.01**	0.1	0.5	7
Zinc	A-T-025	N	N	0.008	**0.080**	4	50	200
Chloride	A-T-026	N	N	2	**16**	800	15000	25000
Fluoride	A-T-026	N	N	0.7	**7.0**	10	150	500
Sulphate as SO_4	A-T-026	N	N	<1.00	**<10**	1000	20000	50000
Total Dissolved Solids	A-T-035	N	N	72	**720**	4000	60000	100000
Phenol Index	A-T-050	N	N	<0.01	**<0.1**	1	-	-
Dissolved Organic Carbon	A-T-032	N	N	<2.0	**<200**	500	800	1000
Leach Test Information								
pH (pH Units)	A-T-031	N	N	7.9				
Conductivity (µS/cm)	A-T-037	N	N	144				
Mass Sample (kg)				0.191				
Dry Matter (%)	A-T-044	N	N	91.7				

Stated acceptance limits are for guidance only and Envirolab cannot be held responsible for any discrepancies with current legislation

Landfill WAC analysis must not be used for hazardous waste classification purposes. This analysis is only applicable for landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Sample Details						Landfill Waste Acceptance Criteria Limits		
Lab Sample ID	Method	ISO17025	MCERTS	23/10280/15				
Client Sample Number				106		Inert Waste Landfill	Stable Non-reactive Hazardous Waste in Non-Hazardous Landfill	Hazardous Waste Landfill
Client Sample ID				RedP-BH-10				
Depth to Top				3.5				
Depth to Bottom								
Date Sampled				12/10/2023				
Sample Type				Solid				
Sample Matrix Code				7				
Solid Waste Analysis								
pH (pH Units)$_D$	A-T-031	N	N	**8.22**		-	>6	-
ANC to pH 4 (mol/kg)$_D$	A-T-ANC	N	N	**4.93**		-	to be evaluated	to be evaluated
ANC to pH 6 (mol/kg)$_D$	A-T-ANC	N	N	**0.17**		-	to be evaluated	to be evaluated
Loss on Ignition (%)$_D$	A-T-030	N	N	**2.1**		-	-	10
Total Organic Carbon (%)$_D$	A-T-032	N	N	**0.91**		3	5	6
PAH Sum of 17 (mg/kg) $_A$	A-T-019	N	N	**13.8**		100	-	-
Mineral Oil (mg/kg)$_{A\ EH_CU_1D_AL}$	A-T-007	N	N	**34**		500	-	-
Sum of 7 PCBs (mg/kg)$_A$	A-T-004	N	N	**<0.007**		1	-	-
Sum of BTEX (mg/kg)$_A$	A-T-022	N	N	**<0.01**		6	-	-
Eluate Analysis				**10:1 mg/l**	**10:1 mg/kg**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg (mg/kg)**		
Arsenic	A-T-025	N	N	0.003	**0.030**	0.5	2	25
Barium	A-T-025	N	N	0.019	**0.190**	20	100	300
Cadmium	A-T-025	N	N	<0.001	**<0.01**	0.04	1	5
Chromium	A-T-025	N	N	<0.001	**<0.01**	0.5	10	70
Copper	A-T-025	N	N	<0.004	**<0.04**	2	50	100
Mercury	A-T-025	N	N	<0.0005	**<0.005**	0.01	0.2	2
Molybdenum	A-T-025	N	N	0.007	**0.070**	0.5	10	30
Nickel	A-T-025	N	N	0.006	**0.060**	0.4	10	40
Lead	A-T-025	N	N	0.002	**0.020**	0.5	10	50
Antimony	A-T-025	N	N	0.005	**0.050**	0.06	0.7	5
Selenium	A-T-025	N	N	<0.001	**<0.01**	0.1	0.5	7
Zinc	A-T-025	N	N	0.010	**0.100**	4	50	200
Chloride	A-T-026	N	N	4	**38**	800	15000	25000
Fluoride	A-T-026	N	N	0.3	**3.0**	10	150	500
Sulphate as SO_4	A-T-026	N	N	28	**280**	1000	20000	50000
Total Dissolved Solids	A-T-035	N	N	97	**970**	4000	60000	100000
Phenol Index	A-T-050	N	N	<0.01	**<0.1**	1	-	-
Dissolved Organic Carbon	A-T-032	N	N	<2.0	**<200**	500	800	1000
Leach Test Information								
pH (pH Units)	A-T-031	N	N	7.8				
Conductivity (µS/cm)	A-T-037	N	N	195				
Mass Sample (kg)				0.224				
Dry Matter (%)	A-T-044	N	N	78.2				

Stated acceptance limits are for guidance only and Envirolab cannot be held responsible for any discrepancies with current legislation

envirolab
Hattersley Science & Technology Park
Stockport Road, Hattersley, SK14 3QU

FINAL ANALYTICAL TEST REPORT
SUPPLEMENT TO TEST REPORT 23/10281/1

Amendments: Request for project/sample information change

Envirolab Job Number: 23/10281
Issue Number: 2 **Date:** 04 April, 2024

Client: Structural Soils Limited (Hemel Hempstead)
18 Frogmore Road
Hemel Hempstead
UK
HP3 9RT

Project Manager: Ian Warne/Nick Harper
Project Name: Sealink Richborough
Project Ref: 563607
Order No: N/A
Date Samples Received: 18/10/23
Date Instructions Received: 18/10/23
Date Analysis Completed: 31/10/23

Approved by:



Deputy Client Services Supervisor

Envirolab Job Number: 23/10281

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10281/1	23/10281/2	23/10281/3					Units	Limit of Detection	Method ref
Client Sample No	108	109	110							
Client Sample ID	RedP-BH-10	RedP-BH-10	RedP-BH-10							
Depth to Top	5.50	6.50	7.50							
Depth To Bottom										
Date Sampled	13-Oct-23	13-Oct-23	13-Oct-23							
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES							
Sample Matrix Code	6ABE	6AB	6AB							
% Stones >10mm$_A$	3.1	2.7	9.7					% w/w	0.1	A-T-044
Leachate Prep BS EN 12457-1 (2:1) (1 no)$_A$	*	-	-							A-T-001
pH (leachable)$_A$	9.90	-	-					pH	0.01	A-T-031w
Ammoniacal nitrogen as N (leachable)$_A$	3.45	-	-					mg/l	0.05	A-T-033w
Chloride (leachable)$_A$	46.49	-	-					mg/l	1	A-T-026w
Fluoride (leachable)$_A$	0.34	-	-					mg/l	0.1	A-T-026w (F)
Sulphate (leachable)$_A$	49.43	-	-					mg/l	1	A-T-026w
Cyanide (free) (leachable)$_A$	<0.005	-	-					mg/l	0.005	A-T-042wFCN
Cyanide (total) (leachable)$_A$	<0.005	-	-					mg/l	0.005	A-T-042wTCN
Cyanide (complex) (leachable)	<0.005	-	-					mg/l	0.005	Calc
Phenol (leachable)$_A$	0.02	-	-					mg/l	0.01	A-T-050w
Cresols (leachable)$_A$	<0.01	-	-					mg/l	0.01	A-T-050w
Resorcinol (leachable)$_A$	<0.01	-	-					mg/l	0.01	A-T-050w
Catechol (leachable)$_A$	<0.01	-	-					mg/l	0.01	A-T-050w
Xylenols & Ethylphenols (leachable)$_A$	<0.01	-	-					mg/l	0.01	A-T-050w
Naphthols (leachable)$_A$	<0.01	-	-					mg/l	0.01	A-T-050w
Trimethylphenol (leachable)$_A$	<0.01	-	-					mg/l	0.01	A-T-050w
Phenols (total by HPLC) (leachable)$_A$	0.02	-	-					mg/l	0.01	A-T-050w
Antimony (leachable)$_A$	18	-	-					µg/l	1	A-T-025w
Arsenic (leachable)$_A$	39	-	-					µg/l	1	A-T-025w
Boron (leachable)$_A$	61	-	-					µg/l	10	A-T-025w
Barium (leachable)$_A$	21	-	-					µg/l	1	A-T-025w
Beryllium (leachable)$_A$	<1	-	-					µg/l	1	A-T-025w
Cadmium (leachable)$_A$	<1	-	-					µg/l	1	A-T-025w
Copper (leachable)$_A$	36	-	-					µg/l	4	A-T-025w
Chromium (leachable)$_A$	2	-	-					µg/l	1	A-T-025w
Chromium (hexavalent) (leachable)$_A$	<0.05	-	-					mg/l	0.05	A-T-040w
Chromium (trivalent)	<0.05	-	-					mg/l	0.05	Calc
Iron (leachable)$_A$	106	-	-					µg/l	10	A-T-025w
Lead (leachable)$_A$	24	-	-					µg/l	1	A-T-025w
Manganese (leachable)$_A$	19	-	-					µg/l	1	A-T-025w
Magnesium (leachable)$_A$	<1	-	-					mg/l	1	A-T-049w
Mercury (leachable)$_A$	<0.1	-	-					µg/l	0.1	A-T-025w

Envirolab Job Number: 23/10281

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10281/1	23/10281/2	23/10281/3					Units	Limit of Detection	Method ref
Client Sample No	108	109	110							
Client Sample ID	RedP-BH-10	RedP-BH-10	RedP-BH-10							
Depth to Top	5.50	6.50	7.50							
Depth To Bottom										
Date Sampled	13-Oct-23	13-Oct-23	13-Oct-23							
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES							
Sample Matrix Code	6ABE	6AB	6AB							
Molybdenum (leachable)$_A$	25	-	-					µg/l	1	A-T-025w
Nickel (leachable)$_A$	15	-	-					µg/l	2	A-T-025w
Selenium (leachable)$_A$	4	-	-					µg/l	1	A-T-025w
Vanadium (leachable)$_A$	500	-	-					µg/l	1	A-T-025w
Zinc (leachable)$_A$	32	-	-					µg/l	2	A-T-025w
Calcium (leachable)$_A$	42	-	-					mg/l	1	A-T-049w

Envirolab Job Number: 23/10281

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10281/1	23/10281/2	23/10281/3					Units	Limit of Detection	Method ref
Client Sample No	108	109	110							
Client Sample ID	RedP-BH-10	RedP-BH-10	RedP-BH-10							
Depth to Top	5.50	6.50	7.50							
Depth To Bottom										
Date Sampled	13-Oct-23	13-Oct-23	13-Oct-23							
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES							
Sample Matrix Code	6ABE	6AB	6AB							
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: 23/10281

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10281/1	23/10281/2	23/10281/3					Units	Limit of Detection	Method ref
Client Sample No	108	109	110							
Client Sample ID	RedP-BH-10	RedP-BH-10	RedP-BH-10							
Depth to Top	5.50	6.50	7.50							
Depth To Bottom										
Date Sampled	13-Oct-23	13-Oct-23	13-Oct-23							
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES							
Sample Matrix Code	6ABE	6AB	6AB							
Speciated PCB-WHO12										
PCB BZ $81_A^{M\#}$	-	-	<0.005^U					mg/kg	0.005	A-T-004s
PCB BZ $105_A^{M\#}$	-	-	<0.005^U					mg/kg	0.005	A-T-004s
PCB BZ $114_A^{M\#}$	-	-	<0.005^U					mg/kg	0.005	A-T-004s
PCB BZ $118_A^{M\#}$	-	-	<0.007					mg/kg	0.007	A-T-004s
PCB BZ $123_A^{M\#}$	-	-	<0.005^U					mg/kg	0.005	A-T-004s
PCB BZ $126_A^{M\#}$	-	-	<0.005^U					mg/kg	0.005	A-T-004s
PCB BZ $156_A^{M\#}$	-	-	<0.005^U					mg/kg	0.005	A-T-004s
PCB BZ $157_A^{M\#}$	-	-	<0.005^U					mg/kg	0.005	A-T-004s
PCB BZ $167_A^{M\#}$	-	-	<0.005^U					mg/kg	0.005	A-T-004s
PCB BZ $169_A^{M\#}$	-	-	<0.005^U					mg/kg	0.005	A-T-004s
PCB BZ $189_A^{M\#}$	-	-	<0.005^U					mg/kg	0.005	A-T-004s
PCB BZ $77_A^{M\#}$	-	-	<0.005^U					mg/kg	0.005	A-T-004s
Total Speciated PCB-WHO12$_A^{M\#}$	-	-	<0.007					mg/kg	0.005	A-T-004s

Envirolab Job Number: 23/10281

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10281/1	23/10281/2	23/10281/3					Units	Limit of Detection	Method ref
Client Sample No	108	109	110							
Client Sample ID	RedP-BH-10	RedP-BH-10	RedP-BH-10							
Depth to Top	5.50	6.50	7.50							
Depth To Bottom										
Date Sampled	13-Oct-23	13-Oct-23	13-Oct-23							
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES							
Sample Matrix Code	6ABE	6AB	6AB							
Envirolab WAC E (Inert, SNRHW + Hazardous Landfills) 10:1										
$pH_D^{M\#}$	-	8.86	-					pH	0.01	A-T-031s
ANC to $pH4_D$	-	1.05	-					mol/kg	0.01	A-T-ANCs
ANC to $pH6_D$	-	0.15	-					mol/kg	0.01	A-T-ANCs
Loss on ignition $(550degC)_D^{M\#}$	-	3.9	-					% w/w	0.6	A-T-030s
Total $Organic\ Carbon_D^{M\#}$	-	1.78	-					% w/w	0.03	A-T-032s
PAH (total 17)$_A$	-	8.54	-					mg/kg	0.08	A-T-019s
Mineral Oil (>C10-C40)$_A$	-	17	-					mg/kg	10	A-T-007s
PCB Total$_A$	-	<0.007	-					mg/kg	0.007	A-T-004s
BTEX (total)$_A$	-	<0.01	-					mg/kg	0.01	A-T-022s
Leachate Prep BS EN 12457-2 (10:1) WAC$_A$	-	*	-							A-T-001
Mass Sample (1 stage WAC)	-	0.213	-					Kg	0.001	Calc-no stones
Dry Matter (Dry Solids) at 40C	-	82.3	-					% w/w	0.1	Calc-no stones
pH (10:1 leachable)$_A$	-	7.83	-					pH	0.01	A-T-031w
Electrical conductivity (10:1 leachable)$_A$	-	193	-					µs/cm	10	A-T-037w
Total Dissolved Solids (10:1 leachable)$_A$	-	97	-					mg/l	20	Probe (w)
Chloride (10:1 leachable)$_A$	-	10.48	-					mg/l	1	A-T-026w
Fluoride (10:1 leachable)$_A$	-	0.91	-					mg/l	0.1	A-T-026w (F)
Sulphate (10:1 leachable)$_A$	-	55.61	-					mg/l	1	A-T-026w
Phenols (10:1 leachable)$_A$	-	<0.01	-					mg/l	0.01	A-T-050w
DOC (10:1 leachable)$_A^{\#}$	-	<2.0	-					mg/l	2	A-T-032w
Antimony (10:1 leachable)$_A$	-	0.019	-					mg/l	0.001	A-T-025w
Arsenic (10:1 leachable)$_A$	-	0.030	-					mg/l	0.001	A-T-025w
Barium (10:1 leachable)$_A$	-	0.058	-					mg/l	0.001	A-T-025w
Cadmium (10:1 leachable)$_A$	-	<0.001	-					mg/l	0.001	A-T-025w
Copper (10:1 leachable)$_A$	-	0.050	-					mg/l	0.004	A-T-025w
Chromium (10:1 leachable)$_A$	-	0.002	-					mg/l	0.001	A-T-025w
Lead (10:1 leachable)$_A$	-	0.143	-					mg/l	0.001	A-T-025w
Mercury (10:1 leachable)$_A$	-	<0.0005	-					mg/l	0.0005	A-T-025w
Molybdenum (10:1 leachable)$_A$	-	0.021	-					mg/l	0.001	A-T-025w
Nickel (10:1 leachable)$_A$	-	0.007	-					mg/l	0.002	A-T-025w
Selenium (10:1 leachable)$_A$	-	0.002	-					mg/l	0.001	A-T-025w
Zinc (10:1 leachable)$_A$	-	0.107	-					mg/l	0.002	A-T-025w

Envirolab Job Number: 23/10281

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10281/1	23/10281/2	23/10281/3					Units	Limit of Detection	Method ref
Client Sample No	108	109	110							
Client Sample ID	RedP-BH-10	RedP-BH-10	RedP-BH-10							
Depth to Top	5.50	6.50	7.50							
Depth To Bottom										
Date Sampled	13-Oct-23	13-Oct-23	13-Oct-23							
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES							
Sample Matrix Code	6ABE	6AB	6AB							
WAC-A 10:1 cumulative mg/kg										
Antimony (10:1 cumulative mg/kg)	-	0.19	-					mg/kg	0.01	Calc-no stones
Arsenic (10:1 cumulative mg/kg)	-	0.30	-					mg/kg	0.01	Calc-no stones
Barium (10:1 cumulative mg/kg)	-	0.58	-					mg/kg	0.01	Calc-no stones
Cadmium (10:1 cumulative mg/kg)	-	<0.01	-					mg/kg	0.01	Calc-no stones
Chloride (10:1 cumulative mg/kg)	-	105	-					mg/kg	10	Calc-no stones
Chromium (10:1 cumulative mg/kg)	-	0.02	-					mg/kg	0.01	Calc-no stones
Copper (10:1 cumulative mg/kg)	-	0.50	-					mg/kg	0.04	Calc-no stones
DOC (10:1 cumulative mg/kg)	-	<200	-					mg/kg	200	Calc-no stones
Fluoride (10:1 cumulative mg/kg)	-	9	-					mg/kg	1	Calc-no stones
Lead (10:1 cumulative mg/kg)	-	1.43	-					mg/kg	0.01	Calc-no stones
Mercury (10:1 cumulative mg/kg)	-	<0.005	-					mg/kg	0.005	Calc-no stones
Molybdenum (10:1 cumulative mg/kg)	-	0.21	-					mg/kg	0.01	Calc-no stones
Nickel (10:1 cumulative mg/kg)	-	0.07	-					mg/kg	0.02	Calc-no stones
Phenols (10:1 cumulative mg/kg)#	-	<0.1	-					mg/kg	0.1	Calc-no stones
Selenium (10:1 cumulative mg/kg)	-	0.02	-					mg/kg	0.01	Calc-no stones
Sulphate (10:1 cumulative mg/kg)	-	556	-					mg/kg	10	Calc-no stones
Total Dissolved Solids (10:1 cumulative mg/kg)	-	970	-					mg/kg	200	Calc-no stones
Zinc (10:1 cumulative mg/kg)	-	1.07	-					mg/kg	0.02	Calc-no stones

Envirolab Job Number: 23/10281

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10281/1	23/10281/2	23/10281/3					Units	Limit of Detection	Method ref
Client Sample No	108	109	110							
Client Sample ID	RedP-BH-10	RedP-BH-10	RedP-BH-10							
Depth to Top	5.50	6.50	7.50							
Depth To Bottom										
Date Sampled	13-Oct-23	13-Oct-23	13-Oct-23							
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES							
Sample Matrix Code	6ABE	6AB	6AB							
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$_A^{M\#}$	-	-	<1					mg/kg	1	A-T-055s
Ali >C21-C35$_A^{M\#}$	-	-	1					mg/kg	1	A-T-055s
Total Aliphatics$_A$	-	-	1					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$_A^{M\#}$	-	-	<1					mg/kg	1	A-T-055s
Aro >C16-C21$_A^{M\#}$	-	-	2					mg/kg	1	A-T-055s
Aro >C21-C35$_A^{M\#}$	-	-	6					mg/kg	1	A-T-055s
Total Aromatics$_A$	-	-	8					mg/kg	1	Calc-As Recd
TPH (Ali & Aro >C5-C35)$_A$	-	-	9					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 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.
The client Sample No, Client Sample ID, Depth to top, Depth to Bottom and Date Sampled are all provided by the client.
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.

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 "^"	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
N/A	Not applicable

Asbestos
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
Quantification of asbestos is a 3 stage process including visual identification, hand picking and weighing, and fibre counting by sedimentation/phase contrast optical microscopy if required. 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) quantification by sedimentation is performed. 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.

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^{o}C / 11550µS/cm @ 20^{o}C fall outside the accreditation 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: Structural Soils Limited (Hemel Hempstead), 18 Frogmore Road, Hemel Hempstead, UK, HP3 9RT

Project: Sealink Richborough

Clients Project No: 563607

Project No: 23/10281

Date Received: 18/10/2023 (am)

Cool Box Temperatures (°C): 13.1

NO DEVIATIONS IDENTIFIED with respect to sampling dates or containers received.

Note: 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 (for water samples 5 ± 3°C), ISO 18400-105:2017, then the concentration of any affected analytes may differ from that at the time of sampling.

Envirolab Analysis Dates

Lab Sample ID	23/10281/1	23/10281/2	23/10281/3
Client Sample No	108	109	110
Client Sample ID/Depth	RedP-BH-10 5.50m	RedP-BH-10 6.50m	RedP-BH-10 7.50m
Date Sampled	13/10/23	13/10/23	13/10/23
A-T-004s		26/10/2023	26/10/2023
A-T-007s		26/10/2023	
A-T-019s		30/10/2023	
A-T-022s		27/10/2023	27/10/2023
A-T-025w	27/10/2023	30/10/2023	
A-T-026w	27/10/2023	30/10/2023	
A-T-026w (F)	27/10/2023	30/10/2023	
A-T-030s		26/10/2023	
A-T-031s		26/10/2023	
A-T-031w	30/10/2023	30/10/2023	
A-T-032s		31/10/2023	
A-T-032w		30/10/2023	
A-T-033w	31/10/2023		
A-T-037w		30/10/2023	
A-T-040w	27/10/2023		
A-T-042wFCN	30/10/2023		
A-T-042wTCN	30/10/2023		
A-T-044	26/10/2023	26/10/2023	26/10/2023
A-T-045			19/10/2023
A-T-049w	30/10/2023		
A-T-050w	27/10/2023	30/10/2023	
A-T-055s			29/10/2023
A-T-ANCs		26/10/2023	
Calc	30/10/2023		
Calc-As Recd			29/10/2023
Calc-no stones		30/10/2023	
Probe (w)		30/10/2023	

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

Units 7 & 8, Sandpits Business Park
Mottram Road, Hyde, Cheshire, SK14 3AR

Final Test Report

Envirolab Job Number:	23/10281
Issue Number:	1
Date:	31-Oct-23

Client: Structural Soils Limited (Hemel Hempstead)
18 Frogmore Road
Hemel Hempstead
UK
HP3 9RT
HP3 9RT

Project Manager:	Ian Warne/Nick Harper
Project Name:	Sealink Richborough
Project Ref:	563607
Order No:	N/A
Date Samples Received:	18-Oct-23
Date Instructions Received:	18-Oct-23
Date Analysis Completed:	31-Oct-23

Notes - Soil analysis

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

For samples with Matrix Codes 1 - 6 natural stones >10mm are removed or excluded from the sample prior to analysis and reported results corrected to a whole sample basis.

For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis.

Notes - General

This report shall not be reproduced, except in full, without written approval from Envirolab.

Subscript "A" indicates analysis performed on the sample as received. "D" indicates analysis performed on the dried sample, crushed to pass a 2mm sieve, unless asbestos is found to be present in which case all analysis is performed on the sample as received.

All analysis is performed on the dried and crushed sample for samples with Matrix Code 7 and this supercedes any "A" subscripts.

All analysis is performed on the sample as received for soil samples from outside the European Union and this supercedes any "D" subscripts

For complex, multi-compound analysis, quality control results do not always fall within chart limits for every compound and we have criteria for reporting in these situations.

If results are in italic font they are associated with such quality control failures and may be unreliable.

A deviating samples 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

Predominant Matrix Codes: 1 = SAND, 2 = LOAM, 3 = CLAY, 4 = LOAM/SAND, 5 = SAND/CLAY, 6 = CLAY/LOAM, 7 = OTHER, 8 = Asbestos bulk ID sample

Secondary Matrix Codes: A = contains stones, B = contains construction rubble, C = contains visible hydrocarbons, D = contains glass/metal, E = contains roots/twigs.

IS indicates Insufficient sample for analysis, NDP indicates No Determination Possible and NAD indicates No Asbestos Detected.

Analytical results reflect the quality of the sample at the time of analysis only. Opinions and interpretations expressed are outside the scope of our accreditation.

Please contact us if you need any further information.

HWOL TPH Code: EH_CU_1D_AL: Extractable hydrocarbons - i.e. everything extracted by the solvent(s), Clean-up - e.g. by florisil, silica gel, GC - Single coil gas chromatography, Aliphatics only

Approved by:

[redacted]

Deputy Client Services Supervisor

Landfill WAC analysis must not be used for hazardous waste classification purposes. This analysis is only applicable for landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Sample Details						Landfill Waste Acceptance Criteria Limits		
Lab Sample ID	Method	ISO17025	MCERTS	23/10281/2		Inert Waste Landfill	Stable Non-reactive Hazardous Waste in Non-Hazardous Landfill	Hazardous Waste Landfill
Client Sample Number				**109**				
Client Sample ID				RedP-BH-10				
Depth to Top				6.5				
Depth to Bottom								
Date Sampled				13/10/2023				
Sample Type				Soil - ES				
Sample Matrix Code				6AB				
Solid Waste Analysis								
pH (pH Units)$_D$	A-T-031	N	N	**8.86**		-	>6	-
ANC to pH 4 (mol/kg)$_D$	A-T-ANC	N	N	**1.05**		-	to be evaluated	to be evaluated
ANC to pH 6 (mol/kg)$_D$	A-T-ANC	N	N	**0.15**		-	to be evaluated	to be evaluated
Loss on Ignition (%)$_D$	A-T-030	N	N	**3.9**		-	-	10
Total Organic Carbon (%)$_D$	A-T-032	N	N	**1.78**		3	5	6
PAH Sum of 17 (mg/kg)$_A$	A-T-019	N	N	**8.54**		100	-	-
Mineral Oil (mg/kg)$_{A\ EH_CU_1D_AL}$	A-T-007	N	N	**17**		500	-	-
Sum of 7 PCBs (mg/kg)$_A$	A-T-004	N	N	**<0.007**		1	-	-
Sum of BTEX (mg/kg)$_A$	A-T-022	N	N	**<0.01**		6	-	-
Eluate Analysis				**10:1** mg/l	**10:1** mg/kg	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg (mg/kg)**		
Arsenic	A-T-025	N	N	0.030	**0.300**	0.5	2	25
Barium	A-T-025	N	N	0.058	**0.580**	20	100	300
Cadmium	A-T-025	N	N	<0.001	**<0.01**	0.04	1	5
Chromium	A-T-025	N	N	0.002	**0.020**	0.5	10	70
Copper	A-T-025	N	N	0.050	**0.500**	2	50	100
Mercury	A-T-025	N	N	<0.0005	**<0.005**	0.01	0.2	2
Molybdenum	A-T-025	N	N	0.021	**0.210**	0.5	10	30
Nickel	A-T-025	N	N	0.007	**0.070**	0.4	10	40
Lead	A-T-025	N	N	0.143	**1.430**	0.5	10	50
Antimony	A-T-025	N	N	0.019	**0.190**	0.06	0.7	5
Selenium	A-T-025	N	N	0.002	**0.020**	0.1	0.5	7
Zinc	A-T-025	N	N	0.107	**1.070**	4	50	200
Chloride	A-T-026	N	N	10	**105**	800	15000	25000
Fluoride	A-T-026	N	N	0.9	**9.0**	10	150	500
Sulphate as SO_4	A-T-026	N	N	56	**556**	1000	20000	50000
Total Dissolved Solids	A-T-035	N	N	97	**970**	4000	60000	100000
Phenol Index	A-T-050	N	N	<0.01	**<0.1**	1	-	-
Dissolved Organic Carbon	A-T-032	N	N	<2.0	**<200**	500	800	1000
Leach Test Information								
pH (pH Units)	A-T-031	N	N	7.8				
Conductivity (µS/cm)	A-T-037	N	N	193				
Mass Sample (kg)				0.213				
Dry Matter (%)	A-T-044	N	N	82.3				

Stated acceptance limits are for guidance only and Envirolab cannot be held responsible for any discrepancies with current legislation

Units 7 & 8 Sandpits Business Park
Mottram Road, Hyde, Cheshire, SK14 3AR

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 23/10384
Issue Number: 1 **Date:** 17 November, 2023

Client: Structural Soils Limited (Hemel Hempstead)
18 Frogmore Road
Hemel Hempstead
UK
HP3 9RT

Project Manager: [redacted]
Project Name: Sealink Richborough
Project Ref: 563607
Order No: N/A
Date Samples Received: 20/10/23
Date Instructions Received: 20/10/23
Date Analysis Completed: 17/11/23

Approved by:

[redacted]

Client Manager

Envirolab Job Number: 23/10384

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10384/1	23/10384/2	23/10384/3	23/10384/4	23/10384/5			Units	Limit of Detection	Method ref
Client Sample No	101	102	103	101	102					
Client Sample ID	R22-TP202	R22-TP202	R22-TP202	R22-BH103	R22-BH103					
Depth to Top	0.20	0.50	1.00	0.20	0.50					
Depth To Bottom										
Date Sampled	18-Oct-23	18-Oct-23	18-Oct-23	18-Oct-23	18-Oct-23					
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES					
Sample Matrix Code	4A	5A	6	3E	3					
% Moisture at 105C$_A$	-	20.7	-	32.3	-			% w/w	0.1	A-T-044
% Stones >10mm$_A$	<0.1	<0.1	<0.1	<0.1	<0.1			% w/w	0.1	A-T-044
pH$_D^{M\#}$	6.98	7.72	8.24	7.87	-			pH	0.01	A-T-031s
Sulphate (water sol 2:1)$_D^{M\#}$	-	<0.01	-	0.06	-			g/l	0.01	A-T-026s
Sulphur (total)$_D$	-	73	-	615	-			mg/kg	50	A-T-024s
Cyanide (free)$_A^{M\#}$	-	<1	-	<1	-			mg/kg	1	A-T-042sFCN
Phenols - Total by HPLC$_A$	-	<0.2	-	<0.2	-			mg/kg	0.2	A-T-050s
Organic Matter$_D^{M\#}$	-	0.9	-	4.7	-			% w/w	0.1	A-T-032s
Total Organic Carbon$_D^{M\#}$	1.15	0.50	0.19	2.70	-			% w/w	0.03	A-T-032s
Fraction of organic carbon$_D^{\#}$	-	0.0050	-	0.0270	-			N/A	0.0003	A-T-032s
Arsenic$_D^{M\#}$	-	2	-	10	-			mg/kg	1	A-T-024s
Barium$_D$	-	33	-	41	-			mg/kg	1	A-T-024s
Beryllium$_D$	-	<0.5	-	1.2	-			mg/kg	0.5	A-T-024s
Boron (water soluble)$_D^{M\#}$	-	<1.0	-	4.6	-			mg/kg	1	A-T-027s
Cadmium$_D^{M\#}$	-	<0.5	-	<0.5	-			mg/kg	0.5	A-T-024s
Copper$_D^{M\#}$	-	6	-	12	-			mg/kg	1	A-T-024s
Chromium$_D^{M\#}$	-	25	-	45	-			mg/kg	1	A-T-024s
Chromium (hexavalent)$_D$	-	<1	-	<1	-			mg/kg	1	A-T-040s
Chromium (trivalent)	-	25	-	45	-			mg/kg	1	Calc
Lead$_D^{M\#}$	-	6	-	18	-			mg/kg	1	A-T-024s
Manganese$_D$	-	222	-	253	-			mg/kg	1	A-T-024s
Mercury$_D$	-	<0.17	-	<0.17	-			mg/kg	0.17	A-T-024s
Molybdenum$_D^{M\#}$	-	<1	-	<1	-			mg/kg	1	A-T-024s
Nickel$_D^{M\#}$	-	9	-	22	-			mg/kg	1	A-T-024s
Selenium$_D^{M\#}$	-	<1	-	<1	-			mg/kg	1	A-T-024s
Vanadium$_D^{M\#}$	-	28	-	77	-			mg/kg	1	A-T-024s
Zinc$_D^{M\#}$	-	31	-	68	-			mg/kg	5	A-T-024s
Leachate Prep BS EN 12457-1 (2:1) (1 no)$_A$	-	*	*	*	*					A-T-001
pH (leachable)$_A$	-	7.52	7.49	7.38	7.34			pH	0.01	A-T-031w
Ammoniacal nitrogen as N (leachable)$_A$	-	0.14	<0.05	<0.05	<0.05			mg/l	0.05	A-T-033w
Chloride (leachable)$_A$	-	1.72	1.42	9.75	95.8			mg/l	1	A-T-026w
Fluoride (leachable)$_A$	-	1.34	0.34	0.40	1.60			mg/l	0.1	A-T-026w (F)
Sulphate (leachable)$_A$	-	14.83	3.40	21.85	56.70			mg/l	1	A-T-026w

Envirolab Job Number: 23/10384

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10384/1	23/10384/2	23/10384/3	23/10384/4	23/10384/5			Units	Limit of Detection	Method ref
Client Sample No	101	102	103	101	102					
Client Sample ID	R22-TP202	R22-TP202	R22-TP202	R22-BH103	R22-BH103					
Depth to Top	0.20	0.50	1.00	0.20	0.50					
Depth To Bottom										
Date Sampled	18-Oct-23	18-Oct-23	18-Oct-23	18-Oct-23	18-Oct-23					
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES					
Sample Matrix Code	4A	5A	6	3E	3					
Cyanide (free) (leachable)$_A$	-	<0.005	<0.005	<0.005	<0.005			mg/l	0.005	A-T-042wFCN
Cyanide (total) (leachable)$_A$	-	<0.005	<0.005	<0.005	<0.005			mg/l	0.005	A-T-042wTCN
Cyanide (complex) (leachable)	-	<0.005	<0.005	<0.005	<0.005			mg/l	0.005	Calc
Phenol (leachable)$_A$	-	<0.01	<0.01	<0.01	<0.01			mg/l	0.01	A-T-050w
Cresols (leachable)$_A$	-	<0.01	<0.01	<0.01	<0.01			mg/l	0.01	A-T-050w
Resorcinol (leachable)$_A$	-	<0.01	<0.01	<0.01	<0.01			mg/l	0.01	A-T-050w
Catechol (leachable)$_A$	-	<0.01	<0.01	<0.01	<0.01			mg/l	0.01	A-T-050w
Xylenols & Ethylphenols (leachable)$_A$	-	<0.01	<0.01	<0.01	<0.01			mg/l	0.01	A-T-050w
Naphthols (leachable)$_A$	-	<0.01	<0.01	<0.01	<0.01			mg/l	0.01	A-T-050w
Trimethylphenol (leachable)$_A$	-	<0.01	<0.01	<0.01	<0.01			mg/l	0.01	A-T-050w
Phenols (total by HPLC) (leachable)$_A$	-	<0.01	<0.01	<0.01	<0.01			mg/l	0.01	A-T-050w
Antimony (leachable)$_A$	-	<1	<1	<1	<1			µg/l	1	A-T-025w
Arsenic (leachable)$_A$	-	6	3	4	2			µg/l	1	A-T-025w
Boron (leachable)$_A$	-	56	37	89	349			µg/l	10	A-T-025w
Barium (leachable)$_A$	-	355	230	8	4			µg/l	1	A-T-025w
Beryllium (leachable)$_A$	-	2	3	<1	<1			µg/l	1	A-T-025w
Cadmium (leachable)$_A$	-	<1	<1	<1	<1			µg/l	1	A-T-025w
Copper (leachable)$_A$	-	14	8	<4	<4			µg/l	4	A-T-025w
Chromium (leachable)$_A$	-	<1	<1	<1	<1			µg/l	1	A-T-025w
Chromium (hexavalent) (leachable)$_A$	-	<0.05	<0.05	<0.10	<0.10			mg/l	0.05	A-T-040w
Chromium (trivalent)	-	<0.05	<0.05	<0.10	<0.10			mg/l	0.05	Calc
Iron (leachable)$_A$	-	423	108	300	99			µg/l	10	A-T-025w
Lead (leachable)$_A$	-	5	7	3	2			µg/l	1	A-T-025w
Manganese (leachable)$_A$	-	52	20	11	2			µg/l	1	A-T-025w
Magnesium (leachable)$_A$	-	170	188	7	7			mg/l	1	A-T-049w
Mercury (leachable)$_A$	-	<0.1	<0.1	<0.1	<0.1			µg/l	0.1	A-T-025w
Molybdenum (leachable)$_A$	-	<1	<1	2	9			µg/l	1	A-T-025w
Nickel (leachable)$_A$	-	7	5	3	3			µg/l	2	A-T-025w
Selenium (leachable)$_A$	-	<1	<1	<1	<1			µg/l	1	A-T-025w
Vanadium (leachable)$_A$	-	21	8	7	4			µg/l	1	A-T-025w
Zinc (leachable)$_A$	-	34	33	12	18			µg/l	2	A-T-025w
Bentazone$_A$	<0.10	-	-	<0.10	-			mg/kg	0.1	Subcon RPS MH
Cypermethrin$_A$	<0.10	-	-	<0.10	-			mg/kg	0.1	Subcon RPS MH

Envirolab Job Number: 23/10384

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10384/1	23/10384/2	23/10384/3	23/10384/4	23/10384/5			Units	Limit of Detection	Method ref
Client Sample No	101	102	103	101	102					
Client Sample ID	R22-TP202	R22-TP202	R22-TP202	R22-BH103	R22-BH103					
Depth to Top	0.20	0.50	1.00	0.20	0.50					
Depth To Bottom										
Date Sampled	18-Oct-23	18-Oct-23	18-Oct-23	18-Oct-23	18-Oct-23					
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES					
Sample Matrix Code	4A	5A	6	3E	3					
Linuron$_A$	<0.10	-	-	<0.10	-			mg/kg	0.1	Subcon RPS MH
Alachlor$_A$	<0.02	-	-	<0.02	-			mg/kg	0.02	Subcon RPS MH
Carbaryl$_A$	<0.10	-	-	<0.10	-			mg/kg	0.1	Subcon RPS MH
Diuron$_A$	<0.10	-	-	<0.10	-			mg/kg	0.1	Subcon RPS MH
Isoproturon$_A$	<0.10	-	-	<0.10	-			mg/kg	0.1	Subcon RPS MH
MCPP; (Mecoprop)$_A$	<0.10	-	-	<0.10	-			mg/kg	0.1	Subcon RPS MH
Calcium (leachable)$_A$	-	149	166	19	23			mg/l	1	A-T-049w

Envirolab Job Number: 23/10384

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10384/1	23/10384/2	23/10384/3	23/10384/4	23/10384/5			Units	Limit of Detection	Method ref
Client Sample No	101	102	103	101	102					
Client Sample ID	R22-TP202	R22-TP202	R22-TP202	R22-BH103	R22-BH103					
Depth to Top	0.20	0.50	1.00	0.20	0.50					
Depth To Bottom										
Date Sampled	18-Oct-23	18-Oct-23	18-Oct-23	18-Oct-23	18-Oct-23					
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES					
Sample Matrix Code	4A	5A	6	3E	3					
Asbestos in Soil (inc. matrix) ^										
Asbestos in soil$_D$#	-	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	-					A-T-045
BTEX										
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
OCP+OPP Combined Pest Suite (incl. Atrazine and Simazine)										
Dichlobenil$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
Tecnazene$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
Trifluralin$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
alpha-Hexachlorocyclohexane (HCH)$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
Hexachlorobenzene (HCB) $_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
Simazine$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
Atrazine$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
beta-Hexachlorocyclohexane (HCH)$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
Quintozene (PCNB)$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
Chlorothalonil$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
delta-Hexachlorocyclohexane (HCH)$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
Triallate$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
Heptachlor$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
Aldrin$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
Triadimefon$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
Telodrin$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
Isodrin$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
Pendimethalin$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056

Lab Sample ID	23/10384/1	23/10384/2	23/10384/3	23/10384/4	23/10384/5			Units	Limit of Detection	Method ref
Client Sample No	101	102	103	101	102					
Client Sample ID	R22-TP202	R22-TP202	R22-TP202	R22-BH103	R22-BH103					
Depth to Top	0.20	0.50	1.00	0.20	0.50					
Depth To Bottom										
Date Sampled	18-Oct-23	18-Oct-23	18-Oct-23	18-Oct-23	18-Oct-23					
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES					
Sample Matrix Code	4A	5A	6	3E	3					
Heptachlor epoxide$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
trans-Chlordane (Gamma)$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
o,p-DDE (2,4)$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
Endosulphan I (Alpha)$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
cis-Chlordane (Alpha)$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
p,p-DDE (4,4)$_A$	0.03	-	-	<0.01	-			mg/kg	0.01	A-T-056
Dieldrin$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
o,p-DDD (2,4)$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
Endrin$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
Endosulphan II (Beta)$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
p,p-DDD (4,4)$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
o,p-DDT (2,4)$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
Endrin Aldehyde$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
Endrin Ketone$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
Endosulphan Sulphate$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
p,p-DDT (4,4)$_A$	0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
o,p-Methoxychlor$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
p,p-Methoxychlor$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
Permethrin I (cis)$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
Permethrin II (trans)$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
Dichlorvos$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
Mevinphos$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
Demeton-S$_A$	<0.50	-	-	<0.50	-			mg/kg	0.5	A-T-056
Demeton-O$_A$	<0.50	-	-	<0.50	-			mg/kg	0.5	A-T-056
Phorate$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
Dimethoate$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
Propetamphos$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
Diazinon (Dimpylate)$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
Disulfoton$_A$	<0.10	-	-	<0.10	-			mg/kg	0.1	A-T-056
Chlorpyrifos-methyl$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
Parathion (Ethyl Parathion)$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
Methyl Parathion$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
Pirimiphos-methyl$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
Fenitrothion$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056

Lab Sample ID	23/10384/1	23/10384/2	23/10384/3	23/10384/4	23/10384/5			Units	Limit of Detection	Method ref
Client Sample No	101	102	103	101	102					
Client Sample ID	R22-TP202	R22-TP202	R22-TP202	R22-BH103	R22-BH103					
Depth to Top	0.20	0.50	1.00	0.20	0.50					
Depth To Bottom										
Date Sampled	18-Oct-23	18-Oct-23	18-Oct-23	18-Oct-23	18-Oct-23					
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES					
Sample Matrix Code	4A	5A	6	3E	3					
Fensulphothion$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
Fenthion$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
Malathion$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
Chlorfenvinphos$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
Chlorpyrifos$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
Trichloronate$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
Prothiofos (Tokuthion)$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
Ethion$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
Triazophos$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
Carbophenothion$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
Phosalone$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
Azinphos-methyl$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
Azinphos-ethyl$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
Coumaphos$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056
gamma-Hexachlorocyclohexane (HCH)$_A$	<0.01	-	-	<0.01	-			mg/kg	0.01	A-T-056

Envirolab Job Number: 23/10384

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10384/1	23/10384/2	23/10384/3	23/10384/4	23/10384/5			Units	Limit of Detection	Method ref
Client Sample No	101	102	103	101	102					
Client Sample ID	R22-TP202	R22-TP202	R22-TP202	R22-BH103	R22-BH103					
Depth to Top	0.20	0.50	1.00	0.20	0.50					
Depth To Bottom										
Date Sampled	18-Oct-23	18-Oct-23	18-Oct-23	18-Oct-23	18-Oct-23					
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES					
Sample Matrix Code	4A	5A	6	3E	3					
PAH-16MS										
Acenaphthene$_A^{M\#}$	-	<0.01	-	<0.01	-			mg/kg	0.01	A-T-019s
Acenaphthylene$_A^{M\#}$	-	<0.01	-	<0.01	-			mg/kg	0.01	A-T-019s
Anthracene$_A^{M\#}$	-	<0.02	-	<0.02	-			mg/kg	0.02	A-T-019s
Benzo(a)anthracene$_A^{M\#}$	-	<0.04	-	<0.04	-			mg/kg	0.04	A-T-019s
Benzo(a)pyrene$_A^{M\#}$	-	<0.04	-	<0.04	-			mg/kg	0.04	A-T-019s
Benzo(b)fluoranthene$_A^{M\#}$	-	<0.05	-	<0.05	-			mg/kg	0.05	A-T-019s
Benzo(ghi)perylene$_A^{M\#}$	-	<0.05	-	<0.05	-			mg/kg	0.05	A-T-019s
Benzo(k)fluoranthene$_A^{M\#}$	-	<0.07	-	<0.07	-			mg/kg	0.07	A-T-019s
Chrysene$_A^{M\#}$	-	<0.06	-	<0.06	-			mg/kg	0.06	A-T-019s
Dibenzo(ah)anthracene$_A$	-	<0.04	-	<0.04	-			mg/kg	0.04	A-T-019s
Fluoranthene$_A^{M\#}$	-	<0.08	-	<0.08	-			mg/kg	0.08	A-T-019s
Fluorene$_A^{M\#}$	-	<0.01	-	<0.01	-			mg/kg	0.01	A-T-019s
Indeno(123-cd)pyrene$_A^{M\#}$	-	<0.03	-	<0.03	-			mg/kg	0.03	A-T-019s
Naphthalene $_A^{M\#}$	-	<0.03	-	<0.03	-			mg/kg	0.03	A-T-019s
Phenanthrene$_A^{M\#}$	-	<0.03	-	<0.03	-			mg/kg	0.03	A-T-019s
Pyrene$_A^{M\#}$	-	<0.07	-	<0.07	-			mg/kg	0.07	A-T-019s
Total PAH-16MS$_A$	-	<0.08	-	<0.08	-			mg/kg	0.01	A-T-019s

Envirolab Job Number: 23/10384

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10384/1	23/10384/2	23/10384/3	23/10384/4	23/10384/5			Units	Limit of Detection	Method ref
Client Sample No	101	102	103	101	102					
Client Sample ID	R22-TP202	R22-TP202	R22-TP202	R22-BH103	R22-BH103					
Depth to Top	0.20	0.50	1.00	0.20	0.50					
Depth To Bottom										
Date Sampled	18-Oct-23	18-Oct-23	18-Oct-23	18-Oct-23	18-Oct-23					
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES					
Sample Matrix Code	4A	5A	6	3E	3					
Speciated PCB-WHO12										
PCB BZ 81$_A^{M\#}$	-	-	-	<0.005	-			mg/kg	0.005	A-T-004s
PCB BZ 105$_A^{M\#}$	-	-	-	<0.005	-			mg/kg	0.005	A-T-004s
PCB BZ 114$_A^{M\#}$	-	-	-	<0.005	-			mg/kg	0.005	A-T-004s
PCB BZ 118$_A^{M\#}$	-	-	-	<0.007	-			mg/kg	0.007	A-T-004s
PCB BZ 123$_A^{M\#}$	-	-	-	<0.005	-			mg/kg	0.005	A-T-004s
PCB BZ 126$_A^{M\#}$	-	-	-	<0.005	-			mg/kg	0.005	A-T-004s
PCB BZ 156$_A^{M\#}$	-	-	-	<0.005	-			mg/kg	0.005	A-T-004s
PCB BZ 157$_A^{M\#}$	-	-	-	<0.005	-			mg/kg	0.005	A-T-004s
PCB BZ 167$_A^{M\#}$	-	-	-	<0.005	-			mg/kg	0.005	A-T-004s
PCB BZ 169$_A^{M\#}$	-	-	-	<0.005	-			mg/kg	0.005	A-T-004s
PCB BZ 189$_A^{M\#}$	-	-	-	<0.005	-			mg/kg	0.005	A-T-004s
PCB BZ 77$_A^{M\#}$	-	-	-	<0.005	-			mg/kg	0.005	A-T-004s
Total Speciated PCB-WHO12$_A^{M\#}$	-	-	-	<0.007	-			mg/kg	0.005	A-T-004s

Report Notes

General
This report shall not be reproduced, except in full, without written approval from Envirolab.
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 **six 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.
The client Sample No, Client Sample ID, Depth to top, Depth to Bottom and Date Sampled are all provided by the client.
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.

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 "^"	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
N/A	Not applicable

Asbestos
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
Quantification of asbestos is a 3 stage process including visual identification, hand picking and weighing, and fibre counting by sedimentation/phase contrast optical microscopy if required. 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) quantification by sedimentation is performed. 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.

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^{o}C / 11550µS/cm @ 20^{o}C fall outside the accreditation range and as such are unaccredited.

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

Envirolab Deviating Samples Report

Units 7&8 Sandpits Business Park, Mottram Road, Hyde, SK14 3AR
Tel. 0161 368 4921 email. ask@envlab.co.uk

Client: Structural Soils Limited (Hemel Hempstead), 18 Frogmore Road, Hemel Hempstead, UK, HP3 9RT

Project: Sealink Richborough

Clients Project No: 563607

Project No: 23/10384

Date Received: 20/10/2023 (am)

Cool Box Temperatures (°C): 14.3, 14.2

NO DEVIATIONS IDENTIFIED

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

Envirolab Analysis Dates

Lab Sample ID	23/10384/1	23/10384/2	23/10384/3	23/10384/4	23/10384/5
Client Sample No	101	102	103	101	102
Client Sample ID/Depth	R22-TP202 0.20m	R22-TP202 0.50m	R22-TP202 1.00m	R22-BH103 0.20m	R22-BH103 0.50m
Date Sampled	18/10/23	18/10/23	18/10/23	18/10/23	18/10/23
A-T-004s	01/11/2023		01/11/2023	01/11/2023	
A-T-007s	30/10/2023		30/10/2023	30/10/2023	
A-T-019s	30/10/2023	30/10/2023	30/10/2023	30/10/2023	
A-T-022s	31/10/2023		31/10/2023	31/10/2023	
A-T-024s		28/10/2023		28/10/2023	
A-T-025w	03/11/2023	29/10/2023	03/11/2023	03/11/2023	29/10/2023
A-T-026s		27/10/2023		27/10/2023	
A-T-026w	03/11/2023	30/10/2023	03/11/2023	03/11/2023	30/10/2023
A-T-026w (F)	03/11/2023	30/10/2023	03/11/2023	03/11/2023	30/10/2023
A-T-027s		30/10/2023		30/10/2023	
A-T-030s	30/10/2023		30/10/2023	30/10/2023	
A-T-031s	30/10/2023	30/10/2023	30/10/2023	30/10/2023	
A-T-031w	03/11/2023	30/10/2023	03/11/2023	03/11/2023	30/10/2023
A-T-032s	01/11/2023	01/11/2023	01/11/2023	01/11/2023	
A-T-032w	03/11/2023		03/11/2023	03/11/2023	
A-T-033w		31/10/2023	31/10/2023	31/10/2023	31/10/2023
A-T-037w	03/11/2023		03/11/2023	03/11/2023	
A-T-040s		27/10/2023		27/10/2023	
A-T-040w		30/10/2023	30/10/2023	30/10/2023	30/10/2023
A-T-042sFCN		01/11/2023		01/11/2023	
A-T-042wFCN		30/10/2023	30/10/2023	30/10/2023	30/10/2023
A-T-042wTCN		30/10/2023	30/10/2023	30/10/2023	30/10/2023
A-T-044	30/10/2023	30/10/2023	30/10/2023	30/10/2023	30/10/2023
A-T-045		24/10/2023		24/10/2023	
A-T-049w		30/10/2023	30/10/2023	30/10/2023	30/10/2023
A-T-050s		03/11/2023		03/11/2023	
A-T-050w	03/11/2023	31/10/2023	03/11/2023	03/11/2023	31/10/2023
A-T-056	31/10/2023			31/10/2023	
A-T-ANCs	30/10/2023		30/10/2023	30/10/2023	
Calc		30/10/2023	30/10/2023	30/10/2023	30/10/2023
Calc-no stones	03/11/2023		03/11/2023	03/11/2023	
Probe (w)	03/11/2023		03/11/2023	03/11/2023	

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

Certificate of Analysis

Report No.: **23-07332-2**

Issue No.: **2**
Date of Issue **08/04/2024**

Customer Details:	Envirolab Ltd, 7 - 8 Sandpits Business Park, Mottram Road, Hyde, Greater Manchester, SK14 3AR, United Kingdom
Customer Contact:	[redacted]
Customer Order No.:	P0752593
Customer Reference:	Not Supplied
Quotation Reference:	Q22-00104 (Issue: 36)
Description:	2 geo samples
Date Received:	25/10/2023
Date Started:	25/10/2023
Date Completed:	16/11/2023
Test Methods:	Details available on request (refer to SOP code against relevant result/s)
Notes:	This report replaces issue 1 in its entirety

[redacted]

Approved By: [redacted], **LIMS Administrator**

This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service.
This certificate shall not be reproduced except in full without the prior written approval of the laboratory.
Observations and interpretations are outside of the scope of UKAS accreditation.
Results reported herein relate only to the items supplied to the laboratory for testing.
Results on an Interim Report are not dry-weight corrected.
Where the laboratory is not responsible for the sampling, results apply to the sample(s) as they were received.
The laboratory shall not be responsible for any information that is supplied by the customer that may affect the validity of results.

RPS Environmental Management Limited trading as RPS Mountainheath. Registered in England No. 01756175.
13 St Martins Way, Bedford, Bedfordshire, MK42 0LF. T +44 1462 480 400
A member of the RPS Group plc. Terms and conditions apply - copy on request

Results Summary

Report No.: 23-07332-2

Customer Reference: Not Supplied

Customer Order No: P0752593

Customer Sample No	R22-TP202 0.20m	R22-BH103 0.20m
RPS Sample No	35429	35430
Sample Type	**GEO**	**GEO**
Sample Matrix	SOIL	SOIL
Sampling Date	18/10/2023	18/10/2023

Determinand	CAS No	Codes	SOP	RL	Units		
carbaryl	63-25-2	N	L001	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
2,4,5-trichlorophenoxyacetic acid (2,4,5-T)	93-76-5	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
2,4,5-TP (Fenoprop)	93-72-1	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
2,4-dichlorophenoxyacetic acid (2,4-D)	94-75-7	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
acifluorfen	50594-66-6	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
bentazone	25057-89-0	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
clopyralid	1702-17-6	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
dichlorprop (2,4-DP)	120-36-5	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
dinoseb (DNBP)	88-85-7	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
2-methyl-4-chlorophenoxyacetic acid (MCPA)	94-74-6	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
mecoprop (MCPP)	7085-19-0	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
pentachlorophenol (PCP)	87-86-5	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
2,3,6-trichlorobenzoic acid (2,3,6-TBA)	50-31-7	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
4-(2,4-dichlorophenoxy)butanoic acid (2,4-DB)	94-82-6	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
4-chlorophenoxyacetic acid (4-CPA)	122-88-3	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
benazolin	3813-05-6	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
bromoxynil	1689-84-5	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
dicamba	1918-00-9	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
diclofop	40843-25-2	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
2-methyl-4,6-dinitrophenol (DNOC)	534-52-1	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
flamprop	58667-63-3	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
fluroxypyr	69377-81-7	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
ioxynil	1689-83-4	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
MCPB	94-81-5	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
picloram	1918-02-1	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
triclopyr	55335-06-3	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
alachlor	15972-60-8	N	G029	0.02	mg/kg AR	< 0.02 (T)	< 0.02 (T)
chloroxuron	1982-47-4	N	L025	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
chlortoluron	15545-48-9	N	L025	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
diflubenzuron	35367-38-5	N	L025	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
dimefuron	34205-21-5	N	L025	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
diuron	330-54-1	N	L025	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
isoproturon	34123-59-6	N	L025	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
linuron	330-55-2	N	L025	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
methabenzthiazuron	18691-97-9	N	L025	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
metoxuron	19937-59-8	N	L025	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
monolinuron	1746-81-2	N	L025	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
monuron	150-68-5	N	L025	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)

Results Summary

Report No.: 23-07332-2

Customer Reference: Not Supplied

Customer Order No: P0752593

Customer Sample No	**R22-TP202 0.20m**	**R22-BH103 0.20m**
RPS Sample No	35429	35430
Sample Type	**GEO**	**GEO**
Sample Matrix	SOIL	SOIL
Sampling Date	18/10/2023	18/10/2023

Determinand	CAS No	Codes	SOP	RL	Units		
pencycuron	66063-05-6	N	L025	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
bifenthrin	82657-04-3	N	G127	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
cyfluthrin, total	68359-37-5	N	G127	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
cyhalothrin, total	68085-85-8	N	G127	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
cypermethrin, total	52315-07-8	N	G127	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
deltamethrin	52918-63-5	N	G127	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
fenvalerate	51630-58-1	N	G127	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
permethrin, total	52645-53-1	N	G127	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
resmethrin	10453-86-8	N	G127	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
tetramethrin	7696-12-0	N	G127	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)

Comments

Report No.: 23-07332-2

Customer Reference: Not Supplied

Customer Order No: P0752593

Job	Description	Document History
23-07332	n/a	Sample numbers changed as per client request

Deviating Samples

Report No.: 23-07332-2

Customer Reference: Not Supplied

Customer Order No: P0752593

Our policy on Deviating Samples has been implemented in accordance with UKAS Policy on Deviating Samples (TPS63).
RPS is not responsible for the integrity of samples as received, unless RPS personnel performed the sampling. Samples submitted may be declared to be deviating.
Where applicable the analysis method remains UKAS accredited, however results reported for a deviating sample may be compromised.
Where no sampling date was supplied, samples have been declared to be deviating. If the date can be supplied, results may be reissued if assessed not deviating.
Where the sample container used was unsuitable or broken, the sample is flagged as deviating and re-sampling/re-submisson may be required.

RPS No.	Customer No.	Customer ID	Date Sampled	Containers Received	Deviating	Reason for Deviation
35429	R22-TP202 0.20m		18/10/2023	100 mL amber glass jar	**Yes**	No sampling time provided.
35430	R22-BH103 0.20m		18/10/2023	100 mL amber glass jar	**Yes**	No sampling time provided.

Type	Matrix Code	Description
Food	CEREALPROD	Cereals, grains & products
Food	DRIEDFRUIT	Dried fruits
Food	FRIEDBAKED	Fried or baked food
Food	LEGUME	Legumes
Food	MEAT	Meat
Food	POWDERED	Powdered food
Food	PULSE	Pulses (dried legumes)
Food	VEGETABLES	Vegetables
Gas	TDTUBE	TD Tube
Gas	TENAX	Tenax Tube
Gas	TUBE	Tube
Gas	VAPOUR	Gas
Geological	SED_MAR	Marine Sediment
Geological	SED_RIV	River Sediment
Geological	SLUDG_SOL	Sludge (solid only)
Geological	SOIL	Soil
Liquid	BEVERAGE	Beverage
Liquid	BLOOD	Blood
Liquid	CONDENSATE	Condensate
Liquid	FOAM_LIQ	Liquid foam
Liquid	FORMULATN	Formula
Liquid	LEACHATE	Leachate
Liquid	OIL/GREASE	Oil or grease
Liquid	SLUDG_LIQ	Sludge (liquid only)
Liquid	SOLVENT	Solvent
Liquid	URINE	Urine
Sludge	SLUDG_WHL	Sludge for bulk route
Solid	BADGE	Badge
Solid	BEDDING	Bedding
Solid	BIOTA	Biota (general)
Solid	BIOTA_F	Biota (fish)
Solid	BIOTA_SF	Biota (shellfish)
Solid	CONSTRCTN	Construction materials
Solid	FABRIC	Fabrics & furnishing materials
Solid	FEED	Animal feed
Solid	FERTILISER	Fertiliser
Solid	FILTER	Filter
Solid	FOAM	Solid foam material
Solid	PACKAGING	Packaging material
Solid	PAPER	Paper
Solid	PLANT	Plant (vegetation)
Solid	POWDER	Powder
Solid	SWAB	Swab
Water	BAL	Ballast Water
Water	BIL	Bilge Water
Water	DW	Drinking Water
Water	EFFLUENT	Effluent
Water	GW	Ground Water
Water	INFLUENT	Influent
Water	SALTW	Salt Water
Water	SW	Surface Water
Water	TW	Tap Water
Water	W	Water

Key Code	Description
N	Not Accredited Test
U	UKAS Accredited Test - UKAS accreditation is only implied if the report carries the UKAS logo
UF	UKAS Flexible Scope Test
M	MCERTS Accredited Test - MCERTS accreditation is only implied if the report carries the MCERTS logo
O	Marine Management Organisation (MMO) Validated
SN	Subcontracted to approved laboratory not accredited for the test
SU	Subcontracted to approved laboratory UKAS Accredited for the test
SM	Subcontracted to approved laboratory MCERTS/UKAS Accredited for the test
SIN	Subcontracted to internal RPS Group laboratory not accredited for the test
SIU	Subcontracted to internal RPS Group laboratory UKAS Accredited for the test
SIM	Subcontracted to internal RPS Group laboratory MCERTS/UKAS Accredited for the test
*	Modified standard method
I/S (in results)	Insufficient Sample
U/S (in results)	Unsuitable Sample
S/C (in results)	See Comments
ND (in results)	Not Detected
DW (in units)	Results are expressed on a dry weight basis
L (in results)	Result is outside normal limits

Sample Type	Sample Retention and Disposal Period
Foodstuff	1 month (if frozen) from the issue date of this report
Waters	2 weeks from the issue date of this report
Other Liquids	1 month from the issue date of this report
Solids / Soils	1 month from the issue date of this report
Sediments	1 month from the issue date of this report

Note: Sample retention may be subject to agreement with the customer for particular projects

Where the dry solids value of a sample is low (<50%), reporting limits are automatically raised for all determinants analysed on an as-received basis.

Soil Typing	Description
Type 1	Clay - Brown
Type 2	Clay - Grey/Black
Type 3	Sand
Type 4	Top Soil (Standard)
Type 5	Top Soil (High Peat)
Type 6	Made Ground (>50% Clay)
Type 7	Made Ground (>50% Sand)
Type 8	Made Ground (>50% Top Soil)
Type X	Other

Dev code	Description
D	No sampling date provided.
T	No sampling time provided.
Z	Temperature of samples exceeded in transit/storage.
V	Excessive headspace for volatile determinands.
P	Sample submitted without required preservative(s).
C	Incorrect container.
H	Holding time exceeded (sampling to extraction).
X	Holding time exceeded (sampling to receipt).

Note: Where the following information is included in this certificate, it has usually been supplied by the customer: Customer Sample ID, Sample Location, Sample Depth, Sampling Date and Sampling Time. The laboratory shall not be responsible for any information that is supplied by the customer that may affect the validity of results.

envirolab
Units 7 & 8, Sandpits Business Park
Mottram Road, Hyde, Cheshire, SK14 3AR

Final Test Report

Envirolab Job Number:	23/10384
Issue Number:	1 Date: 17-Nov-23
Client:	Structural Soils Limited (Hemel Hempstead) 18 Frogmore Road Hemel Hempstead UK HP3 9RT
Project Manager:	[redacted]
Project Name:	Sealink Richborough
Project Ref:	563607
Order No:	N/A
Date Samples Received:	20-Oct-23
Date Instructions Received:	20-Oct-23
Date Analysis Completed:	17-Nov-23

Notes - Soil analysis

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

For samples with Matrix Codes 1 - 6 natural stones >10mm are removed or excluded from the sample prior to analysis and reported results corrected to a whole sample basis.

For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis.

Notes - General

This report shall not be reproduced, except in full, without written approval from Envirolab.

Subscript "A" indicates analysis performed on the sample as received. "D" indicates analysis performed on the dried sample, crushed to pass a 2mm sieve, unless asbestos is found to be present in which case all analysis is performed on the sample as received.

All analysis is performed on the dried and crushed sample for samples with Matrix Code 7 and this supercedes any "A" subscripts.

All analysis is performed on the sample as received for soil samples from outside the European Union and this supercedes any "D" subscripts

For complex, multi-compound analysis, quality control results do not always fall within chart limits for every compound and we have criteria for reporting in these situations.

If results are in italic font they are associated with such quality control failures and may be unreliable.

A deviating samples 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

Predominant Matrix Codes: 1 = SAND, 2 = LOAM, 3 = CLAY, 4 = LOAM/SAND, 5 = SAND/CLAY, 6 = CLAY/LOAM, 7 = OTHER, 8 = Asbestos bulk ID sample

Secondary Matrix Codes: A = contains stones, B = contains construction rubble, C = contains visible hydrocarbons, D = contains glass/metal, E = contains roots/twigs.

IS indicates Insufficient sample for analysis, NDP indicates No Determination Possible and NAD indicates No Asbestos Detected.

Analytical results reflect the quality of the sample at the time of analysis only. Opinions and interpretations expressed are outside the scope of our accreditation.

Please contact us if you need any further information.

HWOL TPH Code: EH_CU_1D_AL: Extractable hydrocarbons - i.e. everything extracted by the solvent(s), Clean-up - e.g. by florisil, silica gel, GC - Single coil gas chromatography, Aliphatics only

Approved by:

[redacted]

Client Manager

envirolab

Landfill WAC analysis must not be used for hazardous waste classification purposes. This analysis is only applicable for landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Sample Details						Landfill Waste Acceptance Criteria Limits		
Lab Sample ID	Method	ISO17025	MCERTS	23/10384/1				
Client Sample Number				**101**		Inert Waste Landfill	Stable Non-reactive Hazardous Waste in Non-Hazardous Landfill	Hazardous Waste Landfill
Client Sample ID				R22-TP202				
Depth to Top				0.2				
Depth to Bottom								
Date Sampled				18/10/2023				
Sample Type				Soil - ES				
Sample Matrix Code				4A				
Solid Waste Analysis								
pH (pH Units)$_D$	A-T-031	N	N	**6.98**		-	>6	-
ANC to pH 4 (mol/kg)$_D$	A-T-ANC	N	N	**0.02**		-	to be evaluated	to be evaluated
ANC to pH 6 (mol/kg)$_D$	A-T-ANC	N	N	**0.01**		-	to be evaluated	to be evaluated
Loss on Ignition (%)$_D$	A-T-030	N	N	**3.6**		-	-	10
Total Organic Carbon (%)$_D$	A-T-032	N	N	**1.15**		3	5	6
PAH Sum of 17 (mg/kg) $_A$	A-T-019	N	N	**<0.08**		100	-	-
Mineral Oil (mg/kg)$_{A\ EH_CU_1D_AL}$	A-T-007	N	N	**<10**		500	-	-
Sum of 7 PCBs (mg/kg)$_A$	A-T-004	N	N	**<0.007**		1	-	-
Sum of BTEX (mg/kg)$_A$	A-T-022	N	N	**<0.01**		6	-	-
Eluate Analysis				**10:1**	**10:1**	**Limit values for compliance leaching test using**		
				mg/l	**mg/kg**	**BS EN 12457-2 at L/S 10 l/kg (mg/kg)**		
Arsenic	A-T-025	N	N	0.005	**0.050**	0.5	2	25
Barium	A-T-025	N	N	0.111	**1.110**	20	100	300
Cadmium	A-T-025	N	N	<0.001	**<0.01**	0.04	1	5
Chromium	A-T-025	N	N	<0.001	**<0.01**	0.5	10	70
Copper	A-T-025	N	N	0.012	**0.120**	2	50	100
Mercury	A-T-025	N	N	<0.0005	**<0.005**	0.01	0.2	2
Molybdenum	A-T-025	N	N	<0.001	**<0.01**	0.5	10	30
Nickel	A-T-025	N	N	0.013	**0.130**	0.4	10	40
Lead	A-T-025	N	N	0.010	**0.100**	0.5	10	50
Antimony	A-T-025	N	N	<0.001	**<0.01**	0.06	0.7	5
Selenium	A-T-025	N	N	<0.001	**<0.01**	0.1	0.5	7
Zinc	A-T-025	N	N	0.056	**0.560**	4	50	200
Chloride	A-T-026	N	N	4	**42**	800	15000	25000
Fluoride	A-T-026	N	N	0.5	**5.0**	10	150	500
Sulphate as SO_4	A-T-026	N	N	23	**232**	1000	20000	50000
Total Dissolved Solids	A-T-035	N	N	24	**240**	4000	60000	100000
Phenol Index	A-T-050	N	N	<0.01	**<0.1**	1	-	-
Dissolved Organic Carbon	A-T-032	N	N	<2.0	**<200**	500	800	1000
Leach Test Information								
pH (pH Units)	A-T-031	N	N	7.2				
Conductivity (µS/cm)	A-T-037	N	N	48				
Mass Sample (kg)				0.207				
Dry Matter (%)	A-T-044	N	N	84.7				

Stated acceptance limits are for guidance only and Envirolab cannot be held responsible for any discrepancies with current legislation

Landfill WAC analysis must not be used for hazardous waste classification purposes. This analysis is only applicable for landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Sample Details						Landfill Waste Acceptance Criteria Limits		
Lab Sample ID	Method	ISO17025	MCERTS	23/10384/3				
Client Sample Number				103		Inert Waste Landfill	Stable Non-reactive Hazardous Waste in Non-Hazardous Landfill	Hazardous Waste Landfill
Client Sample ID				R22-TP202				
Depth to Top				1				
Depth to Bottom								
Date Sampled				18/10/2023				
Sample Type				Soil - ES				
Sample Matrix Code				6				
Solid Waste Analysis								
pH (pH Units)$_D$	A-T-031	N	N	**8.24**		-	>6	-
ANC to pH 4 (mol/kg)$_D$	A-T-ANC	N	N	**0.02**		-	to be evaluated	to be evaluated
ANC to pH 6 (mol/kg)$_D$	A-T-ANC	N	N	**<0.01**		-	to be evaluated	to be evaluated
Loss on Ignition (%)$_D$	A-T-030	N	N	**3.3**		-	-	10
Total Organic Carbon (%)$_D$	A-T-032	N	N	**0.19**		3	5	6
PAH Sum of 17 (mg/kg) $_A$	A-T-019	N	N	**<0.08**		100	-	-
Mineral Oil (mg/kg)$_{A\ EH_CU_1D_AL}$	A-T-007	N	N	**<10**		500	-	-
Sum of 7 PCBs (mg/kg)$_A$	A-T-004	N	N	**<0.007**		1	-	-
Sum of BTEX (mg/kg)$_A$	A-T-022	N	N	**<0.01**		6	-	-
Eluate Analysis				**10:1 mg/l**	**10:1 mg/kg**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg (mg/kg)**		
Arsenic	A-T-025	N	N	0.002	**0.020**	0.5	2	25
Barium	A-T-025	N	N	0.108	**1.080**	20	100	300
Cadmium	A-T-025	N	N	<0.001	**<0.01**	0.04	1	5
Chromium	A-T-025	N	N	<0.001	**<0.01**	0.5	10	70
Copper	A-T-025	N	N	0.007	**0.070**	2	50	100
Mercury	A-T-025	N	N	<0.0005	**<0.005**	0.01	0.2	2
Molybdenum	A-T-025	N	N	<0.001	**<0.01**	0.5	10	30
Nickel	A-T-025	N	N	0.003	**0.030**	0.4	10	40
Lead	A-T-025	N	N	0.009	**0.090**	0.5	10	50
Antimony	A-T-025	N	N	<0.001	**<0.01**	0.06	0.7	5
Selenium	A-T-025	N	N	0.001	**0.010**	0.1	0.5	7
Zinc	A-T-025	N	N	0.018	**0.180**	4	50	200
Chloride	A-T-026	N	N	2	**18**	800	15000	25000
Fluoride	A-T-026	N	N	0.2	**2.0**	10	150	500
Sulphate as SO_4	A-T-026	N	N	13	**126**	1000	20000	50000
Total Dissolved Solids	A-T-035	N	N	31	**310**	4000	60000	100000
Phenol Index	A-T-050	N	N	<0.01	**<0.1**	1	-	-
Dissolved Organic Carbon	A-T-032	N	N	<2.0	**<200**	500	800	1000
Leach Test Information								
pH (pH Units)	A-T-031	N	N	7.6				
Conductivity (µS/cm)	A-T-037	N	N	61				
Mass Sample (kg)				0.202				
Dry Matter (%)	A-T-044	N	N	86.4				

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Landfill WAC analysis must not be used for hazardous waste classification purposes. This analysis is only applicable for landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Sample Details						Landfill Waste Acceptance Criteria Limits		
Lab Sample ID	Method	ISO17025	MCERTS	23/10384/4				
Client Sample Number				101		Inert Waste Landfill	Stable Non-reactive Hazardous Waste in Non-Hazardous Landfill	Hazardous Waste Landfill
Client Sample ID				R22-BH103				
Depth to Top				0.2				
Depth to Bottom								
Date Sampled				18/10/2023				
Sample Type				Soil - ES				
Sample Matrix Code				3E				
Solid Waste Analysis								
pH (pH Units)$_D$	A-T-031	N	N	**7.87**		-	>6	-
ANC to pH 4 (mol/kg)$_D$	A-T-ANC	N	N	**0.33**		-	to be evaluated	to be evaluated
ANC to pH 6 (mol/kg)$_D$	A-T-ANC	N	N	**0.04**		-	to be evaluated	to be evaluated
Loss on Ignition (%)$_D$	A-T-030	N	N	**9.5**		-	-	10
Total Organic Carbon (%)$_D$	A-T-032	N	N	**2.7**		3	5	6
PAH Sum of 17 (mg/kg)$_A$	A-T-019	N	N	**<0.08**		100	-	-
Mineral Oil (mg/kg)$_{A\ EH_CU_1D_AL}$	A-T-007	N	N	**<10**		500	-	-
Sum of 7 PCBs (mg/kg)$_A$	A-T-004	N	N	**<0.007**		1	-	-
Sum of BTEX (mg/kg)$_A$	A-T-022	N	N	**<0.01**		6	-	-
Eluate Analysis				**10:1 mg/l**	**10:1 mg/kg**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg (mg/kg)**		
Arsenic	A-T-025	N	N	0.003	**0.030**	0.5	2	25
Barium	A-T-025	N	N	0.008	**0.080**	20	100	300
Cadmium	A-T-025	N	N	<0.001	**<0.01**	0.04	1	5
Chromium	A-T-025	N	N	<0.001	**<0.01**	0.5	10	70
Copper	A-T-025	N	N	0.004	**0.040**	2	50	100
Mercury	A-T-025	N	N	<0.0005	**<0.005**	0.01	0.2	2
Molybdenum	A-T-025	N	N	0.004	**0.040**	0.5	10	30
Nickel	A-T-025	N	N	0.003	**0.030**	0.4	10	40
Lead	A-T-025	N	N	0.002	**0.020**	0.5	10	50
Antimony	A-T-025	N	N	<0.001	**<0.01**	0.06	0.7	5
Selenium	A-T-025	N	N	<0.001	**<0.01**	0.1	0.5	7
Zinc	A-T-025	N	N	0.028	**0.280**	4	50	200
Chloride	A-T-026	N	N	34	**342**	800	15000	25000
Fluoride	A-T-026	N	N	0.5	**5.0**	10	150	500
Sulphate as SO_4	A-T-026	N	N	36	**355**	1000	20000	50000
Total Dissolved Solids	A-T-035	N	N	200	**2000**	4000	60000	100000
Phenol Index	A-T-050	N	N	<0.01	**<0.1**	1	-	-
Dissolved Organic Carbon	A-T-032	N	N	<2.0	**<200**	500	800	1000
Leach Test Information								
pH (pH Units)	A-T-031	N	N	7.4				
Conductivity (µS/cm)	A-T-037	N	N	401				
Mass Sample (kg)				0.222				
Dry Matter (%)	A-T-044	N	N	78.9				

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envirolab
Units 7 & 8 Sandpits Business Park
Mottram Road, Hyde, Cheshire, SK14 3AR

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 23/10388
Issue Number: 1 **Date:** 17 November, 2023

Client: Structural Soils Limited (Hemel Hempstead)
18 Frogmore Road
Hemel Hempstead
UK
HP3 9RT

Project Manager: [redacted]
Project Name: Sealink Richborough
Project Ref: 563607
Order No: N/A
Date Samples Received: 20/10/23
Date Instructions Received: 20/10/23
Date Analysis Completed: 17/11/23

Approved by:

[redacted]

Client Manager

Envirolab Job Number: 23/10388

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10388/1	23/10388/4	23/10388/5	23/10388/7	23/10388/8			Units	Limit of Detection	Method ref
Client Sample No	101	101	102	111	112					
Client Sample ID	R22-TP501 Topsoil	R22-BH502 MG	R22-BH502 Natural	RedP-BH-10 MG	RedP-BH-10 MG					
Depth to Top	0.20	0.20	0.50	8.50	9.80					
Depth To Bottom										
Date Sampled	17-Oct-23	17-Oct-23	17-Oct-23	16-Oct-23	17-Oct-23					
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES					
Sample Matrix Code	4AE	3A	3A	3A	5A					
% Moisture at 105C$_A$	-	29.7	-	29.9	-			% w/w	0.1	A-T-044
% Stones >10mm$_A$	<0.1	<0.1	<0.1	3.1	<0.1			% w/w	0.1	A-T-044
pH$_D^{M\#}$	-	8.02	-	8.36	-			pH	0.01	A-T-031s
Sulphate (water sol 2:1)$_D^{M\#}$	-	0.02	-	0.18	-			g/l	0.01	A-T-026s
Sulphur (total)$_D$	-	847	-	759	-			mg/kg	50	A-T-024s
Cyanide (free)$_A^{M\#}$	-	<1	-	<1	-			mg/kg	1	A-T-042sFCN
Phenols - Total by HPLC$_A$	-	<0.2	-	<0.2	-			mg/kg	0.2	A-T-050s
Organic Matter$_D^{M\#}$	-	7.8	-	2.2	-			% w/w	0.1	A-T-032s
Total Organic Carbon$_D^{M\#}$	-	4.51	-	1.32	-			% w/w	0.03	A-T-032s
Fraction of organic carbon$_D^{\#}$	-	0.0451	-	0.0132	-			N/A	0.0003	A-T-032s
Arsenic$_D^{M\#}$	-	10	-	10	-			mg/kg	1	A-T-024s
Barium$_D$	-	44	-	75	-			mg/kg	1	A-T-024s
Beryllium$_D$	-	1.2	-	0.7	-			mg/kg	0.5	A-T-024s
Boron (water soluble)$_D^{M\#}$	-	5.9	-	1.8	-			mg/kg	1	A-T-027s
Cadmium$_D^{M\#}$	-	<0.5	-	<0.5	-			mg/kg	0.5	A-T-024s
Copper$_D^{M\#}$	-	14	-	19	-			mg/kg	1	A-T-024s
Chromium$_D^{M\#}$	-	37	-	33	-			mg/kg	1	A-T-024s
Chromium (hexavalent)$_D$	-	<1	-	<1	-			mg/kg	1	A-T-040s
Chromium (trivalent)	-	37	-	33	-			mg/kg	1	Calc
Lead$_D^{M\#}$	-	24	-	57	-			mg/kg	1	A-T-024s
Manganese$_D$	-	270	-	474	-			mg/kg	1	A-T-024s
Mercury$_D$	-	<0.17	-	<0.17	-			mg/kg	0.17	A-T-024s
Molybdenum$_D^{M\#}$	-	<1	-	<1	-			mg/kg	1	A-T-024s
Nickel$_D^{M\#}$	-	20	-	18	-			mg/kg	1	A-T-024s
Selenium$_D^{M\#}$	-	<1	-	<1	-			mg/kg	1	A-T-024s
Vanadium$_D^{M\#}$	-	64	-	37	-			mg/kg	1	A-T-024s
Zinc$_D^{M\#}$	-	71	-	73	-			mg/kg	5	A-T-024s
pH (leachable)$_A$	7.81	7.65	7.71	-	9.25			pH	0.01	A-T-031w
Ammoniacal nitrogen as N (leachable)$_A$	<0.05	0.74	0.24	-	5.22			mg/l	0.05	A-T-033w
Chloride (leachable)$_A$	6.19	10.91	3.98	-	80.14			mg/l	1	A-T-026w
Fluoride (leachable)$_A$	0.50	0.52	0.45	-	0.78			mg/l	0.1	A-T-026w (F)
Sulphate (leachable)$_A$	11.85	4.21	32.31	-	79.14			mg/l	1	A-T-026w
Cyanide (free) (leachable)$_A$	<0.005	<0.005	<0.005	-	<0.005			mg/l	0.005	A-T-042wFCN

Envirolab Job Number: 23/10388

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10388/1	23/10388/4	23/10388/5	23/10388/7	23/10388/8			Units	Limit of Detection	Method ref
Client Sample No	101	101	102	111	112					
Client Sample ID	R22-TP501 Topsoil	R22-BH502 MG	R22-BH502 Natural	RedP-BH-10 MG	RedP-BH-10 MG					
Depth to Top	0.20	0.20	0.50	8.50	9.80					
Depth To Bottom										
Date Sampled	17-Oct-23	17-Oct-23	17-Oct-23	16-Oct-23	17-Oct-23					
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES					
Sample Matrix Code	4AE	3A	3A	3A	5A					
Cyanide (total) (leachable)$_A$	<0.005	0.006	<0.005	-	0.016			mg/l	0.005	A-T-042wTCN
Cyanide (complex) (leachable)	<0.005	0.006	<0.005	-	0.016			mg/l	0.005	Calc
Phenol (leachable)$_A$	<0.01	<0.01	<0.01	-	<0.01			mg/l	0.01	A-T-050w
Cresols (leachable)$_A$	<0.01	<0.01	<0.01	-	<0.01			mg/l	0.01	A-T-050w
Resorcinol (leachable)$_A$	<0.01	<0.01	<0.01	-	<0.01			mg/l	0.01	A-T-050w
Catechol (leachable)$_A$	<0.01	<0.01	<0.01	-	<0.01			mg/l	0.01	A-T-050w
Xylenols & Ethylphenols (leachable)$_A$	<0.01	<0.01	<0.01	-	<0.01			mg/l	0.01	A-T-050w
Naphthols (leachable)$_A$	<0.01	<0.01	<0.01	-	<0.01			mg/l	0.01	A-T-050w
Trimethylphenol (leachable)$_A$	<0.01	<0.01	<0.01	-	<0.01			mg/l	0.01	A-T-050w
Phenols (total by HPLC) (leachable)$_A$	<0.01	<0.01	<0.01	-	<0.01			mg/l	0.01	A-T-050w
Antimony (leachable)$_A$	<1	<1	<1	-	11			µg/l	1	A-T-025w
Arsenic (leachable)$_A$	5	6	4	-	27			µg/l	1	A-T-025w
Boron (leachable)$_A$	29	262	219	-	124			µg/l	10	A-T-025w
Barium (leachable)$_A$	22	17	13	-	23			µg/l	1	A-T-025w
Beryllium (leachable)$_A$	<1	<1	<1	-	<1			µg/l	1	A-T-025w
Cadmium (leachable)$_A$	<1	<1	<1	-	<1			µg/l	1	A-T-025w
Copper (leachable)$_A$	6	9	8	-	14			µg/l	4	A-T-025w
Chromium (leachable)$_A$	<1	<1	<1	-	2			µg/l	1	A-T-025w
Chromium (hexavalent) (leachable)$_A$	<0.05	<0.05	<0.05	-	<0.05			mg/l	0.05	A-T-040w
Chromium (trivalent)	<0.05	<0.05	<0.05	-	<0.05			mg/l	0.05	Calc
Iron (leachable)$_A$	234	304	309	-	40			µg/l	10	A-T-025w
Lead (leachable)$_A$	4	2	2	-	6			µg/l	1	A-T-025w
Manganese (leachable)$_A$	20	5	5	-	8			µg/l	1	A-T-025w
Magnesium (leachable)$_A$	3	6	5	-	<1			mg/l	1	A-T-049w
Mercury (leachable)$_A$	<0.1	<0.1	<0.1	-	<0.1			µg/l	0.1	A-T-025w
Molybdenum (leachable)$_A$	1	4	4	-	66			µg/l	1	A-T-025w
Nickel (leachable)$_A$	3	6	6	-	12			µg/l	2	A-T-025w
Selenium (leachable)$_A$	<1	<1	<1	-	5			µg/l	1	A-T-025w
Vanadium (leachable)$_A$	17	10	8	-	165			µg/l	1	A-T-025w
Zinc (leachable)$_A$	19	15	22	-	8			µg/l	2	A-T-025w
Leachate Prep BS EN 12457-1 (2:1) (1 no.)$_A$	*	*	*	-	*					A-T-001
Bentazone$_A$	<0.10	<0.10	-	-	-			mg/kg	0.1	Subcon RPS MH
Cypermethrin$_A$	<0.10	<0.10	-	-	-			mg/kg	0.1	Subcon RPS MH

Envirolab Job Number: 23/10388

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10388/1	23/10388/4	23/10388/5	23/10388/7	23/10388/8			Units	Limit of Detection	Method ref
Client Sample No	101	101	102	111	112					
Client Sample ID	R22-TP501 Topsoil	R22-BH502 MG	R22-BH502 Natural	RedP-BH-10 MG	RedP-BH-10 MG					
Depth to Top	0.20	0.20	0.50	8.50	9.80					
Depth To Bottom										
Date Sampled	17-Oct-23	17-Oct-23	17-Oct-23	16-Oct-23	17-Oct-23					
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES					
Sample Matrix Code	4AE	3A	3A	3A	5A					
Linuron$_A$	<0.10	<0.10	-	-	-			mg/kg	0.1	Subcon RPS MH
Alachlor$_A$	<0.02	<0.02	-	-	-			mg/kg	0.02	Subcon RPS MH
Carbaryl$_A$	<0.10	<0.10	-	-	-			mg/kg	0.1	Subcon RPS MH
Diuron$_A$	<0.10	<0.10	-	-	-			mg/kg	0.1	Subcon RPS MH
Isoproturon$_A$	<0.10	<0.10	-	-	-			mg/kg	0.1	Subcon RPS MH
MCPP; (Mecoprop)$_A$	<0.10	<0.10	-	-	-			mg/kg	0.1	Subcon RPS MH
Calcium (leachable)$_A$	27	39	26	-	43			mg/l	1	A-T-049w

Lab Sample ID	23/10388/1	23/10388/4	23/10388/5	23/10388/7	23/10388/8			Units	Limit of Detection	Method ref
Client Sample No	101	101	102	111	112					
Client Sample ID	R22-TP501 Topsoil	R22-BH502 MG	R22-BH502 Natural	RedP-BH-10 MG	RedP-BH-10 MG					
Depth to Top	0.20	0.20	0.50	8.50	9.80					
Depth To Bottom										
Date Sampled	17-Oct-23	17-Oct-23	17-Oct-23	16-Oct-23	17-Oct-23					
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES					
Sample Matrix Code	4AE	3A	3A	3A	5A					
Asbestos in Soil (inc. matrix) ^										
Asbestos in soil$_{D}^{\#}$	-	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	-					A-T-045
OCP+OPP Combined Pest Suite (incl. Atrazine and Simazine)										
Dichlobenil$_{A}$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
Tecnazene$_{A}$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
Trifluralin$_{A}$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
alpha-Hexachlorocyclohexane (HCH)$_{A}$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
Hexachlorobenzene (HCB) $_{A}$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
Simazine$_{A}$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
Atrazine$_{A}$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
beta-Hexachlorocyclohexane (HCH)$_{A}$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
Quintozene (PCNB)$_{A}$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
Chlorothalonil$_{A}$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
delta-Hexachlorocyclohexane (HCH)$_{A}$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
Triallate$_{A}$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
Heptachlor$_{A}$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
Aldrin$_{A}$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
Triadimefon$_{A}$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
Telodrin$_{A}$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
Isodrin$_{A}$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
Pendimethalin$_{A}$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
Heptachlor epoxide$_{A}$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
trans-Chlordane (Gamma)$_{A}$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
o,p-DDE (2,4)$_{A}$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
Endosulphan I (Alpha)$_{A}$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
cis-Chlordane (Alpha)$_{A}$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
p,p-DDE (4,4)$_{A}$	0.04	<0.01	-	-	-			mg/kg	0.01	A-T-056
Dieldrin$_{A}$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056

Lab Sample ID	23/10388/1	23/10388/4	23/10388/5	23/10388/7	23/10388/8			Units	Limit of Detection	Method ref
Client Sample No	101	101	102	111	112					
Client Sample ID	R22-TP501 Topsoil	R22-BH502 MG	R22-BH502 Natural	RedP-BH-10 MG	RedP-BH-10 MG					
Depth to Top	0.20	0.20	0.50	8.50	9.80					
Depth To Bottom										
Date Sampled	17-Oct-23	17-Oct-23	17-Oct-23	16-Oct-23	17-Oct-23					
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES					
Sample Matrix Code	4AE	3A	3A	3A	5A					
o,p-DDD (2,4)$_A$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
Endrin$_A$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
Endosulphan II (Beta)$_A$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
p,p-DDD (4,4)$_A$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
o,p-DDT (2,4)$_A$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
Endrin Aldehyde$_A$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
Endrin Ketone$_A$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
Endosulphan Sulphate$_A$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
p,p-DDT (4,4)$_A$	0.03	0.17	-	-	-			mg/kg	0.01	A-T-056
o,p-Methoxychlor$_A$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
p,p-Methoxychlor$_A$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
Permethrin I (cis)$_A$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
Permethrin II (trans)$_A$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
Dichlorvos$_A$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
Mevinphos$_A$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
Demeton-S$_A$	<0.50	<0.50	-	-	-			mg/kg	0.5	A-T-056
Demeton-O$_A$	<0.50	<0.50	-	-	-			mg/kg	0.5	A-T-056
Phorate$_A$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
Dimethoate$_A$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
Propetamphos$_A$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
Diazinon (Dimpylate)$_A$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
Disulfoton$_A$	<0.10	<0.10	-	-	-			mg/kg	0.1	A-T-056
Chlorpyrifos-methyl$_A$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
Parathion (Ethyl Parathion)$_A$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
Methyl Parathion$_A$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
Pirimiphos-methyl$_A$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
Fenitrothion$_A$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
Fensulphothion$_A$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
Fenthion$_A$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
Malathion$_A$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
Chlorfenvinphos$_A$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
Chlorpyrifos$_A$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
Trichloronate$_A$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056

Envirolab Job Number: 23/10388

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10388/1	23/10388/4	23/10388/5	23/10388/7	23/10388/8			Units	Limit of Detection	Method ref
Client Sample No	101	101	102	111	112					
Client Sample ID	R22-TP501 Topsoil	R22-BH502 MG	R22-BH502 Natural	RedP-BH-10 MG	RedP-BH-10 MG					
Depth to Top	0.20	0.20	0.50	8.50	9.80					
Depth To Bottom										
Date Sampled	17-Oct-23	17-Oct-23	17-Oct-23	16-Oct-23	17-Oct-23					
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES					
Sample Matrix Code	4AE	3A	3A	3A	5A					
Prothiofos (Tokuthion)$_A$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
Ethion$_A$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
Triazophos$_A$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
Carbophenothion$_A$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
Phosalone$_A$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
Azinphos-methyl$_A$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
Azinphos-ethyl$_A$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
Coumaphos$_A$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056
gamma-Hexachlorocyclohexane (HCH)$_A$	<0.01	<0.01	-	-	-			mg/kg	0.01	A-T-056

Envirolab Job Number: 23/10388

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10388/1	23/10388/4	23/10388/5	23/10388/7	23/10388/8			Units	Limit of Detection	Method ref
Client Sample No	101	101	102	111	112					
Client Sample ID	R22-TP501 Topsoil	R22-BH502 MG	R22-BH502 Natural	RedP-BH-10 MG	RedP-BH-10 MG					
Depth to Top	0.20	0.20	0.50	8.50	9.80					
Depth To Bottom										
Date Sampled	17-Oct-23	17-Oct-23	17-Oct-23	16-Oct-23	17-Oct-23					
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES					
Sample Matrix Code	4AE	3A	3A	3A	5A					
PAH-16MS										
Acenaphthene$_A^{M\#}$	-	<0.01	-	0.06	-			mg/kg	0.01	A-T-019s
Acenaphthylene$_A^{M\#}$	-	<0.01	-	0.03	-			mg/kg	0.01	A-T-019s
Anthracene$_A^{M\#}$	-	<0.02	-	0.14	-			mg/kg	0.02	A-T-019s
Benzo(a)anthracene$_A^{M\#}$	-	<0.04	-	0.44	-			mg/kg	0.04	A-T-019s
Benzo(a)pyrene$_A^{M\#}$	-	<0.04	-	0.40	-			mg/kg	0.04	A-T-019s
Benzo(b)fluoranthene$_A^{M\#}$	-	<0.05	-	0.50	-			mg/kg	0.05	A-T-019s
Benzo(ghi)perylene$_A^{M\#}$	-	<0.05	-	0.21	-			mg/kg	0.05	A-T-019s
Benzo(k)fluoranthene$_A^{M\#}$	-	<0.07	-	0.21	-			mg/kg	0.07	A-T-019s
Chrysene$_A^{M\#}$	-	<0.06	-	0.44	-			mg/kg	0.06	A-T-019s
Dibenzo(ah)anthracene$_A$	-	<0.04	-	<0.04	-			mg/kg	0.04	A-T-019s
Fluoranthene$_A^{M\#}$	-	<0.08	-	0.87	-			mg/kg	0.08	A-T-019s
Fluorene$_A^{M\#}$	-	<0.01	-	0.07	-			mg/kg	0.01	A-T-019s
Indeno(123-cd)pyrene$_A^{M\#}$	-	<0.03	-	0.28	-			mg/kg	0.03	A-T-019s
Naphthalene $_A^{M\#}$	-	<0.03	-	<0.03	-			mg/kg	0.03	A-T-019s
Phenanthrene$_A^{M\#}$	-	<0.03	-	0.54	-			mg/kg	0.03	A-T-019s
Pyrene$_A^{M\#}$	-	<0.07	-	0.73	-			mg/kg	0.07	A-T-019s
Total PAH-16MS$_A$	-	<0.08	-	4.92	-			mg/kg	0.01	A-T-019s

Envirolab Job Number: 23/10388

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10388/1	23/10388/4	23/10388/5	23/10388/7	23/10388/8			Units	Limit of Detection	Method ref
Client Sample No	101	101	102	111	112					
Client Sample ID	R22-TP501 Topsoil	R22-BH502 MG	R22-BH502 Natural	RedP-BH-10 MG	RedP-BH-10 MG					
Depth to Top	0.20	0.20	0.50	8.50	9.80					
Depth To Bottom										
Date Sampled	17-Oct-23	17-Oct-23	17-Oct-23	16-Oct-23	17-Oct-23					
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES					
Sample Matrix Code	4AE	3A	3A	3A	5A					
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$_A^{M\#}$	-	<1	-	-	-			mg/kg	1	A-T-055s
Ali >C21-C35$_A^{M\#}$	-	17	-	-	-			mg/kg	1	A-T-055s
Total Aliphatics$_A$	-	17	-	-	-			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$_A^{M\#}$	-	3	-	-	-			mg/kg	1	A-T-055s
Aro >C16-C21$_A^{M\#}$	-	3	-	-	-			mg/kg	1	A-T-055s
Aro >C21-C35$_A^{M\#}$	-	6	-	-	-			mg/kg	1	A-T-055s
Total Aromatics$_A$	-	14	-	-	-			mg/kg	1	Calc-As Recd
TPH (Ali & Aro >C5-C35)$_A$	-	31	-	-	-			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 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 **six 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.
The client Sample No, Client Sample ID, Depth to top, Depth to Bottom and Date Sampled are all provided by the client.
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.

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 "^"	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
N/A	Not applicable

Asbestos
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
Quantification of asbestos is a 3 stage process including visual identification, hand picking and weighing, and fibre counting by sedimentation/phase contrast optical microscopy if required. 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) quantification by sedimentation is performed. 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.

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^{o}C / 11550µS/cm @ 20^{o}C fall outside the accreditation range and as such are unaccredited.

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

Envirolab Deviating Samples Report

Units 7&8 Sandpits Business Park, Mottram Road, Hyde, SK14 3AR
Tel. 0161 368 4921 email. ask@envlab.co.uk

Client: Structural Soils Limited (Hemel Hempstead), 18 Frogmore Road, Hemel Hempstead, UK, HP3 9RT

Project: Sealink Richborough

Clients Project No: 563607

Project No: 23/10388

Date Received: 20/10/2023 (am)

Cool Box Temperatures (°C): 14.4

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	23/10388/1	23/10388/4	23/10388/5	23/10388/7	23/10388/8
Client Sample No	101	101	102	111	112
Client Sample ID/Depth	R22-TP501 Topsoil 0.20m	R22-BH502 MG 0.20m	R22-BH502 Natural 0.50m	RedP-BH-10 MG 8.50m	RedP-BH-10 MG 9.80m
Date Sampled	17/10/23	17/10/23	17/10/23	16/10/23	17/10/23
A-T-004s				01/11/2023	
A-T-007s				30/10/2023	
A-T-019s		30/10/2023		30/10/2023	
A-T-022s		31/10/2023		31/10/2023	
A-T-024s		28/10/2023		28/10/2023	
A-T-025w	31/10/2023	31/10/2023	31/10/2023	03/11/2023	31/10/2023
A-T-026s		27/10/2023		27/10/2023	
A-T-026w	30/10/2023	30/10/2023	30/10/2023	03/11/2023	30/10/2023
A-T-026w (F)	30/10/2023	30/10/2023	30/10/2023	03/11/2023	30/10/2023
A-T-027s		30/10/2023		30/10/2023	
A-T-030s				27/10/2023	
A-T-031s		30/10/2023		30/10/2023	
A-T-031w	31/10/2023	31/10/2023	31/10/2023	03/11/2023	31/10/2023
A-T-032s		01/11/2023		01/11/2023	
A-T-032w				03/11/2023	
A-T-033w	31/10/2023	31/10/2023	31/10/2023		31/10/2023
A-T-037w				03/11/2023	
A-T-040s		27/10/2023		27/10/2023	
A-T-040w	01/11/2023	01/11/2023	01/11/2023		01/11/2023
A-T-042sFCN		30/10/2023		30/10/2023	
A-T-042wFCN	01/11/2023	01/11/2023	01/11/2023		01/11/2023
A-T-042wTCN	01/11/2023	01/11/2023	01/11/2023		01/11/2023
A-T-044	25/10/2023	30/10/2023	25/10/2023	30/10/2023	25/10/2023
A-T-045		24/10/2023		24/10/2023	
A-T-049w	31/10/2023	02/11/2023	31/10/2023		31/10/2023
A-T-050s		01/11/2023		01/11/2023	
A-T-050w	01/11/2023	01/11/2023	01/11/2023	03/11/2023	01/11/2023
A-T-055s		30/10/2023			
A-T-056	31/10/2023	31/10/2023			
A-T-ANCs				30/10/2023	
Calc	01/11/2023	01/11/2023	01/11/2023	28/10/2023	01/11/2023

Lab Sample ID	23/10388/1	23/10388/4	23/10388/5	23/10388/7	23/10388/8
Client Sample No	101	101	102	111	112
Client Sample ID/Depth	R22-TP501 Topsoil 0.20m	R22-BH502 MG 0.20m	R22-BH502 Natural 0.50m	RedP-BH-10 MG 8.50m	RedP-BH-10 MG 9.80m
Date Sampled	17/10/23	17/10/23	17/10/23	16/10/23	17/10/23
Calc-As Recd		31/10/2023			
Calc-no stones				03/11/2023	
Probe (w)				03/11/2023	

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

Certificate of Analysis

Report No.: **23-07331-2**

Issue No.: **2**
Date of Issue **08/04/2024**

Customer Details:	Envirolab Ltd, 7 - 8 Sandpits Business Park, Mottram Road, Hyde, Greater Manchester, SK14 3AR, United Kingdom
Customer Contact:	[redacted]
Customer Order No.:	P0752594
Customer Reference:	Not Supplied
Quotation Reference:	Q22-00104 (Issue: 36)
Description:	2 geo samples
Date Received:	25/10/2023
Date Started:	25/10/2023
Date Completed:	16/11/2023
Test Methods:	Details available on request (refer to SOP code against relevant result/s)
Notes:	This report replaces issue 1 in its entirety

[redacted]

Approved By: [redacted]**r, LIMS Administrator**

This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service.
This certificate shall not be reproduced except in full without the prior written approval of the laboratory.
Observations and interpretations are outside of the scope of UKAS accreditation.
Results reported herein relate only to the items supplied to the laboratory for testing.
Results on an Interim Report are not dry-weight corrected.
Where the laboratory is not responsible for the sampling, results apply to the sample(s) as they were received.
The laboratory shall not be responsible for any information that is supplied by the customer that may affect the validity of results.

RPS Environmental Management Limited trading as RPS Mountainheath. Registered in England No. 01756175.
13 St Martins Way, Bedford, Bedfordshire, MK42 0LF. T +44 1462 480 400
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Results Summary

Report No.: 23-07331-2

Customer Reference: Not Supplied

Customer Order No: P0752594

Customer Sample No	R22-TP501 Topsoil 0.2m	R22-BH502 MG 0.20m
RPS Sample No	35427	35428
Sample Type	**GEO**	**GEO**
Sample Matrix	SOIL	SOIL
Sampling Date	17/10/2023	17/10/2023

Determinand	CAS No	Codes	SOP	RL	Units		
carbaryl	63-25-2	N	L001	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
2,4,5-trichlorophenoxyacetic acid (2,4,5-T)	93-76-5	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
2,4,5-TP (Fenoprop)	93-72-1	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
2,4-dichlorophenoxyacetic acid (2,4-D)	94-75-7	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
acifluorfen	50594-66-6	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
bentazone	25057-89-0	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
clopyralid	1702-17-6	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
dichlorprop (2,4-DP)	120-36-5	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
dinoseb (DNBP)	88-85-7	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
2-methyl-4-chlorophenoxyacetic acid (MCPA)	94-74-6	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
mecoprop (MCPP)	7085-19-0	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
pentachlorophenol (PCP)	87-86-5	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
2,3,6-trichlorobenzoic acid (2,3,6-TBA)	50-31-7	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
4-(2,4-dichlorophenoxy)butanoic acid (2,4-DB)	94-82-6	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
4-chlorophenoxyacetic acid (4-CPA)	122-88-3	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
benazolin	3813-05-6	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
bromoxynil	1689-84-5	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
dicamba	1918-00-9	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
diclofop	40843-25-2	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
2-methyl-4,6-dinitrophenol (DNOC)	534-52-1	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
flamprop	58667-63-3	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
fluroxypyr	69377-81-7	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
ioxynil	1689-83-4	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
MCPB	94-81-5	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
picloram	1918-02-1	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
triclopyr	55335-06-3	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
alachlor	15972-60-8	N	G029	0.02	mg/kg AR	< 0.02 (T)	< 0.02 (T)
chloroxuron	1982-47-4	N	L025	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
chlortoluron	15545-48-9	N	L025	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
diflubenzuron	35367-38-5	N	L025	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
dimefuron	34205-21-5	N	L025	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
diuron	330-54-1	N	L025	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
isoproturon	34123-59-6	N	L025	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
linuron	330-55-2	N	L025	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
methabenzthiazuron	18691-97-9	N	L025	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
metoxuron	19937-59-8	N	L025	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
monolinuron	1746-81-2	N	L025	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
monuron	150-68-5	N	L025	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)

Results Summary

Report No.: 23-07331-2

Customer Reference: Not Supplied

Customer Order No: P0752594

Customer Sample No	R22-TP501 Topsoil 0.2m	R22-BH502 MG 0.20m
RPS Sample No	35427	35428
Sample Type	**GEO**	**GEO**
Sample Matrix	SOIL	SOIL
Sampling Date	17/10/2023	17/10/2023

Determinand	CAS No	Codes	SOP	RL	Units		
pencycuron	66063-05-6	N	L025	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
bifenthrin	82657-04-3	N	G127	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
cyfluthrin, total	68359-37-5	N	G127	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
cyhalothrin, total	68085-85-8	N	G127	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
cypermethrin, total	52315-07-8	N	G127	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
deltamethrin	52918-63-5	N	G127	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
fenvalerate	51630-58-1	N	G127	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
permethrin, total	52645-53-1	N	G127	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
resmethrin	10453-86-8	N	G127	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)
tetramethrin	7696-12-0	N	G127	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)

Comments

Report No.: 23-07331-2

Customer Reference: Not Supplied

Customer Order No: P0752594

Job	Description	Document History
23-07331	n/a	Sample numbers changed as per client request

Deviating Samples

Report No.: 23-07331-2

Customer Reference: Not Supplied

Customer Order No: P0752594

Our policy on Deviating Samples has been implemented in accordance with UKAS Policy on Deviating Samples (TPS63).
RPS is not responsible for the integrity of samples as received, unless RPS personnel performed the sampling. Samples submitted may be declared to be deviating.
Where applicable the analysis method remains UKAS accredited, however results reported for a deviating sample may be compromised.
Where no sampling date was supplied, samples have been declared to be deviating. If the date can be supplied, results may be reissued if assessed not deviating.
Where the sample container used was unsuitable or broken, the sample is flagged as deviating and re-sampling/re-submisson may be required.

RPS No.	Customer No.	Customer ID	Date Sampled	Containers Received	Deviating	Reason for Deviation
35427	R22-TP501 Topsoil 0.2m		17/10/2023	100 mL amber glass jar	**Yes**	No sampling time provided.
35428	R22-BH502 MG 0.20m		17/10/2023	100 mL amber glass jar	**Yes**	No sampling time provided.

Report No.: 23-07331-2

Type	Matrix Code	Description
Food	CEREALPROD	Cereals, grains & products
Food	DRIEDFRUIT	Dried fruits
Food	FRIEDBAKED	Fried or baked food
Food	LEGUME	Legumes
Food	MEAT	Meat
Food	POWDERED	Powdered food
Food	PULSE	Pulses (dried legumes)
Food	VEGETABLES	Vegetables
Gas	TDTUBE	TD Tube
Gas	TENAX	Tenax Tube
Gas	TUBE	Tube
Gas	VAPOUR	Gas
Geological	SED_MAR	Marine Sediment
Geological	SED_RIV	River Sediment
Geological	SLUDG_SOL	Sludge (solid only)
Geological	SOIL	Soil
Liquid	BEVERAGE	Beverage
Liquid	BLOOD	Blood
Liquid	CONDENSATE	Condensate
Liquid	FOAM_LIQ	Liquid foam
Liquid	FORMULATN	Formula
Liquid	LEACHATE	Leachate
Liquid	OIL/GREASE	Oil or grease
Liquid	SLUDG_LIQ	Sludge (liquid only)
Liquid	SOLVENT	Solvent
Liquid	URINE	Urine
Sludge	SLUDG_WHL	Sludge for bulk route
Solid	BADGE	Badge
Solid	BEDDING	Bedding
Solid	BIOTA	Biota (general)
Solid	BIOTA_F	Biota (fish)
Solid	BIOTA_SF	Biota (shellfish)
Solid	CONSTRCTN	Construction materials
Solid	FABRIC	Fabrics & furnishing materials
Solid	FEED	Animal feed
Solid	FERTILISER	Fertiliser
Solid	FILTER	Filter
Solid	FOAM	Solid foam material
Solid	PACKAGING	Packaging material
Solid	PAPER	Paper
Solid	PLANT	Plant (vegetation)
Solid	POWDER	Powder
Solid	SWAB	Swab
Water	BAL	Ballast Water
Water	BIL	Bilge Water
Water	DW	Drinking Water
Water	EFFLUENT	Effluent
Water	GW	Ground Water
Water	INFLUENT	Influent
Water	SALTW	Salt Water
Water	SW	Surface Water
Water	TW	Tap Water
Water	W	Water

Key Code	Description
N	Not Accredited Test
U	UKAS Accredited Test - UKAS accreditation is only implied if the report carries the UKAS logo
UF	UKAS Flexible Scope Test
M	MCERTS Accredited Test - MCERTS accreditation is only implied if the report carries the MCERTS logo
O	Marine Management Organisation (MMO) Validated
SN	Subcontracted to approved laboratory not accredited for the test
SU	Subcontracted to approved laboratory UKAS Accredited for the test
SM	Subcontracted to approved laboratory MCERTS/UKAS Accredited for the test
SIN	Subcontracted to internal RPS Group laboratory not accredited for the test
SIU	Subcontracted to internal RPS Group laboratory UKAS Accredited for the test
SIM	Subcontracted to internal RPS Group laboratory MCERTS/UKAS Accredited for the test
*	Modified standard method
I/S (in results)	Insufficient Sample
U/S (in results)	Unsuitable Sample
S/C (in results)	See Comments
ND (in results)	Not Detected
DW (in units)	Results are expressed on a dry weight basis
L (in results)	Result is outside normal limits

Sample Type	Sample Retention and Disposal Period
Foodstuff	1 month (if frozen) from the issue date of this report
Waters	2 weeks from the issue date of this report
Other Liquids	1 month from the issue date of this report
Solids / Soils	1 month from the issue date of this report
Sediments	1 month from the issue date of this report

Note: Sample retention may be subject to agreement with the customer for particular projects

Where the dry solids value of a sample is low (<50%), reporting limits are automatically raised for all determinants analysed on an as-received basis.

Soil Typing	Description
Type 1	Clay - Brown
Type 2	Clay - Grey/Black
Type 3	Sand
Type 4	Top Soil (Standard)
Type 5	Top Soil (High Peat)
Type 6	Made Ground (>50% Clay)
Type 7	Made Ground (>50% Sand)
Type 8	Made Ground (>50% Top Soil)
Type X	Other

Dev code	Description
D	No sampling date provided.
T	No sampling time provided.
Z	Temperature of samples exceeded in transit/storage.
V	Excessive headspace for volatile determinands.
P	Sample submitted without required preservative(s).
C	Incorrect container.
H	Holding time exceeded (sampling to extraction).
X	Holding time exceeded (sampling to receipt).

Note: Where the following information is included in this certificate, it has usually been supplied by the customer: Customer Sample ID, Sample Location, Sample Depth, Sampling Date and Sampling Time. The laboratory shall not be responsible for any information that is supplied by the customer that may affect the validity of results.

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Units 7 & 8, Sandpits Business Park
Mottram Road, Hyde, Cheshire, SK14 3AR

Final Test Report

Envirolab Job Number:	23/10388
Issue Number:	1 Date: 17-Nov-23
Client:	Structural Soils Limited (Hemel Hempstead) 18 Frogmore Road Hemel Hempstead UK HP3 9RT
Project Manager:	[redacted]
Project Name:	Sealink Richborough
Project Ref:	563607
Order No:	N/A
Date Samples Received:	20-Oct-23
Date Instructions Received:	20-Oct-23
Date Analysis Completed:	17-Nov-23

Notes - Soil analysis

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

For samples with Matrix Codes 1 - 6 natural stones >10mm are removed or excluded from the sample prior to analysis and reported results corrected to a whole sample basis.

For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis.

Notes - General

This report shall not be reproduced, except in full, without written approval from Envirolab.

Subscript "A" indicates analysis performed on the sample as received. "D" indicates analysis performed on the dried sample, crushed to pass a 2mm sieve, unless asbestos is found to be present in which case all analysis is performed on the sample as received.

All analysis is performed on the dried and crushed sample for samples with Matrix Code 7 and this supercedes any "A" subscripts.

All analysis is performed on the sample as received for soil samples from outside the European Union and this supercedes any "D" subscripts

For complex, multi-compound analysis, quality control results do not always fall within chart limits for every compound and we have criteria for reporting in these situations.

If results are in italic font they are associated with such quality control failures and may be unreliable.

A deviating samples 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

Predominant Matrix Codes: 1 = SAND, 2 = LOAM, 3 = CLAY, 4 = LOAM/SAND, 5 = SAND/CLAY, 6 = CLAY/LOAM, 7 = OTHER, 8 = Asbestos bulk ID sample

Secondary Matrix Codes: A = contains stones, B = contains construction rubble, C = contains visible hydrocarbons, D = contains glass/metal, E = contains roots/twigs.

IS indicates Insufficient sample for analysis, NDP indicates No Determination Possible and NAD indicates No Asbestos Detected.

Analytical results reflect the quality of the sample at the time of analysis only. Opinions and interpretations expressed are outside the scope of our accreditation.

Please contact us if you need any further information.

HWOL TPH Code: EH_CU_1D_AL: Extractable hydrocarbons - i.e. everything extracted by the solvent(s), Clean-up - e.g. by florisil, silica gel, GC - Single coil gas chromatography, Aliphatics only

Approved by:

[redacted]

Client Manager

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Landfill WAC analysis must not be used for hazardous waste classification purposes. This analysis is only applicable for landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Sample Details						Landfill Waste Acceptance Criteria Limits		
Lab Sample ID	Method	ISO17025	MCERTS	23/10388/7				
Client Sample Number				111		Inert Waste Landfill	Stable Non-reactive Hazardous Waste in Non-Hazardous Landfill	Hazardous Waste Landfill
Client Sample ID				RedP-BH-10 MG				
Depth to Top				8.5				
Depth to Bottom								
Date Sampled				16/10/2023				
Sample Type				Soil - ES				
Sample Matrix Code				3A				
Solid Waste Analysis								
pH (pH Units)$_D$	A-T-031	N	N	**8.36**		-	>6	-
ANC to pH 4 (mol/kg)$_D$	A-T-ANC	N	N	**0.89**		-	to be evaluated	to be evaluated
ANC to pH 6 (mol/kg)$_D$	A-T-ANC	N	N	**0.1**		-	to be evaluated	to be evaluated
Loss on Ignition (%)$_D$	A-T-030	N	N	**4.6**		-	-	10
Total Organic Carbon (%)$_D$	A-T-032	N	N	**1.32**		3	5	6
PAH Sum of 17 (mg/kg) $_A$	A-T-019	N	N	**4.96**		100	-	-
Mineral Oil (mg/kg)$_{A\ EH_CU_1D_AL}$	A-T-007	N	N	**84**		500	-	-
Sum of 7 PCBs (mg/kg)$_A$	A-T-004	N	N	**<0.007**		1	-	-
Sum of BTEX (mg/kg)$_A$	A-T-022	N	N	**<0.01**		6	-	-
Eluate Analysis				**10:1**	**10:1**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg (mg/kg)**		
				mg/l	**mg/kg**			
Arsenic	A-T-025	N	N	0.003	**0.030**	0.5	2	25
Barium	A-T-025	N	N	0.035	**0.350**	20	100	300
Cadmium	A-T-025	N	N	<0.001	**<0.01**	0.04	1	5
Chromium	A-T-025	N	N	<0.001	**<0.01**	0.5	10	70
Copper	A-T-025	N	N	<0.004	**<0.04**	2	50	100
Mercury	A-T-025	N	N	<0.0005	**<0.005**	0.01	0.2	2
Molybdenum	A-T-025	N	N	0.012	**0.120**	0.5	10	30
Nickel	A-T-025	N	N	0.003	**0.030**	0.4	10	40
Lead	A-T-025	N	N	0.001	**0.010**	0.5	10	50
Antimony	A-T-025	N	N	0.005	**0.050**	0.06	0.7	5
Selenium	A-T-025	N	N	<0.001	**<0.01**	0.1	0.5	7
Zinc	A-T-025	N	N	0.007	**0.070**	4	50	200
Chloride	A-T-026	N	N	7	**74**	800	15000	25000
Fluoride	A-T-026	N	N	0.4	**4.0**	10	150	500
Sulphate as SO_4	A-T-026	N	N	56	**561**	1000	20000	50000
Total Dissolved Solids	A-T-035	N	N	151	**1510**	4000	60000	100000
Phenol Index	A-T-050	N	N	<0.01	**<0.1**	1	-	-
Dissolved Organic Carbon	A-T-032	N	N	<2.0	**<200**	500	800	1000
Leach Test Information								
pH (pH Units)	A-T-031	N	N	7.6				
Conductivity (µS/cm)	A-T-037	N	N	301				
Mass Sample (kg)				0.214				
Dry Matter (%)	A-T-044	N	N	81.7				

Stated acceptance limits are for guidance only and Envirolab cannot be held responsible for any discrepancies with current legislation

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Units 7 & 8 Sandpits Business Park
Mottram Road, Hyde, Cheshire, SK14 3AR

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 23/10519
Issue Number: 1 **Date:** 17 November, 2023

Client: Structural Soils Limited (Hemel Hempstead)
18 Frogmore Road
Hemel Hempstead
UK
HP3 9RT

Project Manager: [redacted]
Project Name: Sealink Richborough
Project Ref: 563607
Order No: N/A
Date Samples Received: 25/10/23
Date Instructions Received: 25/10/23
Date Analysis Completed: 17/11/23

Approved by:

[redacted]
Client Manager

Envirolab Job Number: 23/10519

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10519/1	23/10519/3	23/10519/4	23/10519/5	23/10519/6	23/10519/7		Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	R22-TP201	R22-TP201	RedP-BH-9	RedP-BH-9	RedP-BH-9	RedP-BH-9				
Depth to Top	0.20	1.00	0.20	0.50	0.70	1.00				
Depth To Bottom					1					
Date Sampled	19-Oct-23	19-Oct-23	19-Oct-23	19-Oct-23	19-Oct-23	19-Oct-23				
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES				
Sample Matrix Code	4AE	5A	6AE	6AE	6ABE	6ABE				
% Moisture at 105C$_A$	27.7	-	-	-	25.9	-		% w/w	0.1	A-T-044
% Stones >10mm$_A$	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		% w/w	0.1	A-T-044
pH$_D$ M#	7.74	8.07	-	-	8.52	8.58		pH	0.01	A-T-031s
Sulphate (water sol 2:1)$_D$ M#	<0.01	-	-	-	0.03	-		g/l	0.01	A-T-026s
Sulphur (total)$_D$	196	-	-	-	748	-		mg/kg	50	A-T-024s
Cyanide (free)$_A$ M#	<1	-	-	-	<1	-		mg/kg	1	A-T-042sFCN
Phenols - Total by HPLC$_A$	<0.2	-	-	-	<0.2	-		mg/kg	0.2	A-T-050s
Organic Matter$_D$ M#	2.1	-	-	-	3.4	-		% w/w	0.1	A-T-032s
Total Organic Carbon$_D$ M#	1.24	0.51	-	-	1.96	1.89		% w/w	0.03	A-T-032s
Fraction of organic carbon$_D$ #	0.0124	-	-	-	0.0196	-		N/A	0.0003	A-T-032s
Arsenic$_D$ M#	3	-	-	-	5	-		mg/kg	1	A-T-024s
Barium$_D$	47	-	-	-	83	-		mg/kg	1	A-T-024s
Beryllium$_D$	<0.5	-	-	-	0.9	-		mg/kg	0.5	A-T-024s
Boron (water soluble)$_D$ M#	<1.0	-	-	-	<1.0	-		mg/kg	1	A-T-027s
Cadmium$_D$ M#	<0.5	-	-	-	<0.5	-		mg/kg	0.5	A-T-024s
Copper$_D$ M#	11	-	-	-	25	-		mg/kg	1	A-T-024s
Chromium$_D$ M#	24	-	-	-	30	-		mg/kg	1	A-T-024s
Chromium (hexavalent)$_D$	<1	-	-	-	<1	-		mg/kg	1	A-T-040s
Chromium (trivalent)	24	-	-	-	30	-		mg/kg	1	Calc
Lead$_D$ M#	21	-	-	-	37	-		mg/kg	1	A-T-024s
Manganese$_D$	363	-	-	-	528	-		mg/kg	1	A-T-024s
Mercury$_D$	<0.17	-	-	-	<0.17	-		mg/kg	0.17	A-T-024s
Molybdenum$_D$ M#	<1	-	-	-	<1	-		mg/kg	1	A-T-024s
Nickel$_D$ M#	12	-	-	-	31	-		mg/kg	1	A-T-024s
Selenium$_D$ M#	<1	-	-	-	<1	-		mg/kg	1	A-T-024s
Vanadium$_D$ M#	29	-	-	-	35	-		mg/kg	1	A-T-024s
Zinc$_D$ M#	38	-	-	-	75	-		mg/kg	5	A-T-024s
Leachate Prep BS EN 12457-1 (2:1) (1 no)$_A$	*	-	*	*	-	-				A-T-001
pH (leachable)$_A$	7.13	-	7.55	7.15	-	-		pH	0.01	A-T-031w
Ammoniacal nitrogen as N (leachable)$_A$	0.13	-	0.21	0.06	-	-		mg/l	0.05	A-T-033w
Chloride (leachable)$_A$	15.40	-	5.10	3.02	-	-		mg/l	1	A-T-026w
Fluoride (leachable)$_A$	1.20	-	1.00	1.09	-	-		mg/l	0.1	A-T-026w (F)
Sulphate (leachable)$_A$	8.39	-	14.18	11.23	-	-		mg/l	1	A-T-026w

Lab Sample ID	23/10519/1	23/10519/3	23/10519/4	23/10519/5	23/10519/6	23/10519/7		Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	R22-TP201	R22-TP201	RedP-BH-9	RedP-BH-9	RedP-BH-9	RedP-BH-9				
Depth to Top	0.20	1.00	0.20	0.50	0.70	1.00				
Depth To Bottom					1					
Date Sampled	19-Oct-23	19-Oct-23	19-Oct-23	19-Oct-23	19-Oct-23	19-Oct-23				
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES				
Sample Matrix Code	4AE	5A	6AE	6AE	6ABE	6ABE				
Cyanide (free) (leachable)$_A$	<0.005	-	<0.005	<0.005	-	-		mg/l	0.005	A-T-042wFCN
Cyanide (total) (leachable)$_A$	<0.005	-	<0.005	<0.005	-	-		mg/l	0.005	A-T-042wTCN
Cyanide (complex) (leachable)	<0.005	-	<0.005	<0.005	-	-		mg/l	0.005	Calc
Phenol (leachable)$_A$	<0.01	-	<0.01	<0.01	-	-		mg/l	0.01	A-T-050w
Cresols (leachable)$_A$	<0.01	-	<0.01	<0.01	-	-		mg/l	0.01	A-T-050w
Resorcinol (leachable)$_A$	<0.01	-	<0.01	<0.01	-	-		mg/l	0.01	A-T-050w
Catechol (leachable)$_A$	<0.01	-	<0.01	<0.01	-	-		mg/l	0.01	A-T-050w
Xylenols & Ethylphenols (leachable)$_A$	<0.01	-	<0.01	<0.01	-	-		mg/l	0.01	A-T-050w
Naphthols (leachable)$_A$	<0.01	-	<0.01	<0.01	-	-		mg/l	0.01	A-T-050w
Trimethylphenol (leachable)$_A$	<0.01	-	<0.01	<0.01	-	-		mg/l	0.01	A-T-050w
Phenols (total by HPLC) (leachable)$_A$	<0.01	-	<0.01	<0.01	-	-		mg/l	0.01	A-T-050w
Antimony (leachable)$_A$	2	-	2	4	-	-		µg/l	1	A-T-025w
Arsenic (leachable)$_A$	3	-	4	2	-	-		µg/l	1	A-T-025w
Boron (leachable)$_A$	33	-	142	84	-	-		µg/l	10	A-T-025w
Barium (leachable)$_A$	19	-	19	29	-	-		µg/l	1	A-T-025w
Beryllium (leachable)$_A$	<1	-	<1	<1	-	-		µg/l	1	A-T-025w
Cadmium (leachable)$_A$	<1	-	<1	<1	-	-		µg/l	1	A-T-025w
Copper (leachable)$_A$	6	-	6	7	-	-		µg/l	4	A-T-025w
Chromium (leachable)$_A$	<1	-	<1	<1	-	-		µg/l	1	A-T-025w
Chromium (hexavalent) (leachable)$_A$	<0.05	-	<0.05	<0.05	-	-		mg/l	0.05	A-T-040w
Chromium (trivalent)	<0.05	-	<0.05	<0.05	-	-		mg/l	0.05	Calc
Iron (leachable)$_A$	238	-	881	255	-	-		µg/l	10	A-T-025w
Lead (leachable)$_A$	3	-	12	9	-	-		µg/l	1	A-T-025w
Manganese (leachable)$_A$	10	-	9	8	-	-		µg/l	1	A-T-025w
Magnesium (leachable)$_A$	2	-	7	3	-	-		mg/l	1	A-T-049w
Mercury (leachable)$_A$	<0.1	-	<0.1	<0.1	-	-		µg/l	0.1	A-T-025w
Molybdenum (leachable)$_A$	1	-	4	7	-	-		µg/l	1	A-T-025w
Nickel (leachable)$_A$	2	-	4	<2	-	-		µg/l	2	A-T-025w
Selenium (leachable)$_A$	<1	-	2	2	-	-		µg/l	1	A-T-025w
Vanadium (leachable)$_A$	10	-	11	4	-	-		µg/l	1	A-T-025w
Zinc (leachable)$_A$	5	-	8	7	-	-		µg/l	2	A-T-025w
Bentazone$_A$	<0.10	-	<0.10	<0.10	-	-		mg/kg	0.1	Subcon RPS MH
Cypermethrin$_A$	<0.10	-	<0.10	<0.10	-	-		mg/kg	0.1	Subcon RPS MH

Envirolab Job Number: 23/10519

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10519/1	23/10519/3	23/10519/4	23/10519/5	23/10519/6	23/10519/7		Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	R22-TP201	R22-TP201	RedP-BH-9	RedP-BH-9	RedP-BH-9	RedP-BH-9				
Depth to Top	0.20	1.00	0.20	0.50	0.70	1.00				
Depth To Bottom					1					
Date Sampled	19-Oct-23	19-Oct-23	19-Oct-23	19-Oct-23	19-Oct-23	19-Oct-23				
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES				
Sample Matrix Code	4AE	5A	6AE	6AE	6ABE	6ABE				
Linuron$_A$	<0.10	-	<0.10	<0.10	-	-		mg/kg	0.1	Subcon RPS MH
Alachlor$_A$	<0.02	-	<0.02	<0.02	-	-		mg/kg	0.02	Subcon RPS MH
Carbaryl$_A$	<0.10	-	<0.10	<0.10	-	-		mg/kg	0.1	Subcon RPS MH
Diuron$_A$	<0.10	-	<0.10	<0.10	-	-		mg/kg	0.1	Subcon RPS MH
Isoproturon$_A$	<0.10	-	<0.10	<0.10	-	-		mg/kg	0.1	Subcon RPS MH
MCPP; (Mecoprop)$_A$	<0.10	-	<0.10	<0.10	-	-		mg/kg	0.1	Subcon RPS MH
Calcium (leachable)$_A$	32	-	29	19	-	-		mg/l	1	A-T-049w

Lab Sample ID	23/10519/1	23/10519/3	23/10519/4	23/10519/5	23/10519/6	23/10519/7		Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	R22-TP201	R22-TP201	RedP-BH-9	RedP-BH-9	RedP-BH-9	RedP-BH-9				
Depth to Top	0.20	1.00	0.20	0.50	0.70	1.00				
Depth To Bottom					1					
Date Sampled	19-Oct-23	19-Oct-23	19-Oct-23	19-Oct-23	19-Oct-23	19-Oct-23				
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES				
Sample Matrix Code	4AE	5A	6AE	6AE	6ABE	6ABE				
Asbestos in Soil (inc. matrix) ^										
Asbestos in soil$_{D}^{\#}$	NAD	-	-	-	Amosite	-				A-T-045
Asbestos Matrix (visual)$_{D}$	-	-	-	-	-	-				A-T-045
Asbestos Matrix (microscope)$_{D}$	-	-	-	-	Loose Fibres	-				A-T-045
Asbestos ACM - Suitable for Water Absorption Test?$_{D}$	N/A	-	-	-	N/A	-				A-T-045
Asbestos in Soil Quantification % (Hand Picking & Weighing)										
Asbestos in soil % composition (hand picking and weighing)$_{D}$	-	-	-	-	<0.001	-		% w/w	0.001	A-T-054
OCP+OPP Combined Pest Suite (incl. Atrazine and Simazine)										
Dichlobenil$_{A}$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
Tecnazene$_{A}$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
Trifluralin$_{A}$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
alpha-Hexachlorocyclohexane (HCH)$_{A}$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
Hexachlorobenzene (HCB) $_{A}$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
Simazine$_{A}$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
Atrazine$_{A}$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
beta-Hexachlorocyclohexane (HCH)$_{A}$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
Quintozene (PCNB)$_{A}$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
Chlorothalonil$_{A}$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
delta-Hexachlorocyclohexane (HCH)$_{A}$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
Triallate$_{A}$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
Heptachlor$_{A}$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
Aldrin$_{A}$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
Triadimefon$_{A}$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
Telodrin$_{A}$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
Isodrin$_{A}$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
Pendimethalin$_{A}$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
Heptachlor epoxide$_{A}$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
trans-Chlordane (Gamma)$_{A}$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
o,p-DDE (2,4)$_{A}$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056

Lab Sample ID	23/10519/1	23/10519/3	23/10519/4	23/10519/5	23/10519/6	23/10519/7		Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	R22-TP201	R22-TP201	RedP-BH-9	RedP-BH-9	RedP-BH-9	RedP-BH-9				
Depth to Top	0.20	1.00	0.20	0.50	0.70	1.00				
Depth To Bottom					1					
Date Sampled	19-Oct-23	19-Oct-23	19-Oct-23	19-Oct-23	19-Oct-23	19-Oct-23				
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES				
Sample Matrix Code	4AE	5A	6AE	6AE	6ABE	6ABE				
Endosulphan I (Alpha)$_A$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
cis-Chlordane (Alpha)$_A$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
p,p-DDE (4,4)$_A$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
Dieldrin$_A$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
o,p-DDD (2,4)$_A$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
Endrin$_A$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
Endosulphan II (Beta)$_A$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
p,p-DDD (4,4)$_A$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
o,p-DDT (2,4)$_A$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
Endrin Aldehyde$_A$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
Endrin Ketone$_A$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
Endosulphan Sulphate$_A$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
p,p-DDT (4,4)$_A$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
o,p-Methoxychlor$_A$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
p,p-Methoxychlor$_A$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
Permethrin I (cis)$_A$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
Permethrin II (trans)$_A$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
Dichlorvos$_A$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
Mevinphos$_A$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
Demeton-S$_A$	<0.50	-	<0.50	<0.50	-	-		mg/kg	0.5	A-T-056
Demeton-O$_A$	<0.50	-	<0.50	<0.50	-	-		mg/kg	0.5	A-T-056
Phorate$_A$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
Dimethoate$_A$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
Propetamphos$_A$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
Diazinon (Dimpylate)$_A$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
Disulfoton$_A$	<0.10	-	<0.10	<0.10	-	-		mg/kg	0.1	A-T-056
Chlorpyrifos-methyl$_A$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
Parathion (Ethyl Parathion)$_A$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
Methyl Parathion$_A$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
Pirimiphos-methyl$_A$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
Fenitrothion$_A$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
Fensulphothion$_A$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
Fenthion$_A$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
Malathion$_A$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056

Envirolab Job Number: 23/10519

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10519/1	23/10519/3	23/10519/4	23/10519/5	23/10519/6	23/10519/7		Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	R22-TP201	R22-TP201	RedP-BH-9	RedP-BH-9	RedP-BH-9	RedP-BH-9				
Depth to Top	0.20	1.00	0.20	0.50	0.70	1.00				
Depth To Bottom					1					
Date Sampled	19-Oct-23	19-Oct-23	19-Oct-23	19-Oct-23	19-Oct-23	19-Oct-23				
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES				
Sample Matrix Code	4AE	5A	6AE	6AE	6ABE	6ABE				
Chlorfenvinphos$_A$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
Chlorpyrifos$_A$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
Trichloronate$_A$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
Prothiofos (Tokuthion)$_A$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
Ethion$_A$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
Triazophos$_A$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
Carbophenothion$_A$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
Phosalone$_A$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
Azinphos-methyl$_A$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
Azinphos-ethyl$_A$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
Coumaphos$_A$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056
gamma-Hexachlorocyclohexane (HCH)$_A$	<0.01	-	<0.01	<0.01	-	-		mg/kg	0.01	A-T-056

Envirolab Job Number: 23/10519

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10519/1	23/10519/3	23/10519/4	23/10519/5	23/10519/6	23/10519/7		Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	R22-TP201	R22-TP201	RedP-BH-9	RedP-BH-9	RedP-BH-9	RedP-BH-9				
Depth to Top	0.20	1.00	0.20	0.50	0.70	1.00				
Depth To Bottom					1					
Date Sampled	19-Oct-23	19-Oct-23	19-Oct-23	19-Oct-23	19-Oct-23	19-Oct-23				
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES				
Sample Matrix Code	4AE	5A	6AE	6AE	6ABE	6ABE				
PAH-16MS										
Acenaphthene$_A^{M\#}$	<0.01^U	-	-	-	0.30^U	-		mg/kg	0.01	A-T-019s
Acenaphthylene$_A^{M\#}$	<0.01	-	-	-	0.08	-		mg/kg	0.01	A-T-019s
Anthracene$_A^{M\#}$	<0.02	-	-	-	0.69	-		mg/kg	0.02	A-T-019s
Benzo(a)anthracene$_A^{M\#}$	<0.04	-	-	-	1.90	-		mg/kg	0.04	A-T-019s
Benzo(a)pyrene$_A^{M\#}$	<0.04	-	-	-	1.77	-		mg/kg	0.04	A-T-019s
Benzo(b)fluoranthene$_A^{M\#}$	<0.05	-	-	-	2.02	-		mg/kg	0.05	A-T-019s
Benzo(ghi)perylene$_A^{M\#}$	<0.05	-	-	-	0.88	-		mg/kg	0.05	A-T-019s
Benzo(k)fluoranthene$_A^{M\#}$	<0.07	-	-	-	0.88	-		mg/kg	0.07	A-T-019s
Chrysene$_A^{M\#}$	<0.06	-	-	-	1.84	-		mg/kg	0.06	A-T-019s
Dibenzo(ah)anthracene$_A$	<0.04	-	-	-	0.18	-		mg/kg	0.04	A-T-019s
Fluoranthene$_A^{M\#}$	<0.08	-	-	-	4.36	-		mg/kg	0.08	A-T-019s
Fluorene$_A^{M\#}$	<0.01	-	-	-	0.30	-		mg/kg	0.01	A-T-019s
Indeno(123-cd)pyrene$_A^{M\#}$	<0.03	-	-	-	1.09	-		mg/kg	0.03	A-T-019s
Naphthalene $_A^{M\#}$	<0.03^U	-	-	-	0.30	-		mg/kg	0.03	A-T-019s
Phenanthrene$_A^{M\#}$	<0.03	-	-	-	2.60	-		mg/kg	0.03	A-T-019s
Pyrene$_A^{M\#}$	<0.07	-	-	-	3.82	-		mg/kg	0.07	A-T-019s
Total PAH-16MS$_A$	<0.08	-	-	-	23	-		mg/kg	0.01	A-T-019s

Envirolab Job Number: 23/10519

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10519/1	23/10519/3	23/10519/4	23/10519/5	23/10519/6	23/10519/7		Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	R22-TP201	R22-TP201	RedP-BH-9	RedP-BH-9	RedP-BH-9	RedP-BH-9				
Depth to Top	0.20	1.00	0.20	0.50	0.70	1.00				
Depth To Bottom					1					
Date Sampled	19-Oct-23	19-Oct-23	19-Oct-23	19-Oct-23	19-Oct-23	19-Oct-23				
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES				
Sample Matrix Code	4AE	5A	6AE	6AE	6ABE	6ABE				
Speciated PCB-WHO12										
PCB BZ 81$_{A}^{M\#}$	-	-	-	-	<0.005^{U}	-		mg/kg	0.005	A-T-004s
PCB BZ 105$_{A}^{M\#}$	-	-	-	-	<0.005^{U}	-		mg/kg	0.005	A-T-004s
PCB BZ 114$_{A}^{M\#}$	-	-	-	-	<0.005^{U}	-		mg/kg	0.005	A-T-004s
PCB BZ 118$_{A}^{M\#}$	-	-	-	-	<0.007	-		mg/kg	0.007	A-T-004s
PCB BZ 123$_{A}^{M\#}$	-	-	-	-	<0.005^{U}	-		mg/kg	0.005	A-T-004s
PCB BZ 126$_{A}^{M\#}$	-	-	-	-	<0.005^{U}	-		mg/kg	0.005	A-T-004s
PCB BZ 156$_{A}^{M\#}$	-	-	-	-	<0.005^{U}	-		mg/kg	0.005	A-T-004s
PCB BZ 157$_{A}^{M\#}$	-	-	-	-	<0.005^{U}	-		mg/kg	0.005	A-T-004s
PCB BZ 167$_{A}^{M\#}$	-	-	-	-	<0.005^{U}	-		mg/kg	0.005	A-T-004s
PCB BZ 169$_{A}^{M\#}$	-	-	-	-	<0.005^{U}	-		mg/kg	0.005	A-T-004s
PCB BZ 189$_{A}^{M\#}$	-	-	-	-	<0.005^{U}	-		mg/kg	0.005	A-T-004s
PCB BZ 77$_{A}^{M\#}$	-	-	-	-	<0.005^{U}	-		mg/kg	0.005	A-T-004s
Total Speciated PCB-WHO12$_{A}^{M\#}$	-	-	-	-	<0.007	-		mg/kg	0.005	A-T-004s

Envirolab Job Number: 23/10519

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10519/1	23/10519/3	23/10519/4	23/10519/5	23/10519/6	23/10519/7		Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	R22-TP201	R22-TP201	RedP-BH-9	RedP-BH-9	RedP-BH-9	RedP-BH-9				
Depth to Top	0.20	1.00	0.20	0.50	0.70	1.00				
Depth To Bottom					1					
Date Sampled	19-Oct-23	19-Oct-23	19-Oct-23	19-Oct-23	19-Oct-23	19-Oct-23				
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES				
Sample Matrix Code	4AE	5A	6AE	6AE	6ABE	6ABE				
TPH CWG with Clean Up										
Ali >C5-C6$_A$	-	-	-	-	<0.05	-		mg/kg	0.01	A-T-022s
Ali >C6-C8$_A$	-	-	-	-	<0.05	-		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$_A^{M\#}$	-	-	-	-	<1	-		mg/kg	1	A-T-055s
Ali >C21-C35$_A^{M\#}$	-	-	-	-	11	-		mg/kg	1	A-T-055s
Total Aliphatics$_A$	-	-	-	-	11	-		mg/kg	1	Calc-As Recd
Aro >C5-C7$_A^{\#}$	-	-	-	-	<0.05	-		mg/kg	0.01	A-T-022s
Aro >C7-C8$_A^{\#}$	-	-	-	-	<0.05	-		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$_A$	-	-	-	-	4	-		mg/kg	1	A-T-055s
Aro >C16-C21$_A^{M\#}$	-	-	-	-	11	-		mg/kg	1	A-T-055s
Aro >C21-C35$_A^{M\#}$	-	-	-	-	36	-		mg/kg	1	A-T-055s
Total Aromatics$_A$	-	-	-	-	53	-		mg/kg	1	Calc-As Recd
TPH (Ali & Aro >C5-C35)$_A$	-	-	-	-	63	-		mg/kg	1	Calc-As Recd
BTEX - Benzene$_A^{\#}$	-	-	-	-	<0.05	-		mg/kg	0.01	A-T-022s
BTEX - Toluene$_A^{\#}$	-	-	-	-	<0.05	-		mg/kg	0.01	A-T-022s
BTEX - Ethyl Benzene$_A^{\#}$	-	-	-	-	<0.05	-		mg/kg	0.01	A-T-022s
BTEX - m & p Xylene$_A^{\#}$	-	-	-	-	<0.05	-		mg/kg	0.01	A-T-022s
BTEX - o Xylene$_A^{\#}$	-	-	-	-	<0.05	-		mg/kg	0.01	A-T-022s
MTBE$_A^{\#}$	-	-	-	-	<0.05	-		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 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 **six 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.
The client Sample No, Client Sample ID, Depth to top, Depth to Bottom and Date Sampled are all provided by the client.
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.

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 "^"	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
N/A	Not applicable

Asbestos
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
Quantification of asbestos is a 3 stage process including visual identification, hand picking and weighing, and fibre counting by sedimentation/phase contrast optical microscopy if required. 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) quantification by sedimentation is performed. 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.

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^{o}C / 11550µS/cm @ 20^{o}C fall outside the accreditation range and as such are unaccredited.

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

Envirolab Deviating Samples Report

Units 7&8 Sandpits Business Park, Mottram Road, Hyde, SK14 3AR
Tel. 0161 368 4921 email. ask@envlab.co.uk

Client: Structural Soils Limited (Hemel Hempstead), 18 Frogmore Road, Hemel Hempstead, UK, HP3 9RT

Project: Sealink Richborough

Clients Project No: 563607

Project No: 23/10519

Date Received: 25/10/2023 (am)

Cool Box Temperatures (°C): 7.7

Lab Sample ID	23/10519/7
Client Sample No	
Client Sample ID/Depth	RedP-BH-9 1.00m
Date Sampled	19/10/23
Deviation Code	
F	✓

Key
F *Maximum holding time exceeded between sampling date and analysis for analytes listed below*

HOLDING TIME EXCEEDANCES

Lab Sample ID	23/10519/7
Client Sample No	
Client Sample ID/Depth	RedP-BH-9 1.00m
Date Sampled	19/10/23
BTEX (total)	✓

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	23/10519/1	23/10519/3	23/10519/4	23/10519/5	23/10519/6	23/10519/7
Client Sample No						
Client Sample ID/Depth	R22-TP201 0.20m	R22-TP201 1.00m	RedP-BH-9 0.20m	RedP-BH-9 0.50m	RedP-BH-9 0.70-1m	RedP-BH-9 1.00m
Date Sampled	19/10/23	19/10/23	19/10/23	19/10/23	19/10/23	19/10/23
A-T-004s		01/11/2023			01/11/2023	01/11/2023
A-T-007s		31/10/2023			31/10/2023	31/10/2023
A-T-019s	03/11/2023	03/11/2023			03/11/2023	03/11/2023
A-T-022s		02/11/2023			02/11/2023	08/11/2023
A-T-024s	31/10/2023				31/10/2023	
A-T-025w	06/11/2023	07/11/2023	06/11/2023	06/11/2023	07/11/2023	07/11/2023
A-T-026s	31/10/2023				31/10/2023	
A-T-026w	03/11/2023	07/11/2023	03/11/2023	03/11/2023	07/11/2023	07/11/2023
A-T-026w (F)	03/11/2023	07/11/2023	03/11/2023	03/11/2023	07/11/2023	07/11/2023
A-T-027s	31/10/2023				31/10/2023	
A-T-030s		31/10/2023			30/10/2023	31/10/2023
A-T-031s	31/10/2023	31/10/2023			31/10/2023	31/10/2023
A-T-031w	03/11/2023	07/11/2023	03/11/2023	03/11/2023	07/11/2023	07/11/2023
A-T-032s	02/11/2023	02/11/2023			06/11/2023	02/11/2023
A-T-032w		07/11/2023			07/11/2023	07/11/2023
A-T-033w	03/11/2023		03/11/2023	03/11/2023		
A-T-037w		07/11/2023			07/11/2023	07/11/2023
A-T-040s	31/10/2023				31/10/2023	
A-T-040w	03/11/2023		03/11/2023	03/11/2023		
A-T-042sFCN	02/11/2023				02/11/2023	
A-T-042wFCN	02/11/2023		02/11/2023	02/11/2023		
A-T-042wTCN	02/11/2023		02/11/2023	02/11/2023		
A-T-044	02/11/2023	31/10/2023	31/10/2023	31/10/2023	02/11/2023	31/10/2023
A-T-045	27/10/2023				27/10/2023	
A-T-049w	01/11/2023		01/11/2023	01/11/2023		
A-T-050s	03/11/2023				03/11/2023	
A-T-050w	03/11/2023	07/11/2023	03/11/2023	03/11/2023	07/11/2023	07/11/2023
A-T-054					30/10/2023	
A-T-055s					31/10/2023	
A-T-056	01/11/2023		01/11/2023	01/11/2023		
A-T-ANCs		31/10/2023			31/10/2023	31/10/2023
Calc	03/11/2023		03/11/2023	03/11/2023	31/10/2023	

Lab Sample ID	23/10519/1	23/10519/3	23/10519/4	23/10519/5	23/10519/6	23/10519/7
Client Sample No						
Client Sample ID/Depth	R22-TP201 0.20m	R22-TP201 1.00m	RedP-BH-9 0.20m	RedP-BH-9 0.50m	RedP-BH-9 0.70-1m	RedP-BH-9 1.00m
Date Sampled	19/10/23	19/10/23	19/10/23	19/10/23	19/10/23	19/10/23
Calc-As Recd					02/11/2023	
Calc-no stones		07/11/2023			07/11/2023	07/11/2023
Probe (w)		07/11/2023			07/11/2023	07/11/2023

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

Certificate of Analysis

Report No.: **23-07414-2**

Issue No.: **2**
Date of Issue **08/04/2024**

Customer Details:	Envirolab Ltd, 7 - 8 Sandpits Business Park, Mottram Road, Hyde, Greater Manchester, SK14 3AR, United Kingdom
Customer Contact:	[redacted]
Customer Order No.:	P0752626
Customer Reference:	Not Supplied
Quotation Reference:	Q22-00104 (Issue: 36)
Description:	3 geo samples
Date Received:	27/10/2023
Date Started:	27/10/2023
Date Completed:	16/11/2023
Test Methods:	Details available on request (refer to SOP code against relevant result/s)
Notes:	This report replaces issue 1 in its entirety

[redacted]

Approved By: [redacted], **LIMS Administrator**

This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service.
This certificate shall not be reproduced except in full without the prior written approval of the laboratory.
Observations and interpretations are outside of the scope of UKAS accreditation.
Results reported herein relate only to the items supplied to the laboratory for testing.
Results on an Interim Report are not dry-weight corrected.
Where the laboratory is not responsible for the sampling, results apply to the sample(s) as they were received.
The laboratory shall not be responsible for any information that is supplied by the customer that may affect the validity of results.

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Results Summary

Report No.: 23-07414-2

Customer Reference: Not Supplied

Customer Order No: P0752626

Customer Sample No	R22-TP201 0.20m	RedP-BH-9 0.20m	Redp-BH-9 0.50m
RPS Sample No	35988	35989	35990
Sample Type	**GEO**	**GEO**	**GEO**
Sample Matrix	SOIL	SOIL	SOIL
Sampling Date	19/10/2023	19/10/2023	19/10/2023

Determinand	CAS No	Codes	SOP	RL	Units			
carbaryl	63-25-2	N	L001	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)	< 0.10 (T)
2,4,5-trichlorophenoxyacetic acid (2,4,5-T)	93-76-5	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)	< 0.10 (T)
2,4,5-TP (Fenoprop)	93-72-1	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)	< 0.10 (T)
2,4-dichlorophenoxyacetic acid (2,4-D)	94-75-7	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)	< 0.10 (T)
acifluorfen	50594-66-6	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)	< 0.10 (T)
bentazone	25057-89-0	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)	< 0.10 (T)
clopyralid	1702-17-6	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)	< 0.10 (T)
dichlorprop (2,4-DP)	120-36-5	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)	< 0.10 (T)
dinoseb (DNBP)	88-85-7	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)	< 0.10 (T)
2-methyl-4-chlorophenoxyacetic acid (MCPA)	94-74-6	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)	< 0.10 (T)
mecoprop (MCPP)	7085-19-0	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)	< 0.10 (T)
pentachlorophenol (PCP)	87-86-5	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)	< 0.10 (T)
2,3,6-trichlorobenzoic acid (2,3,6-TBA)	50-31-7	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)	< 0.10 (T)
4-(2,4-dichlorophenoxy)butanoic acid (2,4-DB)	94-82-6	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)	< 0.10 (T)
4-chlorophenoxyacetic acid (4-CPA)	122-88-3	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)	< 0.10 (T)
benazolin	3813-05-6	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)	< 0.10 (T)
bromoxynil	1689-84-5	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)	< 0.10 (T)
dicamba	1918-00-9	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)	< 0.10 (T)
diclofop	40843-25-2	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)	< 0.10 (T)
2-methyl-4,6-dinitrophenol (DNOC)	534-52-1	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)	< 0.10 (T)
flamprop	58667-63-3	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)	< 0.10 (T)
fluroxypyr	69377-81-7	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)	< 0.10 (T)
ioxynil	1689-83-4	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)	< 0.10 (T)
MCPB	94-81-5	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)	< 0.10 (T)
picloram	1918-02-1	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)	< 0.10 (T)
triclopyr	55335-06-3	N	L340	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)	< 0.10 (T)
alachlor	15972-60-8	N	G029	0.02	mg/kg AR	< 0.02 (T)	< 0.02 (T)	< 0.02 (T)
chloroxuron	1982-47-4	N	L025	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)	< 0.10 (T)
chlortoluron	15545-48-9	N	L025	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)	< 0.10 (T)
diflubenzuron	35367-38-5	N	L025	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)	< 0.10 (T)
dimefuron	34205-21-5	N	L025	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)	< 0.10 (T)
diuron	330-54-1	N	L025	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)	< 0.10 (T)
isoproturon	34123-59-6	N	L025	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)	< 0.10 (T)
linuron	330-55-2	N	L025	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)	< 0.10 (T)
methabenzthiazuron	18691-97-9	N	L025	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)	< 0.10 (T)
metoxuron	19937-59-8	N	L025	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)	< 0.10 (T)
monolinuron	1746-81-2	N	L025	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)	< 0.10 (T)
monuron	150-68-5	N	L025	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)	< 0.10 (T)

Results Summary

Report No.: 23-07414-2

Customer Reference: Not Supplied

Customer Order No: P0752626

Customer Sample No	R22-TP201 0.20m	RedP-BH-9 0.20m	Redp-BH-9 0.50m
RPS Sample No	35988	35989	35990
Sample Type	**GEO**	**GEO**	**GEO**
Sample Matrix	SOIL	SOIL	SOIL
Sampling Date	19/10/2023	19/10/2023	19/10/2023

Determinand	CAS No	Codes	SOP	RL	Units			
pencycuron	66063-05-6	N	L025	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)	< 0.10 (T)
bifenthrin	82657-04-3	N	G127	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)	< 0.10 (T)
cyfluthrin, total	68359-37-5	N	G127	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)	< 0.10 (T)
cyhalothrin, total	68085-85-8	N	G127	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)	< 0.10 (T)
cypermethrin, total	52315-07-8	N	G127	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)	< 0.10 (T)
deltamethrin	52918-63-5	N	G127	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)	< 0.10 (T)
fenvalerate	51630-58-1	N	G127	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)	< 0.10 (T)
permethrin, total	52645-53-1	N	G127	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)	< 0.10 (T)
resmethrin	10453-86-8	N	G127	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)	< 0.10 (T)
tetramethrin	7696-12-0	N	G127	0.1	mg/kg DW	< 0.10 (T)	< 0.10 (T)	< 0.10 (T)

Comments

Report No.: 23-07414-2

Customer Reference: Not Supplied

Customer Order No: P0752626

Job	Description	Document History
23-07414	n/a	Updated Client sample refs as requested

Deviating Samples

Report No.: 23-07414-2

Customer Reference: Not Supplied

Customer Order No: P0752626

Our policy on Deviating Samples has been implemented in accordance with UKAS Policy on Deviating Samples (TPS63).
RPS is not responsible for the integrity of samples as received, unless RPS personnel performed the sampling. Samples submitted may be declared to be deviating.
Where applicable the analysis method remains UKAS accredited, however results reported for a deviating sample may be compromised.
Where no sampling date was supplied, samples have been declared to be deviating. If the date can be supplied, results may be reissued if assessed not deviating.
Where the sample container used was unsuitable or broken, the sample is flagged as deviating and re-sampling/re-submisson may be required.

RPS No.	Customer No.	Customer ID	Date Sampled	Containers Received	Deviating	Reason for Deviation
35988	R22-TP201 0.20m		19/10/2023	100 mL amber glass jar	**Yes**	No sampling time provided.
35989	RedP-BH-9 0.20m		19/10/2023	100 mL amber glass jar	**Yes**	No sampling time provided.
35990	Redp-BH-9 0.50m		19/10/2023	100 mL amber glass jar	**Yes**	No sampling time provided.

Report No.: 23-07414-2

Type	Matrix Code	Description
Food	CEREALPROD	Cereals, grains & products
Food	DRIEDFRUIT	Dried fruits
Food	FRIEDBAKED	Fried or baked food
Food	LEGUME	Legumes
Food	MEAT	Meat
Food	POWDERED	Powdered food
Food	PULSE	Pulses (dried legumes)
Food	VEGETABLES	Vegetables
Gas	TDTUBE	TD Tube
Gas	TENAX	Tenax Tube
Gas	TUBE	Tube
Gas	VAPOUR	Gas
Geological	SED_MAR	Marine Sediment
Geological	SED_RIV	River Sediment
Geological	SLUDG_SOL	Sludge (solid only)
Geological	SOIL	Soil
Liquid	BEVERAGE	Beverage
Liquid	BLOOD	Blood
Liquid	CONDENSATE	Condensate
Liquid	FOAM_LIQ	Liquid foam
Liquid	FORMULATN	Formula
Liquid	LEACHATE	Leachate
Liquid	OIL/GREASE	Oil or grease
Liquid	SLUDG_LIQ	Sludge (liquid only)
Liquid	SOLVENT	Solvent
Liquid	URINE	Urine
Sludge	SLUDG_WHL	Sludge for bulk route
Solid	BADGE	Badge
Solid	BEDDING	Bedding
Solid	BIOTA	Biota (general)
Solid	BIOTA_F	Biota (fish)
Solid	BIOTA_SF	Biota (shellfish)
Solid	CONSTRCTN	Construction materials
Solid	FABRIC	Fabrics & furnishing materials
Solid	FEED	Animal feed
Solid	FERTILISER	Fertiliser
Solid	FILTER	Filter
Solid	FOAM	Solid foam material
Solid	PACKAGING	Packaging material
Solid	PAPER	Paper
Solid	PLANT	Plant (vegetation)
Solid	POWDER	Powder
Solid	SWAB	Swab
Water	BAL	Ballast Water
Water	BIL	Bilge Water
Water	DW	Drinking Water
Water	EFFLUENT	Effluent
Water	GW	Ground Water
Water	INFLUENT	Influent
Water	SALTW	Salt Water
Water	SW	Surface Water
Water	TW	Tap Water
Water	W	Water

Report No.: 23-07414-2

Key Code	Description
N	Not Accredited Test
U	UKAS Accredited Test - UKAS accreditation is only implied if the report carries the UKAS logo
UF	UKAS Flexible Scope Test
M	MCERTS Accredited Test - MCERTS accreditation is only implied if the report carries the MCERTS logo
O	Marine Management Organisation (MMO) Validated
SN	Subcontracted to approved laboratory not accredited for the test
SU	Subcontracted to approved laboratory UKAS Accredited for the test
SM	Subcontracted to approved laboratory MCERTS/UKAS Accredited for the test
SIN	Subcontracted to internal RPS Group laboratory not accredited for the test
SIU	Subcontracted to internal RPS Group laboratory UKAS Accredited for the test
SIM	Subcontracted to internal RPS Group laboratory MCERTS/UKAS Accredited for the test
*	Modified standard method
I/S (in results)	Insufficient Sample
U/S (in results)	Unsuitable Sample
S/C (in results)	See Comments
ND (in results)	Not Detected
DW (in units)	Results are expressed on a dry weight basis
L (in results)	Result is outside normal limits

Sample Type	Sample Retention and Disposal Period
Foodstuff	1 month (if frozen) from the issue date of this report
Waters	2 weeks from the issue date of this report
Other Liquids	1 month from the issue date of this report
Solids / Soils	1 month from the issue date of this report
Sediments	1 month from the issue date of this report

Note: Sample retention may be subject to agreement with the customer for particular projects

Where the dry solids value of a sample is low (<50%), reporting limits are automatically raised for all determinants analysed on an as-received basis.

Soil Typing	Description
Type 1	Clay - Brown
Type 2	Clay - Grey/Black
Type 3	Sand
Type 4	Top Soil (Standard)
Type 5	Top Soil (High Peat)
Type 6	Made Ground (>50% Clay)
Type 7	Made Ground (>50% Sand)
Type 8	Made Ground (>50% Top Soil)
Type X	Other

Dev code	Description
D	No sampling date provided.
T	No sampling time provided.
Z	Temperature of samples exceeded in transit/storage.
V	Excessive headspace for volatile determinands.
P	Sample submitted without required preservative(s).
C	Incorrect container.
H	Holding time exceeded (sampling to extraction).
X	Holding time exceeded (sampling to receipt).

Note: Where the following information is included in this certificate, it has usually been supplied by the customer: Customer Sample ID, Sample Location, Sample Depth, Sampling Date and Sampling Time. The laboratory shall not be responsible for any information that is supplied by the customer that may affect the validity of results.

Units 7 & 8, Sandpits Business Park
Mottram Road, Hyde, Cheshire, SK14 3AR

Final Test Report

Envirolab Job Number:	23/10519
Issue Number:	1 Date: 17-Nov-23
Client:	Structural Soils Limited (Hemel Hempstead) 18 Frogmore Road Hemel Hempstead UK HP3 9RT
Project Manager:	[redacted]
Project Name:	Sealink Richborough
Project Ref:	563607
Order No:	N/A
Date Samples Received:	25-Oct-23
Date Instructions Received:	25-Oct-23
Date Analysis Completed:	17-Nov-23

Notes - Soil analysis

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

For samples with Matrix Codes 1 - 6 natural stones >10mm are removed or excluded from the sample prior to analysis and reported results corrected to a whole sample basis.

For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis.

Notes - General

This report shall not be reproduced, except in full, without written approval from Envirolab.

Subscript "A" indicates analysis performed on the sample as received. "D" indicates analysis performed on the dried sample, crushed to pass a 2mm sieve, unless asbestos is found to be present in which case all analysis is performed on the sample as received.

All analysis is performed on the dried and crushed sample for samples with Matrix Code 7 and this supercedes any "A" subscripts.

All analysis is performed on the sample as received for soil samples from outside the European Union and this supercedes any "D" subscripts

For complex, multi-compound analysis, quality control results do not always fall within chart limits for every compound and we have criteria for reporting in these situations.

If results are in italic font they are associated with such quality control failures and may be unreliable.

A deviating samples 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

Predominant Matrix Codes: 1 = SAND, 2 = LOAM, 3 = CLAY, 4 = LOAM/SAND, 5 = SAND/CLAY, 6 = CLAY/LOAM, 7 = OTHER, 8 = Asbestos bulk ID sample

Secondary Matrix Codes: A = contains stones, B = contains construction rubble, C = contains visible hydrocarbons, D = contains glass/metal, E = contains roots/twigs.

IS indicates Insufficient sample for analysis, NDP indicates No Determination Possible and NAD indicates No Asbestos Detected.

Analytical results reflect the quality of the sample at the time of analysis only. Opinions and interpretations expressed are outside the scope of our accreditation.

Please contact us if you need any further information.

HWOL TPH Code: EH_CU_1D_AL: Extractable hydrocarbons - i.e. everything extracted by the solvent(s), Clean-up - e.g. by florisil, silica gel, GC - Single coil gas chromatography, Aliphatics only

Approved by:

[redacted]

Client Manager

Landfill WAC analysis must not be used for hazardous waste classification purposes. This analysis is only applicable for landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Sample Details						Landfill Waste Acceptance Criteria Limits		
Lab Sample ID	Method	ISO17025	MCERTS	23/10519/3				
Client Sample Number						Inert Waste Landfill	Stable Non-reactive Hazardous Waste in Non-Hazardous Landfill	Hazardous Waste Landfill
Client Sample ID				R22-TP201				
Depth to Top				1				
Depth to Bottom								
Date Sampled				19/10/2023				
Sample Type				Soil - ES				
Sample Matrix Code				5A				
Solid Waste Analysis								
pH (pH Units)$_D$	A-T-031	N	N	**8.07**		-	>6	-
ANC to pH 4 (mol/kg)$_D$	A-T-ANC	N	N	**0.09**		-	to be evaluated	to be evaluated
ANC to pH 6 (mol/kg)$_D$	A-T-ANC	N	N	**0.08**		-	to be evaluated	to be evaluated
Loss on Ignition (%)$_D$	A-T-030	N	N	**3.9**		-	-	10
Total Organic Carbon (%)$_D$	A-T-032	N	N	**0.51**		3	5	6
PAH Sum of 17 (mg/kg) $_A$	A-T-019	N	N	**<0.08**		100	-	-
Mineral Oil (mg/kg)$_{A\ EH_CU_1D_AL}$	A-T-007	N	N	**<10**		500	-	-
Sum of 7 PCBs (mg/kg)$_A$	A-T-004	N	N	**<0.007**		1	-	-
Sum of BTEX (mg/kg)$_A$	A-T-022	N	N	**<0.01**		6	-	-
Eluate Analysis				**10:1**	**10:1**	**Limit values for compliance leaching test using**		
				mg/l	**mg/kg**	**BS EN 12457-2 at L/S 10 l/kg (mg/kg)**		
Arsenic	A-T-025	N	N	0.004	**0.040**	0.5	2	25
Barium	A-T-025	N	N	0.053	**0.530**	20	100	300
Cadmium	A-T-025	N	N	<0.001	**<0.01**	0.04	1	5
Chromium	A-T-025	N	N	<0.001	**<0.01**	0.5	10	70
Copper	A-T-025	N	N	0.009	**0.090**	2	50	100
Mercury	A-T-025	N	N	<0.0005	**<0.005**	0.01	0.2	2
Molybdenum	A-T-025	N	N	<0.001	**<0.01**	0.5	10	30
Nickel	A-T-025	N	N	0.003	**0.030**	0.4	10	40
Lead	A-T-025	N	N	0.006	**0.060**	0.5	10	50
Antimony	A-T-025	N	N	0.001	**0.010**	0.06	0.7	5
Selenium	A-T-025	N	N	0.001	**0.010**	0.1	0.5	7
Zinc	A-T-025	N	N	0.010	**0.100**	4	50	200
Chloride	A-T-026	N	N	7	**75**	800	15000	25000
Fluoride	A-T-026	N	N	0.3	**3.0**	10	150	500
Sulphate as SO_4	A-T-026	N	N	77	**766**	1000	20000	50000
Total Dissolved Solids	A-T-035	N	N	28	**280**	4000	60000	100000
Phenol Index	A-T-050	N	N	<0.01	**<0.1**	1	-	-
Dissolved Organic Carbon	A-T-032	N	N	<2.0	**<200**	500	800	1000
Leach Test Information								
pH (pH Units)	A-T-031	N	N	8.2				
Conductivity (µS/cm)	A-T-037	N	N	56				
Mass Sample (kg)				0.191				
Dry Matter (%)	A-T-044	N	N	91.5				

Stated acceptance limits are for guidance only and Envirolab cannot be held responsible for any discrepancies with current legislation

Landfill WAC analysis must not be used for hazardous waste classification purposes. This analysis is only applicable for landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Sample Details						Landfill Waste Acceptance Criteria Limits		
Lab Sample ID	Method	ISO17025	MCERTS	23/10519/6				
Client Sample Number						Inert Waste Landfill	Stable Non-reactive Hazardous Waste in Non-Hazardous Landfill	Hazardous Waste Landfill
Client Sample ID				RedP-BH-9				
Depth to Top				0.7				
Depth to Bottom				1.00				
Date Sampled				19/10/2023				
Sample Type				Soil - ES				
Sample Matrix Code				6ABE				
Solid Waste Analysis								
pH (pH Units)$_D$	A-T-031	N	N	**8.52**		-	>6	-
ANC to pH 4 (mol/kg)$_D$	A-T-ANC	N	N	**0.54**		-	to be evaluated	to be evaluated
ANC to pH 6 (mol/kg)$_D$	A-T-ANC	N	N	**0.1**		-	to be evaluated	to be evaluated
Loss on Ignition (%)$_D$	A-T-030	N	N	**ndp**		-	-	10
Total Organic Carbon (%)$_D$	A-T-032	N	N	**1.96**		3	5	6
PAH Sum of 17 (mg/kg) $_A$	A-T-019	N	N	**23.2**		100	-	-
Mineral Oil (mg/kg)$_{A\ EH_CU_1D_AL}$	A-T-007	N	N	**50**		500	-	-
Sum of 7 PCBs (mg/kg)$_A$	A-T-004	N	N	**<0.007**		1	-	-
Sum of BTEX (mg/kg)$_A$	A-T-022	N	N	**<0.05**		6	-	-
Eluate Analysis				**10:1**	**10:1**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg (mg/kg)**		
				mg/l	**mg/kg**			
Arsenic	A-T-025	N	N	0.002	**0.020**	0.5	2	25
Barium	A-T-025	N	N	0.020	**0.200**	20	100	300
Cadmium	A-T-025	N	N	<0.001	**<0.01**	0.04	1	5
Chromium	A-T-025	N	N	<0.001	**<0.01**	0.5	10	70
Copper	A-T-025	N	N	0.005	**0.050**	2	50	100
Mercury	A-T-025	N	N	<0.0005	**<0.005**	0.01	0.2	2
Molybdenum	A-T-025	N	N	0.003	**0.030**	0.5	10	30
Nickel	A-T-025	N	N	<0.002	**<0.02**	0.4	10	40
Lead	A-T-025	N	N	0.007	**0.070**	0.5	10	50
Antimony	A-T-025	N	N	0.002	**0.020**	0.06	0.7	5
Selenium	A-T-025	N	N	0.002	**0.020**	0.1	0.5	7
Zinc	A-T-025	N	N	0.004	**0.040**	4	50	200
Chloride	A-T-026	N	N	1	**11**	800	15000	25000
Fluoride	A-T-026	N	N	0.7	**7.0**	10	150	500
Sulphate as SO_4	A-T-026	N	N	7	**74**	1000	20000	50000
Total Dissolved Solids	A-T-035	N	N	46	**460**	4000	60000	100000
Phenol Index	A-T-050	N	N	<0.01	**<0.1**	1	-	-
Dissolved Organic Carbon	A-T-032	N	N	<2.0	**<200**	500	800	1000
Leach Test Information								
pH (pH Units)	A-T-031	N	N	7.9				
Conductivity (µS/cm)	A-T-037	N	N	92				
Mass Sample (kg)				0.193				
Dry Matter (%)	A-T-044	N	N	90.6				

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Landfill WAC analysis must not be used for hazardous waste classification purposes. This analysis is only applicable for landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Sample Details						Landfill Waste Acceptance Criteria Limits		
Lab Sample ID	Method	ISO17025	MCERTS	23/10519/7				
Client Sample Number						Inert Waste Landfill	Stable Non-reactive Hazardous Waste in Non-Hazardous Landfill	Hazardous Waste Landfill
Client Sample ID				RedP-BH-9				
Depth to Top				1				
Depth to Bottom								
Date Sampled				19/10/2023				
Sample Type				Soil - ES				
Sample Matrix Code				6ABE				
Solid Waste Analysis								
pH (pH Units)$_D$	A-T-031	N	N	**8.58**		-	>6	-
ANC to pH 4 (mol/kg)$_D$	A-T-ANC	N	N	**0.62**		-	to be evaluated	to be evaluated
ANC to pH 6 (mol/kg)$_D$	A-T-ANC	N	N	**0.16**		-	to be evaluated	to be evaluated
Loss on Ignition (%)$_D$	A-T-030	N	N	**6**		-	-	10
Total Organic Carbon (%)$_D$	A-T-032	N	N	**1.89**		3	5	6
PAH Sum of 17 (mg/kg) $_A$	A-T-019	N	N	**15.4**		100	-	-
Mineral Oil (mg/kg)$_{A\ EH_CU_1D_AL}$	A-T-007	N	N	**37**		500	-	-
Sum of 7 PCBs (mg/kg)$_A$	A-T-004	N	N	**<0.007**		1	-	-
Sum of BTEX (mg/kg)$_A$	A-T-022	N	N	**<0.01**		6	-	-
Eluate Analysis				**10:1**	**10:1**	**Limit values for compliance leaching test using**		
				mg/l	**mg/kg**	**BS EN 12457-2 at L/S 10 l/kg (mg/kg)**		
Arsenic	A-T-025	N	N	0.001	**0.010**	0.5	2	25
Barium	A-T-025	N	N	0.026	**0.260**	20	100	300
Cadmium	A-T-025	N	N	<0.001	**<0.01**	0.04	1	5
Chromium	A-T-025	N	N	0.002	**0.020**	0.5	10	70
Copper	A-T-025	N	N	0.005	**0.050**	2	50	100
Mercury	A-T-025	N	N	<0.0005	**<0.005**	0.01	0.2	2
Molybdenum	A-T-025	N	N	0.004	**0.040**	0.5	10	30
Nickel	A-T-025	N	N	<0.002	**<0.02**	0.4	10	40
Lead	A-T-025	N	N	0.003	**0.030**	0.5	10	50
Antimony	A-T-025	N	N	0.004	**0.040**	0.06	0.7	5
Selenium	A-T-025	N	N	<0.001	**<0.01**	0.1	0.5	7
Zinc	A-T-025	N	N	<0.002	**<0.02**	4	50	200
Chloride	A-T-026	N	N	<1.00	**<10**	800	15000	25000
Fluoride	A-T-026	N	N	0.6	**6.0**	10	150	500
Sulphate as SO_4	A-T-026	N	N	12	**122**	1000	20000	50000
Total Dissolved Solids	A-T-035	N	N	74	**740**	4000	60000	100000
Phenol Index	A-T-050	N	N	<0.01	**<0.1**	1	-	-
Dissolved Organic Carbon	A-T-032	N	N	<2.0	**<200**	500	800	1000
Leach Test Information								
pH (pH Units)	A-T-031	N	N	7.9				
Conductivity (µS/cm)	A-T-037	N	N	147				
Mass Sample (kg)				0.206				
Dry Matter (%)	A-T-044	N	N	85				

Stated acceptance limits are for guidance only and Envirolab cannot be held responsible for any discrepancies with current legislation

envirolab
Units 7 & 8 Sandpits Business Park
Mottram Road, Hyde, Cheshire, SK14 3AR

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 23/10525
Issue Number: 1 **Date:** 17 November, 2023

Client: Structural Soils Limited (Hemel Hempstead)
18 Frogmore Road
Hemel Hempstead
UK
HP3 9RT

Project Manager: [redacted]
Project Name: Sealink Richborough
Project Ref: 563607
Order No: N/A
Date Samples Received: 25/10/23
Date Instructions Received: 25/10/23
Date Analysis Completed: 17/11/23

Approved by:

[redacted]

Client Manager

Envirolab Job Number: 23/10525

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10525/1	23/10525/6						Units	Limit of Detection	Method ref
Client Sample No	101	103								
Client Sample ID	R22-TP506	RedP-BH-6								
Depth to Top	0.20	1.00								
Depth To Bottom										
Date Sampled	23-Oct-23	23-Oct-23								
Sample Type	SOIL - ES	SOIL - ES								
Sample Matrix Code	6AE	6ABE								
% Moisture at 105C$_A$	-	28.7						% w/w	0.1	A-T-044
% Stones >10mm$_A$	<0.1	<0.1						% w/w	0.1	A-T-044
pH$_D^{M\#}$	-	8.72						pH	0.01	A-T-031s
Sulphate (water sol 2:1)$_D^{M\#}$	-	0.05						g/l	0.01	A-T-026s
Sulphur (total)$_D$	-	446						mg/kg	50	A-T-024s
Cyanide (free)$_A^{M\#}$	-	<1						mg/kg	1	A-T-042sFCN
Phenols - Total by HPLC$_A$	-	<0.2						mg/kg	0.2	A-T-050s
Organic Matter$_D^{M\#}$	-	4.5						% w/w	0.1	A-T-032s
Total Organic Carbon$_D^{M\#}$	-	2.61						% w/w	0.03	A-T-032s
Fraction of organic carbon$_D^{\#}$	-	0.0261						N/A	0.0003	A-T-032s
Arsenic$_D^{M\#}$	-	5						mg/kg	1	A-T-024s
Barium$_D$	-	77						mg/kg	1	A-T-024s
Beryllium$_D$	-	0.6						mg/kg	0.5	A-T-024s
Boron (water soluble)$_D^{M\#}$	-	1.3						mg/kg	1	A-T-027s
Cadmium$_D^{M\#}$	-	<0.5						mg/kg	0.5	A-T-024s
Copper$_D^{M\#}$	-	17						mg/kg	1	A-T-024s
Chromium$_D^{M\#}$	-	20						mg/kg	1	A-T-024s
Chromium (hexavalent)$_D$	-	<1						mg/kg	1	A-T-040s
Chromium (trivalent)	-	20						mg/kg	1	Calc
Lead$_D^{M\#}$	-	45						mg/kg	1	A-T-024s
Manganese$_D$	-	425						mg/kg	1	A-T-024s
Mercury$_D$	-	<0.17						mg/kg	0.17	A-T-024s
Molybdenum$_D^{M\#}$	-	<1						mg/kg	1	A-T-024s
Nickel$_D^{M\#}$	-	13						mg/kg	1	A-T-024s
Selenium$_D^{M\#}$	-	<1						mg/kg	1	A-T-024s
Vanadium$_D^{M\#}$	-	26						mg/kg	1	A-T-024s
Zinc$_D^{M\#}$	-	89						mg/kg	5	A-T-024s
Leachate Prep BS EN 12457-1 (2:1) (1 no)$_A$	*	*								A-T-001
pH (leachable)$_A$	7.67	7.44						pH	0.01	A-T-031w
Ammoniacal nitrogen as N (leachable)$_A$	<0.05	<0.05						mg/l	0.05	A-T-033w
Chloride (leachable)$_A$	47.82	1.42						mg/l	1	A-T-026w
Fluoride (leachable)$_A$	1.23	0.59						mg/l	0.1	A-T-026w (F)
Sulphate (leachable)$_A$	40.63	7.06						mg/l	1	A-T-026w

Envirolab Job Number: 23/10525

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10525/1	23/10525/6						Units	Limit of Detection	Method ref
Client Sample No	101	103								
Client Sample ID	R22-TP506	RedP-BH-6								
Depth to Top	0.20	1.00								
Depth To Bottom										
Date Sampled	23-Oct-23	23-Oct-23								
Sample Type	SOIL - ES	SOIL - ES								
Sample Matrix Code	6AE	6ABE								
Cyanide (free) (leachable)$_A$	<0.005	<0.005						mg/l	0.005	A-T-042wFCN
Cyanide (total) (leachable)$_A$	<0.005	<0.005						mg/l	0.005	A-T-042wTCN
Cyanide (complex) (leachable)	<0.005	<0.005						mg/l	0.005	Calc
Phenol (leachable)$_A$	<0.01	0.01						mg/l	0.01	A-T-050w
Cresols (leachable)$_A$	<0.01	<0.01						mg/l	0.01	A-T-050w
Resorcinol (leachable)$_A$	<0.01	<0.01						mg/l	0.01	A-T-050w
Catechol (leachable)$_A$	<0.01	<0.01						mg/l	0.01	A-T-050w
Xylenols & Ethylphenols (leachable)$_A$	<0.01	<0.01						mg/l	0.01	A-T-050w
Naphthols (leachable)$_A$	<0.01	<0.01						mg/l	0.01	A-T-050w
Trimethylphenol (leachable)$_A$	<0.01	<0.01						mg/l	0.01	A-T-050w
Phenols (total by HPLC) (leachable)$_A$	<0.01	0.01						mg/l	0.01	A-T-050w
Antimony (leachable)$_A$	2	3						µg/l	1	A-T-025w
Arsenic (leachable)$_A$	9	6						µg/l	1	A-T-025w
Boron (leachable)$_A$	495	33						µg/l	10	A-T-025w
Barium (leachable)$_A$	12	33						µg/l	1	A-T-025w
Beryllium (leachable)$_A$	<1	<1						µg/l	1	A-T-025w
Cadmium (leachable)$_A$	<1	<1						µg/l	1	A-T-025w
Copper (leachable)$_A$	7	9						µg/l	4	A-T-025w
Chromium (leachable)$_A$	1	2						µg/l	1	A-T-025w
Chromium (hexavalent) (leachable)$_A$	<0.05	<0.05						mg/l	0.05	A-T-040w
Chromium (trivalent)	<0.05	<0.05						mg/l	0.05	Calc
Iron (leachable)$_A$	1120	318						µg/l	10	A-T-025w
Lead (leachable)$_A$	10	48						µg/l	1	A-T-025w
Manganese (leachable)$_A$	17	27						µg/l	1	A-T-025w
Magnesium (leachable)$_A$	8	2						mg/l	1	A-T-049w
Mercury (leachable)$_A$	<0.1	<0.1						µg/l	0.1	A-T-025w
Molybdenum (leachable)$_A$	18	3						µg/l	1	A-T-025w
Nickel (leachable)$_A$	6	<2						µg/l	2	A-T-025w
Selenium (leachable)$_A$	2	<1						µg/l	1	A-T-025w
Vanadium (leachable)$_A$	18	8						µg/l	1	A-T-025w
Zinc (leachable)$_A$	4	33						µg/l	2	A-T-025w
Bentazone$_A$	<0.10	-						mg/kg	0.1	Subcon RPS MH
Cypermethrin$_A$	<0.10	-						mg/kg	0.1	Subcon RPS MH

Envirolab Job Number: 23/10525

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10525/1	23/10525/6						Units	Limit of Detection	Method ref
Client Sample No	101	103								
Client Sample ID	R22-TP506	RedP-BH-6								
Depth to Top	0.20	1.00								
Depth To Bottom										
Date Sampled	23-Oct-23	23-Oct-23								
Sample Type	SOIL - ES	SOIL - ES								
Sample Matrix Code	6AE	6ABE								
Linuron$_A$	<0.10	-						mg/kg	0.1	Subcon RPS MH
Alachlor$_A$	<0.02	-						mg/kg	0.02	Subcon RPS MH
Carbaryl$_A$	<0.10	-						mg/kg	0.1	Subcon RPS MH
Diuron$_A$	<0.10	-						mg/kg	0.1	Subcon RPS MH
Isoproturon$_A$	<0.10	-						mg/kg	0.1	Subcon RPS MH
MCPP; (Mecoprop)$_A$	<0.10	-						mg/kg	0.1	Subcon RPS MH
Calcium (leachable)$_A$	28	11						mg/l	1	A-T-049w

Lab Sample ID	23/10525/1	23/10525/6						Units	Limit of Detection	Method ref
Client Sample No	101	103								
Client Sample ID	R22-TP506	RedP-BH-6								
Depth to Top	0.20	1.00								
Depth To Bottom										
Date Sampled	23-Oct-23	23-Oct-23								
Sample Type	SOIL - ES	SOIL - ES								
Sample Matrix Code	6AE	6ABE								
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
OCP+OPP Combined Pest Suite (incl. Atrazine and Simazine)										
Dichlobenil$_{A}$	<0.01	-						mg/kg	0.01	A-T-056
Tecnazene$_{A}$	<0.01	-						mg/kg	0.01	A-T-056
Trifluralin$_{A}$	<0.01	-						mg/kg	0.01	A-T-056
alpha-Hexachlorocyclohexane (HCH)$_{A}$	<0.01	-						mg/kg	0.01	A-T-056
Hexachlorobenzene (HCB) $_{A}$	<0.01	-						mg/kg	0.01	A-T-056
Simazine$_{A}$	<0.01	-						mg/kg	0.01	A-T-056
Atrazine$_{A}$	<0.01	-						mg/kg	0.01	A-T-056
beta-Hexachlorocyclohexane (HCH)$_{A}$	<0.01	-						mg/kg	0.01	A-T-056
Quintozene (PCNB)$_{A}$	<0.01	-						mg/kg	0.01	A-T-056
Chlorothalonil$_{A}$	<0.01	-						mg/kg	0.01	A-T-056
delta-Hexachlorocyclohexane (HCH)$_{A}$	<0.01	-						mg/kg	0.01	A-T-056
Triallate$_{A}$	<0.01	-						mg/kg	0.01	A-T-056
Heptachlor$_{A}$	<0.01	-						mg/kg	0.01	A-T-056
Aldrin$_{A}$	<0.01	-						mg/kg	0.01	A-T-056
Triadimefon$_{A}$	<0.01	-						mg/kg	0.01	A-T-056
Telodrin$_{A}$	<0.01	-						mg/kg	0.01	A-T-056
Isodrin$_{A}$	<0.01	-						mg/kg	0.01	A-T-056
Pendimethalin$_{A}$	<0.01	-						mg/kg	0.01	A-T-056
Heptachlor epoxide$_{A}$	<0.01	-						mg/kg	0.01	A-T-056
trans-Chlordane (Gamma)$_{A}$	<0.01	-						mg/kg	0.01	A-T-056
o,p-DDE (2,4)$_{A}$	<0.01	-						mg/kg	0.01	A-T-056
Endosulphan I (Alpha)$_{A}$	<0.01	-						mg/kg	0.01	A-T-056
cis-Chlordane (Alpha)$_{A}$	<0.01	-						mg/kg	0.01	A-T-056
p,p-DDE (4,4)$_{A}$	<0.01	-						mg/kg	0.01	A-T-056
Dieldrin$_{A}$	<0.01	-						mg/kg	0.01	A-T-056

Lab Sample ID	23/10525/1	23/10525/6						Units	Limit of Detection	Method ref
Client Sample No	101	103								
Client Sample ID	R22-TP506	RedP-BH-6								
Depth to Top	0.20	1.00								
Depth To Bottom										
Date Sampled	23-Oct-23	23-Oct-23								
Sample Type	SOIL - ES	SOIL - ES								
Sample Matrix Code	6AE	6ABE								
o,p-DDD (2,4)$_A$	<0.01	-						mg/kg	0.01	A-T-056
Endrin$_A$	<0.01	-						mg/kg	0.01	A-T-056
Endosulphan II (Beta)$_A$	<0.01	-						mg/kg	0.01	A-T-056
p,p-DDD (4,4)$_A$	<0.01	-						mg/kg	0.01	A-T-056
o,p-DDT (2,4)$_A$	<0.01	-						mg/kg	0.01	A-T-056
Endrin Aldehyde$_A$	<0.01	-						mg/kg	0.01	A-T-056
Endrin Ketone$_A$	<0.01	-						mg/kg	0.01	A-T-056
Endosulphan Sulphate$_A$	<0.01	-						mg/kg	0.01	A-T-056
p,p-DDT (4,4)$_A$	<0.01	-						mg/kg	0.01	A-T-056
o,p-Methoxychlor$_A$	<0.01	-						mg/kg	0.01	A-T-056
p,p-Methoxychlor$_A$	<0.01	-						mg/kg	0.01	A-T-056
Permethrin I (cis)$_A$	<0.01	-						mg/kg	0.01	A-T-056
Permethrin II (trans)$_A$	<0.01	-						mg/kg	0.01	A-T-056
Dichlorvos$_A$	<0.01	-						mg/kg	0.01	A-T-056
Mevinphos$_A$	<0.01	-						mg/kg	0.01	A-T-056
Demeton-S$_A$	<0.50	-						mg/kg	0.5	A-T-056
Demeton-O$_A$	<0.50	-						mg/kg	0.5	A-T-056
Phorate$_A$	<0.01	-						mg/kg	0.01	A-T-056
Dimethoate$_A$	<0.01	-						mg/kg	0.01	A-T-056
Propetamphos$_A$	<0.01	-						mg/kg	0.01	A-T-056
Diazinon (Dimpylate)$_A$	<0.01	-						mg/kg	0.01	A-T-056
Disulfoton$_A$	<0.10	-						mg/kg	0.1	A-T-056
Chlorpyrifos-methyl$_A$	<0.01	-						mg/kg	0.01	A-T-056
Parathion (Ethyl Parathion)$_A$	<0.01	-						mg/kg	0.01	A-T-056
Methyl Parathion$_A$	<0.01	-						mg/kg	0.01	A-T-056
Pirimiphos-methyl$_A$	<0.01	-						mg/kg	0.01	A-T-056
Fenitrothion$_A$	<0.01	-						mg/kg	0.01	A-T-056
Fensulphothion$_A$	<0.01	-						mg/kg	0.01	A-T-056
Fenthion$_A$	<0.01	-						mg/kg	0.01	A-T-056
Malathion$_A$	<0.01	-						mg/kg	0.01	A-T-056
Chlorfenvinphos$_A$	<0.01	-						mg/kg	0.01	A-T-056
Chlorpyrifos$_A$	<0.01	-						mg/kg	0.01	A-T-056
Trichloronate$_A$	<0.01	-						mg/kg	0.01	A-T-056
Prothiofos (Tokuthion)$_A$	<0.01	-						mg/kg	0.01	A-T-056

Envirolab Job Number: 23/10525

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10525/1	23/10525/6						Units	Limit of Detection	Method ref
Client Sample No	101	103								
Client Sample ID	R22-TP506	RedP-BH-6								
Depth to Top	0.20	1.00								
Depth To Bottom										
Date Sampled	23-Oct-23	23-Oct-23								
Sample Type	SOIL - ES	SOIL - ES								
Sample Matrix Code	6AE	6ABE								
Ethion$_A$	<0.01	-						mg/kg	0.01	A-T-056
Triazophos$_A$	<0.01	-						mg/kg	0.01	A-T-056
Carbophenothion$_A$	<0.01	-						mg/kg	0.01	A-T-056
Phosalone$_A$	<0.01	-						mg/kg	0.01	A-T-056
Azinphos-methyl$_A$	<0.01	-						mg/kg	0.01	A-T-056
Azinphos-ethyl$_A$	<0.01	-						mg/kg	0.01	A-T-056
Coumaphos$_A$	<0.01	-						mg/kg	0.01	A-T-056
gamma-Hexachlorocyclohexane (HCH)$_A$	<0.01	-						mg/kg	0.01	A-T-056

Envirolab Job Number: 23/10525

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10525/1	23/10525/6						Units	Limit of Detection	Method ref
Client Sample No	101	103								
Client Sample ID	R22-TP506	RedP-BH-6								
Depth to Top	0.20	1.00								
Depth To Bottom										
Date Sampled	23-Oct-23	23-Oct-23								
Sample Type	SOIL - ES	SOIL - ES								
Sample Matrix Code	6AE	6ABE								
PAH-16MS										
Acenaphthene$_A^{M\#}$	-	0.06^U						mg/kg	0.01	A-T-019s
Acenaphthylene$_A^{M\#}$	-	0.11						mg/kg	0.01	A-T-019s
Anthracene$_A^{M\#}$	-	0.34						mg/kg	0.02	A-T-019s
Benzo(a)anthracene$_A^{M\#}$	-	1.80						mg/kg	0.04	A-T-019s
Benzo(a)pyrene$_A^{M\#}$	-	2.22						mg/kg	0.04	A-T-019s
Benzo(b)fluoranthene$_A^{M\#}$	-	2.44						mg/kg	0.05	A-T-019s
Benzo(ghi)perylene$_A^{M\#}$	-	1.28						mg/kg	0.05	A-T-019s
Benzo(k)fluoranthene$_A^{M\#}$	-	0.90						mg/kg	0.07	A-T-019s
Chrysene$_A^{M\#}$	-	1.94						mg/kg	0.06	A-T-019s
Dibenzo(ah)anthracene$_A$	-	0.25						mg/kg	0.04	A-T-019s
Fluoranthene$_A^{M\#}$	-	3.24						mg/kg	0.08	A-T-019s
Fluorene$_A^{M\#}$	-	0.06						mg/kg	0.01	A-T-019s
Indeno(123-cd)pyrene$_A^{M\#}$	-	1.53						mg/kg	0.03	A-T-019s
Naphthalene $_A^{M\#}$	-	<0.03^U						mg/kg	0.03	A-T-019s
Phenanthrene$_A^{M\#}$	-	1.12						mg/kg	0.03	A-T-019s
Pyrene$_A^{M\#}$	-	3.11						mg/kg	0.07	A-T-019s
Total PAH-16MS$_A$	-	20.4						mg/kg	0.01	A-T-019s

Envirolab Job Number: 23/10525

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10525/1	23/10525/6						Units	Limit of Detection	Method ref
Client Sample No	101	103								
Client Sample ID	R22-TP506	RedP-BH-6								
Depth to Top	0.20	1.00								
Depth To Bottom										
Date Sampled	23-Oct-23	23-Oct-23								
Sample Type	SOIL - ES	SOIL - ES								
Sample Matrix Code	6AE	6ABE								
Speciated PCB-WHO12										
PCB BZ 81$_{A}^{M\#}$	-	<0.005						mg/kg	0.005	A-T-004s
PCB BZ 105$_{A}^{M\#}$	-	<0.005						mg/kg	0.005	A-T-004s
PCB BZ 114$_{A}^{M\#}$	-	<0.005						mg/kg	0.005	A-T-004s
PCB BZ 118$_{A}^{M\#}$	-	<0.007						mg/kg	0.007	A-T-004s
PCB BZ 123$_{A}^{M\#}$	-	<0.005						mg/kg	0.005	A-T-004s
PCB BZ 126$_{A}^{M\#}$	-	<0.005						mg/kg	0.005	A-T-004s
PCB BZ 156$_{A}^{M\#}$	-	<0.005						mg/kg	0.005	A-T-004s
PCB BZ 157$_{A}^{M\#}$	-	<0.005						mg/kg	0.005	A-T-004s
PCB BZ 167$_{A}^{M\#}$	-	<0.005						mg/kg	0.005	A-T-004s
PCB BZ 169$_{A}^{M\#}$	-	<0.005						mg/kg	0.005	A-T-004s
PCB BZ 189$_{A}^{M\#}$	-	<0.005						mg/kg	0.005	A-T-004s
PCB BZ 77$_{A}^{M\#}$	-	<0.005						mg/kg	0.005	A-T-004s
Total Speciated PCB-WHO12$_{A}^{M\#}$	-	<0.007						mg/kg	0.005	A-T-004s

Envirolab Job Number: 23/10525

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10525/1	23/10525/6						Units	Limit of Detection	Method ref
Client Sample No	101	103								
Client Sample ID	R22-TP506	RedP-BH-6								
Depth to Top	0.20	1.00								
Depth To Bottom										
Date Sampled	23-Oct-23	23-Oct-23								
Sample Type	SOIL - ES	SOIL - ES								
Sample Matrix Code	6AE	6ABE								
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$_A^{M\#}$	-	3						mg/kg	1	A-T-055s
Ali >C21-C35$_A^{M\#}$	-	27						mg/kg	1	A-T-055s
Total Aliphatics$_A$	-	29						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$_A$	-	<2						mg/kg	1	A-T-055s
Aro >C10-C12$_A$	-	<1						mg/kg	1	A-T-055s
Aro >C12-C16$_A$	-	<1						mg/kg	1	A-T-055s
Aro >C16-C21$_A^{M\#}$	-	8						mg/kg	1	A-T-055s
Aro >C21-C35$_A^{M\#}$	-	42						mg/kg	1	A-T-055s
Total Aromatics$_A$	-	50						mg/kg	1	Calc-As Recd
TPH (Ali & Aro >C5-C35)$_A$	-	80						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 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 **six 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.
The client Sample No, Client Sample ID, Depth to top, Depth to Bottom and Date Sampled are all provided by the client.
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.

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 "^"	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
N/A	Not applicable

Asbestos
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
Quantification of asbestos is a 3 stage process including visual identification, hand picking and weighing, and fibre counting by sedimentation/phase contrast optical microscopy if required. 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) quantification by sedimentation is performed. 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.

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^{o}C / 11550µS/cm @ 20^{o}C fall outside the accreditation range and as such are unaccredited.

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

Envirolab Deviating Samples Report

Units 7&8 Sandpits Business Park, Mottram Road, Hyde, SK14 3AR
Tel. 0161 368 4921 email. ask@envlab.co.uk

Client: Structural Soils Limited (Hemel Hempstead), 18 Frogmore Road, Hemel Hempstead, UK, HP3 9RT

Project: Sealink Richborough

Clients Project No: 563607

Project No: 23/10525

Date Received: 25/10/2023 (am)

Cool Box Temperatures (°C): 7.4 - 7.7

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	23/10525/1	23/10525/6
Client Sample No	101	103
Client Sample ID/Depth	R22-TP506 0.20m	RedP-BH-6 1.00m
Date Sampled	23/10/23	23/10/23
A-T-004s		01/11/2023
A-T-007s		08/11/2023
A-T-019s		03/11/2023
A-T-022s		01/11/2023
A-T-024s		01/11/2023
A-T-025w	06/11/2023	07/11/2023
A-T-026s		31/10/2023
A-T-026w	03/11/2023	07/11/2023
A-T-026w (F)	03/11/2023	07/11/2023
A-T-027s		01/11/2023
A-T-030s		01/11/2023
A-T-031s		01/11/2023
A-T-031w	03/11/2023	07/11/2023
A-T-032s		02/11/2023
A-T-032w		07/11/2023
A-T-033w	03/11/2023	03/11/2023
A-T-037w		07/11/2023
A-T-040s		31/10/2023
A-T-040w	03/11/2023	03/11/2023
A-T-042sFCN		02/11/2023
A-T-042wFCN	02/11/2023	02/11/2023
A-T-042wTCN	02/11/2023	02/11/2023
A-T-044	02/11/2023	02/11/2023
A-T-045		26/10/2023
A-T-049w	02/11/2023	02/11/2023
A-T-050s		06/11/2023
A-T-050w	07/11/2023	07/11/2023
A-T-055s		01/11/2023
A-T-056	01/11/2023	
A-T-ANCs		01/11/2023
Calc	03/11/2023	03/11/2023
Calc-As Recd		01/11/2023

Lab Sample ID	23/10525/1	23/10525/6
Client Sample No	101	103
Client Sample ID/Depth	R22-TP506 0.20m	RedP-BH-6 1.00m
Date Sampled	23/10/23	23/10/23
Calc-no stones		07/11/2023
Probe (w)		07/11/2023

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

Certificate of Analysis

Report No.: **23-07409-2**

Issue No.: **2**
Date of Issue **08/04/2024**

Customer Details:	Envirolab Ltd, 7 - 8 Sandpits Business Park, Mottram Road, Hyde, Greater Manchester, SK14 3AR, United Kingdom
Customer Contact:	[redacted]
Customer Order No.:	P0752627
Customer Reference:	Not Supplied
Quotation Reference:	Q22-00104 (Issue: 36)
Description:	1 geo sample
Date Received:	27/10/2023
Date Started:	27/10/2023
Date Completed:	16/11/2023
Test Methods:	Details available on request (refer to SOP code against relevant result/s)
Notes:	This report replaces issue 1 in its entirety

[redacted]

Approved By: [redacted] **LIMS Administrator**

This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service.
This certificate shall not be reproduced except in full without the prior written approval of the laboratory.
Observations and interpretations are outside of the scope of UKAS accreditation.
Results reported herein relate only to the items supplied to the laboratory for testing.
Results on an Interim Report are not dry-weight corrected.
Where the laboratory is not responsible for the sampling, results apply to the sample(s) as they were received.
The laboratory shall not be responsible for any information that is supplied by the customer that may affect the validity of results.

RPS Environmental Management Limited trading as RPS Mountainheath. Registered in England No. 01756175.
13 St Martins Way, Bedford, Bedfordshire, MK42 0LF. T +44 1462 480 400
A member of the RPS Group plc. Terms and conditions apply - copy on request

Results Summary

Report No.: 23-07409-2

Customer Reference: Not Supplied

Customer Order No: P0752627

Customer Sample No	**R22-TP506 0.20m**
RPS Sample No	35953
Sample Type	**GEO**
Sample Matrix	SOIL
Sampling Date	23/10/2023

Determinand	CAS No	Codes	SOP	RL	Units	
carbaryl	63-25-2	N	L001	0.1	mg/kg DW	< 0.10 (T)
2,4,5-trichlorophenoxyacetic acid (2,4,5-T)	93-76-5	N	L340	0.1	mg/kg DW	< 0.10 (T)
2,4,5-TP (Fenoprop)	93-72-1	N	L340	0.1	mg/kg DW	< 0.10 (T)
2,4-dichlorophenoxyacetic acid (2,4-D)	94-75-7	N	L340	0.1	mg/kg DW	< 0.10 (T)
acifluorfen	50594-66-6	N	L340	0.1	mg/kg DW	< 0.10 (T)
bentazone	25057-89-0	N	L340	0.1	mg/kg DW	< 0.10 (T)
clopyralid	1702-17-6	N	L340	0.1	mg/kg DW	< 0.10 (T)
dichlorprop (2,4-DP)	120-36-5	N	L340	0.1	mg/kg DW	< 0.10 (T)
dinoseb (DNBP)	88-85-7	N	L340	0.1	mg/kg DW	< 0.10 (T)
2-methyl-4-chlorophenoxyacetic acid (MCPA)	94-74-6	N	L340	0.1	mg/kg DW	< 0.10 (T)
mecoprop (MCPP)	7085-19-0	N	L340	0.1	mg/kg DW	< 0.10 (T)
pentachlorophenol (PCP)	87-86-5	N	L340	0.1	mg/kg DW	< 0.10 (T)
2,3,6-trichlorobenzoic acid (2,3,6-TBA)	50-31-7	N	L340	0.1	mg/kg DW	< 0.10 (T)
4-(2,4-dichlorophenoxy)butanoic acid (2,4-DB)	94-82-6	N	L340	0.1	mg/kg DW	< 0.10 (T)
4-chlorophenoxyacetic acid (4-CPA)	122-88-3	N	L340	0.1	mg/kg DW	< 0.10 (T)
benazolin	3813-05-6	N	L340	0.1	mg/kg DW	< 0.10 (T)
bromoxynil	1689-84-5	N	L340	0.1	mg/kg DW	< 0.10 (T)
dicamba	1918-00-9	N	L340	0.1	mg/kg DW	< 0.10 (T)
diclofop	40843-25-2	N	L340	0.1	mg/kg DW	< 0.10 (T)
2-methyl-4,6-dinitrophenol (DNOC)	534-52-1	N	L340	0.1	mg/kg DW	< 0.10 (T)
flamprop	58667-63-3	N	L340	0.1	mg/kg DW	< 0.10 (T)
fluroxypyr	69377-81-7	N	L340	0.1	mg/kg DW	< 0.10 (T)
ioxynil	1689-83-4	N	L340	0.1	mg/kg DW	< 0.10 (T)
MCPB	94-81-5	N	L340	0.1	mg/kg DW	< 0.10 (T)
picloram	1918-02-1	N	L340	0.1	mg/kg DW	< 0.10 (T)
triclopyr	55335-06-3	N	L340	0.1	mg/kg DW	< 0.10 (T)
alachlor	15972-60-8	N	G029	0.02	mg/kg AR	< 0.02 (T)
chloroxuron	1982-47-4	N	L025	0.1	mg/kg DW	< 0.10 (T)
chlortoluron	15545-48-9	N	L025	0.1	mg/kg DW	< 0.10 (T)
diflubenzuron	35367-38-5	N	L025	0.1	mg/kg DW	< 0.10 (T)
dimefuron	34205-21-5	N	L025	0.1	mg/kg DW	< 0.10 (T)
diuron	330-54-1	N	L025	0.1	mg/kg DW	< 0.10 (T)
isoproturon	34123-59-6	N	L025	0.1	mg/kg DW	< 0.10 (T)
linuron	330-55-2	N	L025	0.1	mg/kg DW	< 0.10 (T)
methabenzthiazuron	18691-97-9	N	L025	0.1	mg/kg DW	< 0.10 (T)
metoxuron	19937-59-8	N	L025	0.1	mg/kg DW	< 0.10 (T)
monolinuron	1746-81-2	N	L025	0.1	mg/kg DW	< 0.10 (T)
monuron	150-68-5	N	L025	0.1	mg/kg DW	< 0.10 (T)

Results Summary

Report No.: 23-07409-2

Customer Reference: Not Supplied

Customer Order No: P0752627

Customer Sample No	**R22-TP506 0.20m**
RPS Sample No	35953
Sample Type	**GEO**
Sample Matrix	SOIL
Sampling Date	23/10/2023

Determinand	CAS No	Codes	SOP	RL	Units	
pencycuron	66063-05-6	N	L025	0.1	mg/kg DW	< 0.10 (T)
bifenthrin	82657-04-3	N	G127	0.1	mg/kg DW	< 0.10 (T)
cyfluthrin, total	68359-37-5	N	G127	0.1	mg/kg DW	< 0.10 (T)
cyhalothrin, total	68085-85-8	N	G127	0.1	mg/kg DW	< 0.10 (T)
cypermethrin, total	52315-07-8	N	G127	0.1	mg/kg DW	< 0.10 (T)
deltamethrin	52918-63-5	N	G127	0.1	mg/kg DW	< 0.10 (T)
fenvalerate	51630-58-1	N	G127	0.1	mg/kg DW	< 0.10 (T)
permethrin, total	52645-53-1	N	G127	0.1	mg/kg DW	< 0.10 (T)
resmethrin	10453-86-8	N	G127	0.1	mg/kg DW	< 0.10 (T)
tetramethrin	7696-12-0	N	G127	0.1	mg/kg DW	< 0.10 (T)

Comments

Report No.: 23-07409-2

Customer Reference: Not Supplied

Customer Order No: P0752627

Job	Description	Document History
23-07409	n/a	Sample numbers changed as per client request

Deviating Samples

Report No.: 23-07409-2

Customer Reference: Not Supplied

Customer Order No: P0752627

Our policy on Deviating Samples has been implemented in accordance with UKAS Policy on Deviating Samples (TPS63).
RPS is not responsible for the integrity of samples as received, unless RPS personnel performed the sampling. Samples submitted may be declared to be deviating.
Where applicable the analysis method remains UKAS accredited, however results reported for a deviating sample may be compromised.
Where no sampling date was supplied, samples have been declared to be deviating. If the date can be supplied, results may be reissued if assessed not deviating.
Where the sample container used was unsuitable or broken, the sample is flagged as deviating and re-sampling/re-submisson may be required.

RPS No.	Customer No.	Customer ID	Date Sampled	Containers Received	Deviating	Reason for Deviation
35953	R22-TP506 0.20m		23/10/2023	100 mL amber glass jar	**Yes**	No sampling time provided.

Type	Matrix Code	Description
Food	CEREALPROD	Cereals, grains & products
Food	DRIEDFRUIT	Dried fruits
Food	FRIEDBAKED	Fried or baked food
Food	LEGUME	Legumes
Food	MEAT	Meat
Food	POWDERED	Powdered food
Food	PULSE	Pulses (dried legumes)
Food	VEGETABLES	Vegetables
Gas	TDTUBE	TD Tube
Gas	TENAX	Tenax Tube
Gas	TUBE	Tube
Gas	VAPOUR	Gas
Geological	SED_MAR	Marine Sediment
Geological	SED_RIV	River Sediment
Geological	SLUDG_SOL	Sludge (solid only)
Geological	SOIL	Soil
Liquid	BEVERAGE	Beverage
Liquid	BLOOD	Blood
Liquid	CONDENSATE	Condensate
Liquid	FOAM_LIQ	Liquid foam
Liquid	FORMULATN	Formula
Liquid	LEACHATE	Leachate
Liquid	OIL/GREASE	Oil or grease
Liquid	SLUDG_LIQ	Sludge (liquid only)
Liquid	SOLVENT	Solvent
Liquid	URINE	Urine
Sludge	SLUDG_WHL	Sludge for bulk route
Solid	BADGE	Badge
Solid	BEDDING	Bedding
Solid	BIOTA	Biota (general)
Solid	BIOTA_F	Biota (fish)
Solid	BIOTA_SF	Biota (shellfish)
Solid	CONSTRCTN	Construction materials
Solid	FABRIC	Fabrics & furnishing materials
Solid	FEED	Animal feed
Solid	FERTILISER	Fertiliser
Solid	FILTER	Filter
Solid	FOAM	Solid foam material
Solid	PACKAGING	Packaging material
Solid	PAPER	Paper
Solid	PLANT	Plant (vegetation)
Solid	POWDER	Powder
Solid	SWAB	Swab
Water	BAL	Ballast Water
Water	BIL	Bilge Water
Water	DW	Drinking Water
Water	EFFLUENT	Effluent
Water	GW	Ground Water
Water	INFLUENT	Influent
Water	SALTW	Salt Water
Water	SW	Surface Water
Water	TW	Tap Water
Water	W	Water

Report No.: 23-07409-2

Key Code	Description
N	Not Accredited Test
U	UKAS Accredited Test - UKAS accreditation is only implied if the report carries the UKAS logo
UF	UKAS Flexible Scope Test
M	MCERTS Accredited Test - MCERTS accreditation is only implied if the report carries the MCERTS logo
O	Marine Management Organisation (MMO) Validated
SN	Subcontracted to approved laboratory not accredited for the test
SU	Subcontracted to approved laboratory UKAS Accredited for the test
SM	Subcontracted to approved laboratory MCERTS/UKAS Accredited for the test
SIN	Subcontracted to internal RPS Group laboratory not accredited for the test
SIU	Subcontracted to internal RPS Group laboratory UKAS Accredited for the test
SIM	Subcontracted to internal RPS Group laboratory MCERTS/UKAS Accredited for the test
*	Modified standard method
I/S (in results)	Insufficient Sample
U/S (in results)	Unsuitable Sample
S/C (in results)	See Comments
ND (in results)	Not Detected
DW (in units)	Results are expressed on a dry weight basis
L (in results)	Result is outside normal limits

Sample Type	Sample Retention and Disposal Period
Foodstuff	1 month (if frozen) from the issue date of this report
Waters	2 weeks from the issue date of this report
Other Liquids	1 month from the issue date of this report
Solids / Soils	1 month from the issue date of this report
Sediments	1 month from the issue date of this report

Note: Sample retention may be subject to agreement with the customer for particular projects

Where the dry solids value of a sample is low (<50%), reporting limits are automatically raised for all determinants analysed on an as-received basis.

Soil Typing	Description
Type 1	Clay - Brown
Type 2	Clay - Grey/Black
Type 3	Sand
Type 4	Top Soil (Standard)
Type 5	Top Soil (High Peat)
Type 6	Made Ground (>50% Clay)
Type 7	Made Ground (>50% Sand)
Type 8	Made Ground (>50% Top Soil)
Type X	Other

Dev code	Description
D	No sampling date provided.
T	No sampling time provided.
Z	Temperature of samples exceeded in transit/storage.
V	Excessive headspace for volatile determinands.
P	Sample submitted without required preservative(s).
C	Incorrect container.
H	Holding time exceeded (sampling to extraction).
X	Holding time exceeded (sampling to receipt).

Note: Where the following information is included in this certificate, it has usually been supplied by the customer: Customer Sample ID, Sample Location, Sample Depth, Sampling Date and Sampling Time. The laboratory shall not be responsible for any information that is supplied by the customer that may affect the validity of results.

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Units 7 & 8, Sandpits Business Park
Mottram Road, Hyde, Cheshire, SK14 3AR

Final Test Report

Envirolab Job Number:	23/10525
Issue Number:	1 Date: 17-Nov-23
Client:	Structural Soils Limited (Hemel Hempstead) 18 Frogmore Road Hemel Hempstead UK HP3 9RT
Project Manager:	Ian Warne/Nick Harper
Project Name:	Sealink Richborough
Project Ref:	563607
Order No:	N/A
Date Samples Received:	25-Oct-23
Date Instructions Received:	25-Oct-23
Date Analysis Completed:	17-Nov-23

Notes - Soil analysis

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

For samples with Matrix Codes 1 - 6 natural stones >10mm are removed or excluded from the sample prior to analysis and reported results corrected to a whole sample basis.

For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis.

Notes - General

This report shall not be reproduced, except in full, without written approval from Envirolab.

Subscript "A" indicates analysis performed on the sample as received. "D" indicates analysis performed on the dried sample, crushed to pass a 2mm sieve, unless asbestos is found to be present in which case all analysis is performed on the sample as received.

All analysis is performed on the dried and crushed sample for samples with Matrix Code 7 and this supercedes any "A" subscripts.

All analysis is performed on the sample as received for soil samples from outside the European Union and this supercedes any "D" subscripts

For complex, multi-compound analysis, quality control results do not always fall within chart limits for every compound and we have criteria for reporting in these situations.

If results are in italic font they are associated with such quality control failures and may be unreliable.

A deviating samples 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

Predominant Matrix Codes: 1 = SAND, 2 = LOAM, 3 = CLAY, 4 = LOAM/SAND, 5 = SAND/CLAY, 6 = CLAY/LOAM, 7 = OTHER, 8 = Asbestos bulk ID sample

Secondary Matrix Codes: A = contains stones, B = contains construction rubble, C = contains visible hydrocarbons, D = contains glass/metal, E = contains roots/twigs.

IS indicates Insufficient sample for analysis, NDP indicates No Determination Possible and NAD indicates No Asbestos Detected.

Analytical results reflect the quality of the sample at the time of analysis only. Opinions and interpretations expressed are outside the scope of our accreditation.

Please contact us if you need any further information.

HWOL TPH Code: EH_CU_1D_AL: Extractable hydrocarbons - i.e. everything extracted by the solvent(s), Clean-up - e.g. by florisil, silica gel, GC - Single coil gas chromatography, Aliphatics only

Approved by:



Richard Wong
Client Manager

Landfill WAC analysis must not be used for hazardous waste classification purposes. This analysis is only applicable for landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Sample Details						Landfill Waste Acceptance Criteria Limits		
Lab Sample ID	Method	ISO17025	MCERTS	23/10525/6				
Client Sample Number				103		Inert Waste Landfill	Stable Non-reactive Hazardous Waste in Non-Hazardous Landfill	Hazardous Waste Landfill
Client Sample ID				RedP-BH-6				
Depth to Top				1				
Depth to Bottom								
Date Sampled				23/10/2023				
Sample Type				Soil - ES				
Sample Matrix Code				6ABE				
Solid Waste Analysis								
pH (pH Units)$_D$	A-T-031	N	N	**8.72**		-	>6	-
ANC to pH 4 (mol/kg)$_D$	A-T-ANC	N	N	**2.87**		-	to be evaluated	to be evaluated
ANC to pH 6 (mol/kg)$_D$	A-T-ANC	N	N	**0.19**		-	to be evaluated	to be evaluated
Loss on Ignition (%)$_D$	A-T-030	N	N	**5.4**		-	-	10
Total Organic Carbon (%)$_D$	A-T-032	N	N	**2.61**		3	5	6
PAH Sum of 17 (mg/kg) $_A$	A-T-019	N	N	**20.6**		100	-	-
Mineral Oil (mg/kg)$_{A\ EH_CU_1D_AL}$	A-T-007	N	N	**59**		500	-	-
Sum of 7 PCBs (mg/kg)$_A$	A-T-004	N	N	**<0.007**		1	-	-
Sum of BTEX (mg/kg)$_A$	A-T-022	N	N	**<0.01**		6	-	-
Eluate Analysis				**10:1**	**10:1**	**Limit values for compliance leaching test using**		
				mg/l	**mg/kg**	**BS EN 12457-2 at L/S 10 l/kg (mg/kg)**		
Arsenic	A-T-025	N	N	0.005	**0.050**	0.5	2	25
Barium	A-T-025	N	N	0.027	**0.270**	20	100	300
Cadmium	A-T-025	N	N	<0.001	**<0.01**	0.04	1	5
Chromium	A-T-025	N	N	0.003	**0.030**	0.5	10	70
Copper	A-T-025	N	N	0.007	**0.070**	2	50	100
Mercury	A-T-025	N	N	<0.0005	**<0.005**	0.01	0.2	2
Molybdenum	A-T-025	N	N	0.005	**0.050**	0.5	10	30
Nickel	A-T-025	N	N	<0.002	**<0.02**	0.4	10	40
Lead	A-T-025	N	N	0.013	**0.130**	0.5	10	50
Antimony	A-T-025	N	N	0.003	**0.030**	0.06	0.7	5
Selenium	A-T-025	N	N	0.001	**0.010**	0.1	0.5	7
Zinc	A-T-025	N	N	0.021	**0.210**	4	50	200
Chloride	A-T-026	N	N	3	**31**	800	15000	25000
Fluoride	A-T-026	N	N	1.2	**12.0**	10	150	500
Sulphate as SO_4	A-T-026	N	N	15	**154**	1000	20000	50000
Total Dissolved Solids	A-T-035	N	N	100	**1000**	4000	60000	100000
Phenol Index	A-T-050	N	N	<0.01	**<0.1**	1	-	-
Dissolved Organic Carbon	A-T-032	N	N	<2.0	**<200**	500	800	1000
Leach Test Information								
pH (pH Units)	A-T-031	N	N	7.3				
Conductivity (µS/cm)	A-T-037	N	N	201				
Mass Sample (kg)				0.22				
Dry Matter (%)	A-T-044	N	N	79.5				

Stated acceptance limits are for guidance only and Envirolab cannot be held responsible for any discrepancies with current legislation

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Units 7 & 8 Sandpits Business Park
Mottram Road, Hyde, Cheshire, SK14 3AR

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 23/10528
Issue Number: 1 **Date:** 17 November, 2023

Client: Structural Soils Limited (Hemel Hempstead)
18 Frogmore Road
Hemel Hempstead
UK
HP3 9RT

Project Manager: Ian Warne/Nick Harper
Project Name: Sealink Richborough
Project Ref: 563607
Order No: N/A
Date Samples Received: 25/10/23
Date Instructions Received: 25/10/23
Date Analysis Completed: 17/11/23

Approved by:



Richard Wong
Client Manager

Envirolab Job Number: 23/10528

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10528/1							Units	Limit of Detection	Method ref
Client Sample No	101									
Client Sample ID	R22-TP510									
Depth to Top	0.20									
Depth To Bottom										
Date Sampled	20-Oct-23									
Sample Type	SOIL - ES									
Sample Matrix Code	6AE									
% Moisture at 105C$_A$	35.8							% w/w	0.1	A-T-044
% Stones >10mm$_A$	<0.1							% w/w	0.1	A-T-044
pH$_D$[M#]	7.88							pH	0.01	A-T-031s
Sulphate (water sol 2:1)$_D$[M#]	0.04							g/l	0.01	A-T-026s
Sulphur (total)$_D$	435							mg/kg	50	A-T-024s
Cyanide (free)$_A$[M#]	<1							mg/kg	1	A-T-042sFCN
Phenols - Total by HPLC$_A$	<0.2							mg/kg	0.2	A-T-050s
Organic Matter$_D$[M#]	4.7							% w/w	0.1	A-T-032s
Total Organic Carbon$_D$[M#]	2.71							% w/w	0.03	A-T-032s
Fraction of organic carbon$_D$[#]	0.0271							N/A	0.0003	A-T-032s
Arsenic$_D$[M#]	10							mg/kg	1	A-T-024s
Barium$_D$	35							mg/kg	1	A-T-024s
Beryllium$_D$	1.1							mg/kg	0.5	A-T-024s
Boron (water soluble)$_D$[M#]	3.5							mg/kg	1	A-T-027s
Cadmium$_D$[M#]	<0.5							mg/kg	0.5	A-T-024s
Copper$_D$[M#]	13							mg/kg	1	A-T-024s
Chromium$_D$[M#]	35							mg/kg	1	A-T-024s
Chromium (hexavalent)$_D$	<1							mg/kg	1	A-T-040s
Chromium (trivalent)	35							mg/kg	1	Calc
Lead$_D$[M#]	17							mg/kg	1	A-T-024s
Manganese$_D$	345							mg/kg	1	A-T-024s
Mercury$_D$	<0.17							mg/kg	0.17	A-T-024s
Molybdenum$_D$[M#]	<1							mg/kg	1	A-T-024s
Nickel$_D$[M#]	19							mg/kg	1	A-T-024s
Selenium$_D$[M#]	<1							mg/kg	1	A-T-024s
Vanadium$_D$[M#]	61							mg/kg	1	A-T-024s
Zinc$_D$[M#]	56							mg/kg	5	A-T-024s
Leachate Prep BS EN 12457-1 (2:1) (1 no)$_A$	*									A-T-001
pH (leachable)$_A$	7.81							pH	0.01	A-T-031w
Ammoniacal nitrogen as N (leachable)$_A$	0.11							mg/l	0.05	A-T-033w
Chloride (leachable)$_A$	14.97							mg/l	1	A-T-026w
Fluoride (leachable)$_A$	0.50							mg/l	0.1	A-T-026w (F)
Sulphate (leachable)$_A$	23.48							mg/l	1	A-T-026w

Envirolab Job Number: 23/10528

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10528/1							Units	Limit of Detection	Method ref
Client Sample No	101									
Client Sample ID	R22-TP510									
Depth to Top	0.20									
Depth To Bottom										
Date Sampled	20-Oct-23									
Sample Type	SOIL - ES									
Sample Matrix Code	6AE									
Cyanide (free) (leachable)$_A$	<0.005							mg/l	0.005	A-T-042wFCN
Cyanide (total) (leachable)$_A$	<0.005							mg/l	0.005	A-T-042wTCN
Cyanide (complex) (leachable)	<0.005							mg/l	0.005	Calc
Phenol (leachable)$_A$	0.01							mg/l	0.01	A-T-050w
Cresols (leachable)$_A$	<0.01							mg/l	0.01	A-T-050w
Resorcinol (leachable)$_A$	<0.01							mg/l	0.01	A-T-050w
Catechol (leachable)$_A$	<0.01							mg/l	0.01	A-T-050w
Xylenols & Ethylphenols (leachable)$_A$	<0.01							mg/l	0.01	A-T-050w
Naphthols (leachable)$_A$	<0.01							mg/l	0.01	A-T-050w
Trimethylphenol (leachable)$_A$	<0.01							mg/l	0.01	A-T-050w
Phenols (total by HPLC) (leachable)$_A$	0.01							mg/l	0.01	A-T-050w
Antimony (leachable)$_A$	2							µg/l	1	A-T-025w
Arsenic (leachable)$_A$	2							µg/l	1	A-T-025w
Boron (leachable)$_A$	117							µg/l	10	A-T-025w
Barium (leachable)$_A$	12							µg/l	1	A-T-025w
Beryllium (leachable)$_A$	<1							µg/l	1	A-T-025w
Cadmium (leachable)$_A$	<1							µg/l	1	A-T-025w
Copper (leachable)$_A$	6							µg/l	4	A-T-025w
Chromium (leachable)$_A$	<1							µg/l	1	A-T-025w
Chromium (hexavalent) (leachable)$_A$	<0.05							mg/l	0.05	A-T-040w
Chromium (trivalent)	<0.05							mg/l	0.05	Calc
Iron (leachable)$_A$	216							µg/l	10	A-T-025w
Lead (leachable)$_A$	55							µg/l	1	A-T-025w
Manganese (leachable)$_A$	7							µg/l	1	A-T-025w
Magnesium (leachable)$_A$	3							mg/l	1	A-T-049w
Mercury (leachable)$_A$	<0.1							µg/l	0.1	A-T-025w
Molybdenum (leachable)$_A$	4							µg/l	1	A-T-025w
Nickel (leachable)$_A$	3							µg/l	2	A-T-025w
Selenium (leachable)$_A$	<1							µg/l	1	A-T-025w
Vanadium (leachable)$_A$	4							µg/l	1	A-T-025w
Zinc (leachable)$_A$	6							µg/l	2	A-T-025w
Bentazone$_A$	<0.10							mg/kg	0.1	Subcon RPS MH
Cypermethrin$_A$	<0.10							mg/kg	0.1	Subcon RPS MH

Envirolab Job Number: 23/10528

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10528/1							Units	Limit of Detection	Method ref
Client Sample No	101									
Client Sample ID	R22-TP510									
Depth to Top	0.20									
Depth To Bottom										
Date Sampled	20-Oct-23									
Sample Type	SOIL - ES									
Sample Matrix Code	6AE									
Linuron$_A$	<0.10							mg/kg	0.1	Subcon RPS MH
Alachlor$_A$	<0.02							mg/kg	0.02	Subcon RPS MH
Carbaryl$_A$	<0.10							mg/kg	0.1	Subcon RPS MH
Diuron$_A$	<0.10							mg/kg	0.1	Subcon RPS MH
Isoproturon$_A$	<0.10							mg/kg	0.1	Subcon RPS MH
MCPP; (Mecoprop)$_A$	<0.10							mg/kg	0.1	Subcon RPS MH
Calcium (leachable)$_A$	41							mg/l	1	A-T-049w

Lab Sample ID	23/10528/1							Units	Limit of Detection	Method ref
Client Sample No	101									
Client Sample ID	R22-TP510									
Depth to Top	0.20									
Depth To Bottom										
Date Sampled	20-Oct-23									
Sample Type	SOIL - ES									
Sample Matrix Code	6AE									
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
OCP+OPP Combined Pest Suite (incl. Atrazine and Simazine)										
Dichlobenil$_{A}$	<0.01							mg/kg	0.01	A-T-056
Tecnazene$_{A}$	<0.01							mg/kg	0.01	A-T-056
Trifluralin$_{A}$	<0.01							mg/kg	0.01	A-T-056
alpha-Hexachlorocyclohexane (HCH)$_{A}$	<0.01							mg/kg	0.01	A-T-056
Hexachlorobenzene (HCB) $_{A}$	<0.01							mg/kg	0.01	A-T-056
Simazine$_{A}$	<0.01							mg/kg	0.01	A-T-056
Atrazine$_{A}$	<0.01							mg/kg	0.01	A-T-056
beta-Hexachlorocyclohexane (HCH)$_{A}$	<0.01							mg/kg	0.01	A-T-056
Quintozene (PCNB)$_{A}$	<0.01							mg/kg	0.01	A-T-056
Chlorothalonil$_{A}$	<0.01							mg/kg	0.01	A-T-056
delta-Hexachlorocyclohexane (HCH)$_{A}$	<0.01							mg/kg	0.01	A-T-056
Triallate$_{A}$	<0.01							mg/kg	0.01	A-T-056
Heptachlor$_{A}$	<0.01							mg/kg	0.01	A-T-056
Aldrin$_{A}$	<0.01							mg/kg	0.01	A-T-056
Triadimefon$_{A}$	<0.01							mg/kg	0.01	A-T-056
Telodrin$_{A}$	<0.01							mg/kg	0.01	A-T-056
Isodrin$_{A}$	<0.01							mg/kg	0.01	A-T-056
Pendimethalin$_{A}$	<0.01							mg/kg	0.01	A-T-056
Heptachlor epoxide$_{A}$	<0.01							mg/kg	0.01	A-T-056
trans-Chlordane (Gamma)$_{A}$	<0.01							mg/kg	0.01	A-T-056
o,p-DDE (2,4)$_{A}$	<0.01							mg/kg	0.01	A-T-056
Endosulphan I (Alpha)$_{A}$	<0.01							mg/kg	0.01	A-T-056
cis-Chlordane (Alpha)$_{A}$	<0.01							mg/kg	0.01	A-T-056
p,p-DDE (4,4)$_{A}$	<0.01							mg/kg	0.01	A-T-056
Dieldrin$_{A}$	<0.01							mg/kg	0.01	A-T-056

Lab Sample ID	23/10528/1							Units	Limit of Detection	Method ref
Client Sample No	101									
Client Sample ID	R22-TP510									
Depth to Top	0.20									
Depth To Bottom										
Date Sampled	20-Oct-23									
Sample Type	SOIL - ES									
Sample Matrix Code	6AE									
o,p-DDD (2,4)$_A$	<0.01							mg/kg	0.01	A-T-056
Endrin$_A$	<0.01							mg/kg	0.01	A-T-056
Endosulphan II (Beta)$_A$	<0.01							mg/kg	0.01	A-T-056
p,p-DDD (4,4)$_A$	<0.01							mg/kg	0.01	A-T-056
o,p-DDT (2,4)$_A$	<0.01							mg/kg	0.01	A-T-056
Endrin Aldehyde$_A$	<0.01							mg/kg	0.01	A-T-056
Endrin Ketone$_A$	<0.01							mg/kg	0.01	A-T-056
Endosulphan Sulphate$_A$	<0.01							mg/kg	0.01	A-T-056
p,p-DDT (4,4)$_A$	<0.01							mg/kg	0.01	A-T-056
o,p-Methoxychlor$_A$	<0.01							mg/kg	0.01	A-T-056
p,p-Methoxychlor$_A$	<0.01							mg/kg	0.01	A-T-056
Permethrin I (cis)$_A$	<0.01							mg/kg	0.01	A-T-056
Permethrin II (trans)$_A$	<0.01							mg/kg	0.01	A-T-056
Dichlorvos$_A$	<0.01							mg/kg	0.01	A-T-056
Mevinphos$_A$	<0.01							mg/kg	0.01	A-T-056
Demeton-S$_A$	<0.50							mg/kg	0.5	A-T-056
Demeton-O$_A$	<0.50							mg/kg	0.5	A-T-056
Phorate$_A$	<0.01							mg/kg	0.01	A-T-056
Dimethoate$_A$	<0.01							mg/kg	0.01	A-T-056
Propetamphos$_A$	<0.01							mg/kg	0.01	A-T-056
Diazinon (Dimpylate)$_A$	<0.01							mg/kg	0.01	A-T-056
Disulfoton$_A$	<0.10							mg/kg	0.1	A-T-056
Chlorpyrifos-methyl$_A$	<0.01							mg/kg	0.01	A-T-056
Parathion (Ethyl Parathion)$_A$	<0.01							mg/kg	0.01	A-T-056
Methyl Parathion$_A$	<0.01							mg/kg	0.01	A-T-056
Pirimiphos-methyl$_A$	<0.01							mg/kg	0.01	A-T-056
Fenitrothion$_A$	<0.01							mg/kg	0.01	A-T-056
Fensulphothion$_A$	<0.01							mg/kg	0.01	A-T-056
Fenthion$_A$	<0.01							mg/kg	0.01	A-T-056
Malathion$_A$	<0.01							mg/kg	0.01	A-T-056
Chlorfenvinphos$_A$	<0.01							mg/kg	0.01	A-T-056
Chlorpyrifos$_A$	<0.01							mg/kg	0.01	A-T-056
Trichloronate$_A$	<0.01							mg/kg	0.01	A-T-056
Prothiofos (Tokuthion)$_A$	<0.01							mg/kg	0.01	A-T-056

Envirolab Job Number: 23/10528

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10528/1							Units	Limit of Detection	Method ref
Client Sample No	101									
Client Sample ID	R22-TP510									
Depth to Top	0.20									
Depth To Bottom										
Date Sampled	20-Oct-23									
Sample Type	SOIL - ES									
Sample Matrix Code	6AE									
Ethion$_A$	<0.01							mg/kg	0.01	A-T-056
Triazophos$_A$	<0.01							mg/kg	0.01	A-T-056
Carbophenothion$_A$	<0.01							mg/kg	0.01	A-T-056
Phosalone$_A$	<0.01							mg/kg	0.01	A-T-056
Azinphos-methyl$_A$	<0.01							mg/kg	0.01	A-T-056
Azinphos-ethyl$_A$	<0.01							mg/kg	0.01	A-T-056
Coumaphos$_A$	<0.01							mg/kg	0.01	A-T-056
gamma-Hexachlorocyclohexane (HCH)$_A$	<0.01							mg/kg	0.01	A-T-056

Envirolab Job Number: 23/10528

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/10528/1							Units	Limit of Detection	Method ref
Client Sample No	101									
Client Sample ID	R22-TP510									
Depth to Top	0.20									
Depth To Bottom										
Date Sampled	20-Oct-23									
Sample Type	SOIL - ES									
Sample Matrix Code	6AE									
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$_A$	<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^U							mg/kg	0.03	A-T-019s
Phenanthrene$_A^{M\#}$	<0.03							mg/kg	0.03	A-T-019s
Pyrene$_A^{M\#}$	<0.07							mg/kg	0.07	A-T-019s
Total PAH-16MS$_A$	<0.08							mg/kg	0.01	A-T-019s

Report Notes

General
This report shall not be reproduced, except in full, without written approval from Envirolab.
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 **six 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.
The client Sample No, Client Sample ID, Depth to top, Depth to Bottom and Date Sampled are all provided by the client.
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.

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 "^"	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
N/A	Not applicable

Asbestos
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
Quantification of asbestos is a 3 stage process including visual identification, hand picking and weighing, and fibre counting by sedimentation/phase contrast optical microscopy if required. 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) quantification by sedimentation is performed. 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.

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^{o}C / 11550µS/cm @ 20^{o}C fall outside the accreditation range and as such are unaccredited.

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

Envirolab Deviating Samples Report

Units 7&8 Sandpits Business Park, Mottram Road, Hyde, SK14 3AR
Tel. 0161 368 4921 email. ask@envlab.co.uk

Client: Structural Soils Limited (Hemel Hempstead), 18 Frogmore Road, Hemel Hempstead, UK, HP3 9RT

Project: Sealink Richborough

Clients Project No: 563607

Project No: 23/10528

Date Received: 25/10/2023 (am)

Cool Box Temperatures (°C): 7.5

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	23/10528/1
Client Sample No	101
Client Sample ID/Depth	R22-TP510 0.20m
Date Sampled	20/10/23
A-T-019s	02/11/2023
A-T-024s	01/11/2023
A-T-025w	06/11/2023
A-T-026s	31/10/2023
A-T-026w	03/11/2023
A-T-026w (F)	03/11/2023
A-T-027s	01/11/2023
A-T-031s	01/11/2023
A-T-031w	03/11/2023
A-T-032s	02/11/2023
A-T-033w	03/11/2023
A-T-040s	31/10/2023
A-T-040w	03/11/2023
A-T-042sFCN	02/11/2023
A-T-042wFCN	01/11/2023
A-T-042wTCN	01/11/2023
A-T-044	02/11/2023
A-T-045	27/10/2023
A-T-049w	01/11/2023
A-T-050s	06/11/2023
A-T-050w	06/11/2023
A-T-056	01/11/2023
Calc	03/11/2023

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

Certificate of Analysis

Report No.: **23-07408-2**

Issue No.: **2**
Date of Issue **08/04/2024**

Customer Details:	Envirolab Ltd, 7 - 8 Sandpits Business Park, Mottram Road, Hyde, Greater Manchester, SK14 3AR, United Kingdom
Customer Contact:	[redacted]
Customer Order No.:	P0752629
Customer Reference:	Not Supplied
Quotation Reference:	Q22-00104 (Issue: 36)
Description:	1 geo sample
Date Received:	27/10/2023
Date Started:	27/10/2023
Date Completed:	16/11/2023
Test Methods:	Details available on request (refer to SOP code against relevant result/s)
Notes:	This report replaces issue 1 in its entirety

[redacted]

Approved By: [redacted], **LIMS Administrator**

This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service.
This certificate shall not be reproduced except in full without the prior written approval of the laboratory.
Observations and interpretations are outside of the scope of UKAS accreditation.
Results reported herein relate only to the items supplied to the laboratory for testing.
Results on an Interim Report are not dry-weight corrected.
Where the laboratory is not responsible for the sampling, results apply to the sample(s) as they were received.
The laboratory shall not be responsible for any information that is supplied by the customer that may affect the validity of results.

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A member of the RPS Group plc. Terms and conditions apply - copy on request

Results Summary

Report No.: 23-07408-2

Customer Reference: Not Supplied

Customer Order No: P0752629

Customer Sample No	**R22-TP510 0.20m**
RPS Sample No	35952
Sample Type	**GEO**
Sample Matrix	SOIL
Sampling Date	20/10/2023

Determinand	CAS No	Codes	SOP	RL	Units	
carbaryl	63-25-2	N	L001	0.1	mg/kg DW	< 0.10 (T)
2,4,5-trichlorophenoxyacetic acid (2,4,5-T)	93-76-5	N	L340	0.1	mg/kg DW	< 0.10 (T)
2,4,5-TP (Fenoprop)	93-72-1	N	L340	0.1	mg/kg DW	< 0.10 (T)
2,4-dichlorophenoxyacetic acid (2,4-D)	94-75-7	N	L340	0.1	mg/kg DW	< 0.10 (T)
acifluorfen	50594-66-6	N	L340	0.1	mg/kg DW	< 0.10 (T)
bentazone	25057-89-0	N	L340	0.1	mg/kg DW	< 0.10 (T)
clopyralid	1702-17-6	N	L340	0.1	mg/kg DW	< 0.10 (T)
dichlorprop (2,4-DP)	120-36-5	N	L340	0.1	mg/kg DW	< 0.10 (T)
dinoseb (DNBP)	88-85-7	N	L340	0.1	mg/kg DW	< 0.10 (T)
2-methyl-4-chlorophenoxyacetic acid (MCPA)	94-74-6	N	L340	0.1	mg/kg DW	< 0.10 (T)
mecoprop (MCPP)	7085-19-0	N	L340	0.1	mg/kg DW	< 0.10 (T)
pentachlorophenol (PCP)	87-86-5	N	L340	0.1	mg/kg DW	< 0.10 (T)
2,3,6-trichlorobenzoic acid (2,3,6-TBA)	50-31-7	N	L340	0.1	mg/kg DW	< 0.10 (T)
4-(2,4-dichlorophenoxy)butanoic acid (2,4-DB)	94-82-6	N	L340	0.1	mg/kg DW	< 0.10 (T)
4-chlorophenoxyacetic acid (4-CPA)	122-88-3	N	L340	0.1	mg/kg DW	< 0.10 (T)
benazolin	3813-05-6	N	L340	0.1	mg/kg DW	< 0.10 (T)
bromoxynil	1689-84-5	N	L340	0.1	mg/kg DW	< 0.10 (T)
dicamba	1918-00-9	N	L340	0.1	mg/kg DW	< 0.10 (T)
diclofop	40843-25-2	N	L340	0.1	mg/kg DW	< 0.10 (T)
2-methyl-4,6-dinitrophenol (DNOC)	534-52-1	N	L340	0.1	mg/kg DW	< 0.10 (T)
flamprop	58667-63-3	N	L340	0.1	mg/kg DW	< 0.10 (T)
fluroxypyr	69377-81-7	N	L340	0.1	mg/kg DW	< 0.10 (T)
ioxynil	1689-83-4	N	L340	0.1	mg/kg DW	< 0.10 (T)
MCPB	94-81-5	N	L340	0.1	mg/kg DW	< 0.10 (T)
picloram	1918-02-1	N	L340	0.1	mg/kg DW	< 0.10 (T)
triclopyr	55335-06-3	N	L340	0.1	mg/kg DW	< 0.10 (T)
alachlor	15972-60-8	N	G029	0.02	mg/kg AR	< 0.02 (T)
chloroxuron	1982-47-4	N	L025	0.1	mg/kg DW	< 0.10 (T)
chlortoluron	15545-48-9	N	L025	0.1	mg/kg DW	< 0.10 (T)
diflubenzuron	35367-38-5	N	L025	0.1	mg/kg DW	< 0.10 (T)
dimefuron	34205-21-5	N	L025	0.1	mg/kg DW	< 0.10 (T)
diuron	330-54-1	N	L025	0.1	mg/kg DW	< 0.10 (T)
isoproturon	34123-59-6	N	L025	0.1	mg/kg DW	< 0.10 (T)
linuron	330-55-2	N	L025	0.1	mg/kg DW	< 0.10 (T)
methabenzthiazuron	18691-97-9	N	L025	0.1	mg/kg DW	< 0.10 (T)
metoxuron	19937-59-8	N	L025	0.1	mg/kg DW	< 0.10 (T)
monolinuron	1746-81-2	N	L025	0.1	mg/kg DW	< 0.10 (T)
monuron	150-68-5	N	L025	0.1	mg/kg DW	< 0.10 (T)

Results Summary

Report No.: 23-07408-2

Customer Reference: Not Supplied

Customer Order No: P0752629

Customer Sample No	**R22-TP510 0.20m**
RPS Sample No	35952
Sample Type	**GEO**
Sample Matrix	SOIL
Sampling Date	20/10/2023

Determinand	CAS No	Codes	SOP	RL	Units	
pencycuron	66063-05-6	N	L025	0.1	mg/kg DW	< 0.10 (T)
bifenthrin	82657-04-3	N	G127	0.1	mg/kg DW	< 0.10 (T)
cyfluthrin, total	68359-37-5	N	G127	0.1	mg/kg DW	< 0.10 (T)
cyhalothrin, total	68085-85-8	N	G127	0.1	mg/kg DW	< 0.10 (T)
cypermethrin, total	52315-07-8	N	G127	0.1	mg/kg DW	< 0.10 (T)
deltamethrin	52918-63-5	N	G127	0.1	mg/kg DW	< 0.10 (T)
fenvalerate	51630-58-1	N	G127	0.1	mg/kg DW	< 0.10 (T)
permethrin, total	52645-53-1	N	G127	0.1	mg/kg DW	< 0.10 (T)
resmethrin	10453-86-8	N	G127	0.1	mg/kg DW	< 0.10 (T)
tetramethrin	7696-12-0	N	G127	0.1	mg/kg DW	< 0.10 (T)

Comments

Report No.: 23-07408-2

Customer Reference: Not Supplied

Customer Order No: P0752629

Job	Description	Document History
23-07408	n/a	Sample numbers changed as per client request

Deviating Samples

Report No.: 23-07408-2

Customer Reference: Not Supplied

Customer Order No: P0752629

Our policy on Deviating Samples has been implemented in accordance with UKAS Policy on Deviating Samples (TPS63).
RPS is not responsible for the integrity of samples as received, unless RPS personnel performed the sampling. Samples submitted may be declared to be deviating.
Where applicable the analysis method remains UKAS accredited, however results reported for a deviating sample may be compromised.
Where no sampling date was supplied, samples have been declared to be deviating. If the date can be supplied, results may be reissued if assessed not deviating.
Where the sample container used was unsuitable or broken, the sample is flagged as deviating and re-sampling/re-submisson may be required.

RPS No.	Customer No.	Customer ID	Date Sampled	Containers Received	Deviating	Reason for Deviation
35952	R22-TP510 0.20m		20/10/2023	100 mL amber glass jar	**Yes**	No sampling time provided.

Type	Matrix Code	Description
Food	CEREALPROD	Cereals, grains & products
Food	DRIEDFRUIT	Dried fruits
Food	FRIEDBAKED	Fried or baked food
Food	LEGUME	Legumes
Food	MEAT	Meat
Food	POWDERED	Powdered food
Food	PULSE	Pulses (dried legumes)
Food	VEGETABLES	Vegetables
Gas	TDTUBE	TD Tube
Gas	TENAX	Tenax Tube
Gas	TUBE	Tube
Gas	VAPOUR	Gas
Geological	SED_MAR	Marine Sediment
Geological	SED_RIV	River Sediment
Geological	SLUDG_SOL	Sludge (solid only)
Geological	SOIL	Soil
Liquid	BEVERAGE	Beverage
Liquid	BLOOD	Blood
Liquid	CONDENSATE	Condensate
Liquid	FOAM_LIQ	Liquid foam
Liquid	FORMULATN	Formula
Liquid	LEACHATE	Leachate
Liquid	OIL/GREASE	Oil or grease
Liquid	SLUDG_LIQ	Sludge (liquid only)
Liquid	SOLVENT	Solvent
Liquid	URINE	Urine
Sludge	SLUDG_WHL	Sludge for bulk route
Solid	BADGE	Badge
Solid	BEDDING	Bedding
Solid	BIOTA	Biota (general)
Solid	BIOTA_F	Biota (fish)
Solid	BIOTA_SF	Biota (shellfish)
Solid	CONSTRCTN	Construction materials
Solid	FABRIC	Fabrics & furnishing materials
Solid	FEED	Animal feed
Solid	FERTILISER	Fertiliser
Solid	FILTER	Filter
Solid	FOAM	Solid foam material
Solid	PACKAGING	Packaging material
Solid	PAPER	Paper
Solid	PLANT	Plant (vegetation)
Solid	POWDER	Powder
Solid	SWAB	Swab
Water	BAL	Ballast Water
Water	BIL	Bilge Water
Water	DW	Drinking Water
Water	EFFLUENT	Effluent
Water	GW	Ground Water
Water	INFLUENT	Influent
Water	SALTW	Salt Water
Water	SW	Surface Water
Water	TW	Tap Water
Water	W	Water

Report No.: 23-07408-2

Key Code	Description
N	Not Accredited Test
U	UKAS Accredited Test - UKAS accreditation is only implied if the report carries the UKAS logo
UF	UKAS Flexible Scope Test
M	MCERTS Accredited Test - MCERTS accreditation is only implied if the report carries the MCERTS logo
O	Marine Management Organisation (MMO) Validated
SN	Subcontracted to approved laboratory not accredited for the test
SU	Subcontracted to approved laboratory UKAS Accredited for the test
SM	Subcontracted to approved laboratory MCERTS/UKAS Accredited for the test
SIN	Subcontracted to internal RPS Group laboratory not accredited for the test
SIU	Subcontracted to internal RPS Group laboratory UKAS Accredited for the test
SIM	Subcontracted to internal RPS Group laboratory MCERTS/UKAS Accredited for the test
*	Modified standard method
I/S (in results)	Insufficient Sample
U/S (in results)	Unsuitable Sample
S/C (in results)	See Comments
ND (in results)	Not Detected
DW (in units)	Results are expressed on a dry weight basis
L (in results)	Result is outside normal limits

Sample Type	Sample Retention and Disposal Period
Foodstuff	1 month (if frozen) from the issue date of this report
Waters	2 weeks from the issue date of this report
Other Liquids	1 month from the issue date of this report
Solids / Soils	1 month from the issue date of this report
Sediments	1 month from the issue date of this report

Note: Sample retention may be subject to agreement with the customer for particular projects

Where the dry solids value of a sample is low (<50%), reporting limits are automatically raised for all determinants analysed on an as-received basis.

Soil Typing	Description
Type 1	Clay - Brown
Type 2	Clay - Grey/Black
Type 3	Sand
Type 4	Top Soil (Standard)
Type 5	Top Soil (High Peat)
Type 6	Made Ground (>50% Clay)
Type 7	Made Ground (>50% Sand)
Type 8	Made Ground (>50% Top Soil)
Type X	Other

Dev code	Description
D	No sampling date provided.
T	No sampling time provided.
Z	Temperature of samples exceeded in transit/storage.
V	Excessive headspace for volatile determinands.
P	Sample submitted without required preservative(s).
C	Incorrect container.
H	Holding time exceeded (sampling to extraction).
X	Holding time exceeded (sampling to receipt).

Note: Where the following information is included in this certificate, it has usually been supplied by the customer: Customer Sample ID, Sample Location, Sample Depth, Sampling Date and Sampling Time. The laboratory shall not be responsible for any information that is supplied by the customer that may affect the validity of results.

Units 7 & 8 Sandpits Business Park
Mottram Road, Hyde, Cheshire, SK14 3AR

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 23/11719
Issue Number: 1 **Date:** 06 December, 2023

Client: Structural Soils Limited (Hemel Hempstead)
18 Frogmore Road
Hemel Hempstead
UK
HP3 9RT

Project Manager: [redacted]
Project Name: Sealink Richborough
Project Ref: 563607
Order No: N/A
Date Samples Received: 27/11/23
Date Instructions Received: 27/11/23
Date Analysis Completed: 06/12/23

Approved by:

[redacted]
Deputy Client Services Supervisor

Envirolab Job Number: 23/11719

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/11719/1							Units	Limit of Detection	Method ref
Client Sample No	101									
Client Sample ID	RedP-BH-7									
Depth to Top	0.25									
Depth To Bottom										
Date Sampled	23-Nov-23									
Sample Type	SOIL - ES									
Sample Matrix Code	3A									
% Moisture at 105C$_A$	24.2							% w/w	0.1	A-T-044
% Stones >10mm$_A$	16.9							% w/w	0.1	A-T-044
pH$_D$$^{M\#}$	8.18							pH	0.01	A-T-031s
Sulphate (water sol 2:1)$_D$$^{M\#}$	0.42							g/l	0.01	A-T-026s
Sulphur (total)$_D$	549							mg/kg	50	A-T-024s
Cyanide (free)$_A$$^{M\#}$	<1							mg/kg	1	A-T-042sFCN
Phenols - Total by HPLC$_A$	<0.2							mg/kg	0.2	A-T-050s
Organic Matter$_D$$^{M\#}$	2.4							% w/w	0.1	A-T-032s
Total Organic Carbon$_D$$^{M\#}$	1.39							% w/w	0.03	A-T-032s
Fraction of organic carbon$_D$$^{\#}$	0.0139							N/A	0.0003	A-T-032s
Arsenic$_D$$^{M\#}$	7							mg/kg	1	A-T-024s
Barium$_D$	76							mg/kg	1	A-T-024s
Beryllium$_D$	0.7							mg/kg	0.5	A-T-024s
Boron (water soluble)$_D$$^{M\#}$	1.4							mg/kg	1	A-T-027s
Cadmium$_D$$^{M\#}$	0.6							mg/kg	0.5	A-T-024s
Copper$_D$$^{M\#}$	18							mg/kg	1	A-T-024s
Chromium$_D$$^{M\#}$	21							mg/kg	1	A-T-024s
Chromium (hexavalent)$_D$	<1							mg/kg	1	A-T-040s
Chromium (trivalent)	21							mg/kg	1	Calc
Lead$_D$$^{M\#}$	69							mg/kg	1	A-T-024s
Manganese$_D$	256							mg/kg	1	A-T-024s
Mercury$_D$	1.34							mg/kg	0.17	A-T-024s
Molybdenum$_D$$^{M\#}$	<1							mg/kg	1	A-T-024s
Nickel$_D$$^{M\#}$	17							mg/kg	1	A-T-024s
Selenium$_D$$^{M\#}$	<1							mg/kg	1	A-T-024s
Vanadium$_D$$^{M\#}$	37							mg/kg	1	A-T-024s
Zinc$_D$$^{M\#}$	67							mg/kg	5	A-T-024s

Envirolab Job Number: 23/11719

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/11719/1							Units	Limit of Detection	Method ref
Client Sample No	101									
Client Sample ID	RedP-BH-7									
Depth to Top	0.25									
Depth To Bottom										
Date Sampled	23-Nov-23									
Sample Type	SOIL - ES									
Sample Matrix Code	3A									
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: 23/11719

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/11719/1							Units	Limit of Detection	Method ref
Client Sample No	101									
Client Sample ID	RedP-BH-7									
Depth to Top	0.25									
Depth To Bottom										
Date Sampled	23-Nov-23									
Sample Type	SOIL - ES									
Sample Matrix Code	3A									
PAH-16MS										
Acenaphthene$_A^{M\#}$	0.08							mg/kg	0.01	A-T-019s
Acenaphthylene$_A^{M\#}$	0.05							mg/kg	0.01	A-T-019s
Anthracene$_A^{M\#}$	0.24							mg/kg	0.02	A-T-019s
Benzo(a)anthracene$_A^{M\#}$	1.11							mg/kg	0.04	A-T-019s
Benzo(a)pyrene$_A^{M\#}$	1.05^U							mg/kg	0.04	A-T-019s
Benzo(b)fluoranthene$_A^{M\#}$	1.27							mg/kg	0.05	A-T-019s
Benzo(ghi)perylene$_A^{M\#}$	0.72							mg/kg	0.05	A-T-019s
Benzo(k)fluoranthene$_A^{M\#}$	0.46							mg/kg	0.07	A-T-019s
Chrysene$_A^{M\#}$	1.12							mg/kg	0.06	A-T-019s
Dibenzo(ah)anthracene$_A$	0.13							mg/kg	0.04	A-T-019s
Fluoranthene$_A^{M\#}$	2.18							mg/kg	0.08	A-T-019s
Fluorene$_A^{M\#}$	0.07							mg/kg	0.01	A-T-019s
Indeno(123-cd)pyrene$_A^{M\#}$	0.84							mg/kg	0.03	A-T-019s
Naphthalene $_A^{M\#}$	<0.03							mg/kg	0.03	A-T-019s
Phenanthrene$_A^{M\#}$	0.81							mg/kg	0.03	A-T-019s
Pyrene$_A^{M\#}$	1.92							mg/kg	0.07	A-T-019s
Total PAH-16MS$_A$	12.1							mg/kg	0.01	A-T-019s

Report Notes

General
This report shall not be reproduced, except in full, without written approval from Envirolab.
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 **six 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.
The client Sample No, Client Sample ID, Depth to top, Depth to Bottom and Date Sampled are all provided by the client.
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.

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 "^"	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
N/A	Not applicable

Asbestos
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
Quantification of asbestos is a 3 stage process including visual identification, hand picking and weighing, and fibre counting by sedimentation/phase contrast optical microscopy if required. 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) quantification by sedimentation is performed. 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.

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^{o}C / 11550µS/cm @ 20^{o}C fall outside the accreditation range and as such are unaccredited.

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

Envirolab Deviating Samples Report

Units 7&8 Sandpits Business Park, Mottram Road, Hyde, SK14 3AR
Tel. 0161 368 4921 email. ask@envlab.co.uk

Client: Structural Soils Limited (Hemel Hempstead), 18 Frogmore Road, Hemel Hempstead, UK, HP3 9RT

Project: Sealink Richborough

Clients Project No: 563607

Project No: 23/11719

Date Received: 27/11/2023 (am)

Cool Box Temperatures (°C): 7.4

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	23/11719/1
Client Sample No	101
Client Sample ID/Depth	RedP-BH-7 0.25m
Date Sampled	23/11/23
A-T-019s	05/12/2023
A-T-024s	05/12/2023
A-T-026s	05/12/2023
A-T-027s	05/12/2023
A-T-031s	02/12/2023
A-T-032s	05/12/2023
A-T-040s	05/12/2023
A-T-042sFCN	04/12/2023
A-T-044	05/12/2023
A-T-045	28/11/2023
A-T-050s	06/12/2023
Calc	05/12/2023

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

envirolab
Hattersley Science & Technology Park
Stockport Road, Hattersley, SK14 3QU

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 23/12474
Issue Number: 1 **Date:** 11 January, 2024

Client: Structural Soils Limited (Hemel Hempstead)
18 Frogmore Road
Hemel Hempstead
UK
HP3 9RT

Project Manager: Ian Warne/Nick Harper
Project Name: Sealink Richborough
Project Ref: 563607
Order No: N/A
Date Samples Received: 15/12/23
Date Instructions Received: 18/12/23
Date Analysis Completed: 11/01/24

Approved by:



Client Manager

UKAS TESTING 1247

Envirolab Job Number: 23/12474

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/12474/1	23/12474/2	23/12474/3	23/12474/4	23/12474/5	23/12474/6	23/12474/7	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	RedP-BH-6	RedP-BH-8	R22-BH102	R22-BH103 (s)	R22-BH103 (d)	R22-BH104	R22-BH105			
Depth to Top	11.00	12.00	1.80	0.80	4.00	4.00	1.80			
Depth To Bottom										
Date Sampled	13-Dec-23	13-Dec-23	13-Dec-23	14-Dec-23	14-Dec-23	13-Dec-23	13-Dec-23			
Sample Type	WATER - GW	WATER - GW	WATER - GW	WATER - GW	WATER - GW	WATER - GW	WATER - GW			
Sample Matrix Code	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
pH (w)$_A^{\#}$	7.36	7.34	7.63	7.42	7.14	7.43	6.96	pH	0.01	A-T-031w
pH BRE (w)$_A^{\#}$	7.36	7.34	7.63	7.42	7.14	7.43	6.96	pH	0.01	A-T-031w
Alkalinity by titration (bicarbonate) (w)$_A$	290	290	290	985	1275	905	670	mg/l Ca CO3	15	Titration w
Hardness Total$_A^{\#}$	353	355	508	2310	4720	1788	1613	mg/l Ca CO3	4	A-T-049w
Total Dissolved Solids (w)$_A^{\#}$	648	647	1564	542491	27180	12566	6568	mg/l	20	A-T-035w
Ammoniacal nitrogen as N (w)$_A^{\#}$	<0.05	<0.05	0.31	1.85	11.1	2.26	0.73	mg/l	0.05	A-T-033w
Ammonium / Ammoniacal N as NH4 BRE (w)$_A^{\#}$	<0.065	<0.065	0.395	2.381	14.26	2.919	0.948	mg/l	0.065	A-T-033w
Chloride (w)$_A^{\#}$	88	110	553	9170	12300	6750	16400	mg/l	1	A-T-026w
Chloride BRE (w)$_A^{\#}$	88.27	110.19	552.92	9174.50	12300.04	6745.45	3270.20	mg/l	1	A-T-026w
Fluoride (w)$_A^{\#}$	0.25	0.32	0.53	0.58	0.61	0.90	0.66	mg/l	0.1	A-T-026w (F)
Nitrate (w)$_A^{\#}$	40.2	41.7	18.2	2.7	0.1	0.2	<0.1	mg/l	0.1	A-T-026w (N)
Nitrate BRE (w)$_A^{\#}$	40.2	41.7	18.2	2.7	0.1	0.2	<0.1	mg/l	0.1	A-T-026w (N)
Sulphate (w)$_A^{\#}$	37	38	146	932	1392	996	52	mg/l	1	A-T-026w
Sulphate BRE (w)$_A^{\#}$	37	38	146	932	1392	996	52	mg/l	1	A-T-026w
Cyanide (free) (w)$_A^{\#}$	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/l	0.005	A-T-042wFCN
Cyanide (total) (w)$_A^{\#}$	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/l	0.005	A-T-042wTCN
Antimony (dissolved)$_A$	<1	<1	2	<10	<20	<20	<10	µg/l	1	A-T-025w
Arsenic (dissolved)$_A^{\#}$	<1	<1	<1	<10	<20	<20	<10	µg/l	1	A-T-025w
Boron (dissolved)$_A^{\#}$	69	73	202	1120	4120	675	718	µg/l	10	A-T-025w
Barium (dissolved)$_A^{\#}$	81	108	95	237	313	335	1850	µg/l	1	A-T-025w
Beryllium (dissolved)$_A^{\#}$	<1	<1	<1	<10	<20	<20	<10	µg/l	1	A-T-025w
Cadmium (dissolved)$_A^{\#}$	<0.2	<0.2	<0.2	<2.0	<4.0	<4.0	<2.0	µg/l	0.2	A-T-025w
Calcium (dissolved)$_A^{\#}$	125	123	160	302	509	248	330	mg/l	1	A-T-049w
Copper (dissolved)$_A$	<4	<4	20	<40	<80	<80	<40	µg/l	4	A-T-025w
Chromium (dissolved)$_A^{\#}$	<1	1	<1	<10	<20	<20	<10	µg/l	1	A-T-025w
Chromium (hexavalent) (w)$_A^{\#}$	<0.02	<0.01	<0.02	<0.01	<0.02	<0.01	<0.01	mg/l	0.01	A-T-040w
Chromium (trivalent) (w)	<0.02	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01	mg/l	0.01	Calc
Iron (dissolved)$_A^{\#}$	<10	10	<10	943	1640	637	16900	µg/l	10	A-T-025w
Lead (dissolved)$_A^{\#}$	<1	<1	<1	<10	<20	<20	<10	µg/l	1	A-T-025w
Manganese (dissolved)$_A^{\#}$	2	2	53	2560	3210	4740	16500	µg/l	1	A-T-025w
Magnesium (dissolved)$_A^{\#}$	10	11	26	378	839	284	192	mg/l	1	A-T-049w
Magnesium BRE (dissolved)$_A^{\#}$	10.0	11.5	26.0	378	838	284	192	mg/l	1	A-T-049w

Envirolab Job Number: 23/12474

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/12474/1	23/12474/2	23/12474/3	23/12474/4	23/12474/5	23/12474/6	23/12474/7	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	RedP-BH-6	RedP-BH-8	R22-BH102	R22-BH103 (s)	R22-BH103 (d)	R22-BH104	R22-BH105			
Depth to Top	11.00	12.00	1.80	0.80	4.00	4.00	1.80			
Depth To Bottom										
Date Sampled	13-Dec-23	13-Dec-23	13-Dec-23	14-Dec-23	14-Dec-23	13-Dec-23	13-Dec-23			
Sample Type	WATER - GW	WATER - GW	WATER - GW	WATER - GW	WATER - GW	WATER - GW	WATER - GW			
Sample Matrix Code	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
Mercury (dissolved)$_{A}^{\#}$	<0.1	<0.1	<0.1	<1.0	<2.0	<2.0	<1.0	µg/l	0.1	A-T-025w
Molybdenum (dissolved)$_{A}^{\#}$	<0.5	0.6	2.4	<5.0	<10.0	<10.0	<5.0	µg/l	0.5	A-T-025w
Nickel (dissolved)$_{A}^{\#}$	5	4	7	<20	<40	<40	<20	µg/l	2	A-T-025w
Selenium (dissolved)$_{A}^{\#}$	3	3	7	<10	<20	<20	<10	µg/l	1	A-T-025w
Sodium (dissolved)$_{A}^{\#}$	50	63	294	4900	7720	4500	1580	mg/l	1	A-T-049w
Sulphur, Total (dissolved)$_{A}$	12	13	43	328	485	350	20	mg/l	1	A-T-072w
Vanadium (dissolved)$_{A}^{\#}$	<1	<1	<1	<10	<20	<20	<10	µg/l	1	A-T-025w
Zinc (dissolved)$_{A}^{\#}$	19	14	4	56	<40	<40	31	µg/l	2	A-T-025w
Ali >C5-C6 (w)$_{A}^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-022w
Ali >C6-C8 (w)$_{A}^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-022w
Aro >C5-C7 (w)$_{A}^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-022w
Aro >C7-C8 (w)$_{A}^{\#}$	<1	<1	<1	<1	<1	1	2	µg/l	1	A-T-022w
BTEX - Benzene (w)$_{A}^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-022w
BTEX - Toluene (w)$_{A}^{\#}$	<1	<1	<1	<1	<1	1	2	µg/l	1	A-T-022w
BTEX - Ethyl Benzene (w)$_{A}^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-022w
BTEX - m & p Xylene (w)$_{A}^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-022w
BTEX - o Xylene (w)$_{A}^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-022w
MTBE (w)$_{A}^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-022w

Envirolab Job Number: 23/12474

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/12474/1	23/12474/2	23/12474/3	23/12474/4	23/12474/5	23/12474/6	23/12474/7	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	RedP-BH-6	RedP-BH-8	R22-BH102	R22-BH103 (s)	R22-BH103 (d)	R22-BH104	R22-BH105			
Depth to Top	11.00	12.00	1.80	0.80	4.00	4.00	1.80			
Depth To Bottom										
Date Sampled	13-Dec-23	13-Dec-23	13-Dec-23	14-Dec-23	14-Dec-23	13-Dec-23	13-Dec-23			
Sample Type	WATER - GW	WATER - GW	WATER - GW	WATER - GW	WATER - GW	WATER - GW	WATER - GW			
Sample Matrix Code	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
PAH 16MS (w)										
Acenaphthene (w)$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	µg/l	0.01	A-T-019w
Acenaphthylene (w)$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	µg/l	0.01	A-T-019w
Anthracene (w)$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	µg/l	0.01	A-T-019w
Benzo(a)anthracene (w)$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	µg/l	0.01	A-T-019w
Benzo(a)pyrene (w)$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	µg/l	0.01	A-T-019w
Benzo(b)fluoranthene (w)$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	µg/l	0.01	A-T-019w
Benzo(ghi)perylene (w)$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	µg/l	0.01	A-T-019w
Benzo(k)fluoranthene (w)$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	µg/l	0.01	A-T-019w
Chrysene (w)$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	µg/l	0.01	A-T-019w
Dibenzo(ah)anthracene (w)$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	µg/l	0.01	A-T-019w
Fluoranthene (w)$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	µg/l	0.01	A-T-019w
Fluorene (w)$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	µg/l	0.01	A-T-019w
Indeno(123-cd)pyrene (w)$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	µg/l	0.01	A-T-019w
Naphthalene (w)$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	0.07	0.06	µg/l	0.01	A-T-019w
Phenanthrene (w)$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	µg/l	0.01	A-T-019w
Pyrene (w)$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	µg/l	0.01	A-T-019w
Total PAH 16MS (w)$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	0.07	0.09	µg/l	0.01	A-T-019w
Phenols NG (speciated HPLC) (w)										
Phenol (w)$_A$	<0.01	<0.01	<0.01	<0.10	<0.10	<0.10	<0.10	mg/l	0.01	A-T-050w
Cresols (w)$_A$	<0.01	<0.01	<0.01	<0.10	<0.10	<0.10	<0.10	mg/l	0.01	A-T-050w
Catechol (w)$_A$	<0.01	<0.01	<0.01	<0.10	<0.10	<0.10	<0.10	mg/l	0.01	A-T-050w
Resorcinol (w) $_A$	<0.01	<0.01	<0.01	<0.10	<0.10	<0.10	<0.10	mg/l	0.01	A-T-050w
Xylenols & Ethylphenols (w)$_A$	<0.01	<0.01	<0.01	<0.10	<0.10	<0.10	<0.10	mg/l	0.01	A-T-050w
Naphthols (w)$_A$	<0.01	<0.01	<0.01	<0.10	<0.10	<0.10	<0.10	mg/l	0.01	A-T-050w
Trimethylphenol (w)$_A$	<0.01	<0.01	<0.01	<0.10	<0.10	<0.10	<0.10	mg/l	0.01	A-T-050w
Phenols - Total by HPLC (w)$_A$	<0.01	<0.01	<0.01	<0.10	<0.10	<0.10	<0.10	mg/l	0.01	A-T-050w

Envirolab Job Number: 23/12474

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/12474/1	23/12474/2	23/12474/3	23/12474/4	23/12474/5	23/12474/6	23/12474/7	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	RedP-BH-6	RedP-BH-8	R22-BH102	R22-BH103 (s)	R22-BH103 (d)	R22-BH104	R22-BH105			
Depth to Top	11.00	12.00	1.80	0.80	4.00	4.00	1.80			
Depth To Bottom										
Date Sampled	13-Dec-23	13-Dec-23	13-Dec-23	14-Dec-23	14-Dec-23	13-Dec-23	13-Dec-23			
Sample Type	WATER - GW	WATER - GW	WATER - GW	WATER - GW	WATER - GW	WATER - GW	WATER - GW			
Sample Matrix Code	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
VOC (w)										
Dichlorodifluoromethane$_A$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Chloromethane$_A$	<10	<10	<10	<10	<10	<10	<10	µg/l	10	A-T-006w
Vinyl Chloride$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Bromomethane$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Chloroethane$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Trichlorofluoromethane$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
trans 1,2-Dichloroethene$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Dichloromethane$_A$	<5	<5	<5	<5	<5	<5	<5	µg/l	5	A-T-006w
Carbon Disulphide$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
1,1-Dichloroethene$_A^{\#}$	<1^U	<1^U	<1^U	<1^U	<1^U	<1^U	<1^U	µg/l	1	A-T-006w
1,1-Dichloroethane$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
cis 1,2-Dichloroethene$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Bromochloromethane$_A^{\#}$	<5	<5	<5	<5	<5	<5	<5	µg/l	5	A-T-006w
Chloroform$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
2,2-Dichloropropane$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
1,2-Dichloroethane$_A^{\#}$	<2	<2	<2	<2	<2	<2	<2	µg/l	2	A-T-006w
1,1,1-Trichloroethane$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
1,1-Dichloropropene$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Benzene$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Carbon Tetrachloride$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Dibromomethane$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
1,2-Dichloropropane$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Bromodichloromethane$_A^{\#}$	<10	<10	<10	<10	<10	<10	<10	µg/l	10	A-T-006w
Trichloroethene$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
cis 1,3-Dichloropropene$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
trans 1,3-Dichloropropene$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
1,1,2-Trichloroethane$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Toluene$_A^{\#}$	<1	<1	<1	<1	<1	1	2	µg/l	1	A-T-006w
1,3-Dichloropropane$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Dibromochloromethane$_A^{\#}$	<3	<3	<3	<3	<3	<3	<3	µg/l	3	A-T-006w
1,2-Dibromoethane$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Tetrachloroethene$_A$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w

Envirolab Job Number: 23/12474

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/12474/1	23/12474/2	23/12474/3	23/12474/4	23/12474/5	23/12474/6	23/12474/7	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	RedP-BH-6	RedP-BH-8	R22-BH102	R22-BH103 (s)	R22-BH103 (d)	R22-BH104	R22-BH105			
Depth to Top	11.00	12.00	1.80	0.80	4.00	4.00	1.80			
Depth To Bottom										
Date Sampled	13-Dec-23	13-Dec-23	13-Dec-23	14-Dec-23	14-Dec-23	13-Dec-23	13-Dec-23			
Sample Type	WATER - GW	WATER - GW	WATER - GW	WATER - GW	WATER - GW	WATER - GW	WATER - GW			
Sample Matrix Code	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
1,1,1,2-Tetrachloroethane$_A$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Chlorobenzene$_A^\#$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Ethylbenzene$_A^\#$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
m & p Xylene$_A^\#$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Bromoform$_A^\#$	<3	<3	<3	<3	<3	<3	<3	µg/l	3	A-T-006w
Styrene$_A^\#$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
1,1,2,2-Tetrachloroethane$_A$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
o-Xylene$_A^\#$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
1,2,3-Trichloropropane$_A^\#$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Isopropylbenzene$_A^\#$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Bromobenzene$_A^\#$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
2-Chlorotoluene$_A^\#$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
n-propylbenzene$_A^\#$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
4-Chlorotoluene$_A^\#$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
1,2,4-Trimethylbenzene$_A^\#$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
4-Isopropyltoluene$_A^\#$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
1,3,5-Trimethylbenzene$_A^\#$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
1,2-Dichlorobenzene$_A^\#$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
1,4-Dichlorobenzene$_A^\#$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
sec-Butylbenzene$_A^\#$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
tert-Butylbenzene$_A^\#$	<2	<2	<2	<2	<2	<2	<2	µg/l	2	A-T-006w
1,3-Dichlorobenzene$_A^\#$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
n-butylbenzene$_A^\#$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
1,2-Dibromo-3-chloropropane$_A^\#$	<2	<2	<2	<2	<2	<2	<2	µg/l	2	A-T-006w
1,2,4-Trichlorobenzene$_A^\#$	<3	<3	<3	<3	<3	<3	<3	µg/l	3	A-T-006w
1,2,3-Trichlorobenzene$_A^\#$	<3	<3	<3	<3	<3	<3	<3	µg/l	3	A-T-006w
Hexachlorobutadiene$_A^\#$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w

Envirolab Job Number: 23/12474

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/12474/1	23/12474/2	23/12474/3	23/12474/4	23/12474/5	23/12474/6	23/12474/7	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	RedP-BH-6	RedP-BH-8	R22-BH102	R22-BH103 (s)	R22-BH103 (d)	R22-BH104	R22-BH105			
Depth to Top	11.00	12.00	1.80	0.80	4.00	4.00	1.80			
Depth To Bottom										
Date Sampled	13-Dec-23	13-Dec-23	13-Dec-23	14-Dec-23	14-Dec-23	13-Dec-23	13-Dec-23			
Sample Type	WATER - GW	WATER - GW	WATER - GW	WATER - GW	WATER - GW	WATER - GW	WATER - GW			
Sample Matrix Code	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
TPH CWG (w) with Clean Up										
Ali >C8-C10 $(w)_A^{\#}$	<5	<5	<5	<5	<5	<5	11	µg/l	5	A-T-055w
Ali >C10-C12 $(w)_A^{\#}$	<5	<5	<5	<5	<5	<5	<5	µg/l	5	A-T-055w
Ali >C12-C16 $(w)_A^{\#}$	<5	<5	<5	<5	<5	<5	<5	µg/l	5	A-T-055w
Ali >C16-C21 $(w)_A^{\#}$	<5	<5	<5	<5	<5	<5	<5	µg/l	5	A-T-055w
Ali >C21-C35 $(w)_A^{\#}$	<5	<5	<5	<5	<5	<5	<5	µg/l	5	A-T-055w
Total Aliphatics $(w)_A^{\#}$	<5	<5	<5	<5	<5	<5	11	µg/l	5	Calc-As Recd
Aro >C8-C10 $(w)_A$	<5	<5	<5	<5	<5	6	63	µg/l	5	A-T-055w
Aro >C10-C12 $(w)_A^{\#}$	<5	<5	<5	<5	<5	5	5	µg/l	5	A-T-055w
Aro >C12-C16 $(w)_A^{\#}$	<5	<5	<5	<5	<5	10	8	µg/l	5	A-T-055w
Aro >C16-C21 $(w)_A^{\#}$	<5	<5	<5	<5	<5	8	8	µg/l	5	A-T-055w
Aro >C21-C35 $(w)_A$	<10	<10	<10	<10	<10	<10	<10	µg/l	10	A-T-055w
Total Aromatics $(w)_A$	<10	<10	<10	<10	<10	30	86	µg/l	10	Calc-As Recd
TPH (Ali & Aro >C5-C35) $(w)_A$	<10	<10	<10	<10	<10	30	97	µg/l	10	Calc-As Recd

Lab Sample ID	23/12474/8	23/12474/9	23/12474/10					Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	R22-BH204	R22-BH205	R22-BH501							
Depth to Top	27.30	21.00	24.50							
Depth To Bottom			2							
Date Sampled	13-Dec-23	14-Dec-23	13-Dec-23							
Sample Type	WATER - GW	WATER - GW	WATER - GW							
Sample Matrix Code	N/A	N/A	N/A							
pH (w)$_A^\#$	7.61	7.28	7.56					pH	0.01	A-T-031w
pH BRE (w)$_A^\#$	7.61	7.28	7.56					pH	0.01	A-T-031w
Alkalinity by titration (bicarbonate) (w)$_A$	370	710	330					mg/l Ca CO3	15	Titration w
Hardness Total$_A^\#$	340	5430	855					mg/l Ca CO3	4	A-T-049w
Total Dissolved Solids (w)$_A^\#$	597	21809	1931					mg/l	20	A-T-035w
Ammoniacal nitrogen as N (w)$_A^\#$	0.36	5.47	1.34					mg/l	0.05	A-T-033w
Ammonium / Ammoniacal N as NH4 BRE (w)$_A^\#$	0.466	7.061	1.726					mg/l	0.065	A-T-033w
Chloride (w)$_A^\#$	67	2620	606					mg/l	1	A-T-026w
Chloride BRE (w)$_A^\#$	67.42	2620.54	606.18					mg/l	1	A-T-026w
Fluoride (w)$_A^\#$	0.83	0.26	0.90					mg/l	0.1	A-T-026w (F)
Nitrate (w)$_A^\#$	<0.1	0.5	0.1					mg/l	0.1	A-T-026w (N)
Nitrate BRE (w)$_A^\#$	<0.1	0.5	0.1					mg/l	0.1	A-T-026w (N)
Sulphate (w)$_A^\#$	75	957	73					mg/l	1	A-T-026w
Sulphate BRE (w)$_A^\#$	75	957	73					mg/l	1	A-T-026w
Cyanide (free) (w)$_A^\#$	<0.005	<0.005	<0.005					mg/l	0.005	A-T-042wFCN
Cyanide (total) (w)$_A^\#$	<0.005	<0.005	<0.005					mg/l	0.005	A-T-042wTCN
Antimony (dissolved)$_A$	<5	<20	<5					µg/l	1	A-T-025w
Arsenic (dissolved)$_A^\#$	<5	<20	<5					µg/l	1	A-T-025w
Boron (dissolved)$_A^\#$	164	996	139					µg/l	10	A-T-025w
Barium (dissolved)$_A^\#$	213	335	133					µg/l	1	A-T-025w
Beryllium (dissolved)$_A^\#$	<5	<20	<5					µg/l	1	A-T-025w
Cadmium (dissolved)$_A^\#$	<1.0	<4.0	<1.0					µg/l	0.2	A-T-025w
Calcium (dissolved)$_A^\#$	87	874	188					mg/l	1	A-T-049w
Copper (dissolved)$_A$	<20	<80	<20					µg/l	4	A-T-025w
Chromium (dissolved)$_A^\#$	<5	<20	<5					µg/l	1	A-T-025w
Chromium (hexavalent) (w)$_A^\#$	<0.01	<0.01	<0.01					mg/l	0.01	A-T-040w
Chromium (trivalent) (w)	<0.01	<0.02	<0.01					mg/l	0.01	Calc
Iron (dissolved)$_A^\#$	2450	379	1030					µg/l	10	A-T-025w
Lead (dissolved)$_A^\#$	<5	<20	<5					µg/l	1	A-T-025w
Manganese (dissolved)$_A^\#$	1100	3000	187					µg/l	1	A-T-025w
Magnesium (dissolved)$_A^\#$	30	789	94					mg/l	1	A-T-049w
Magnesium BRE (dissolved)$_A^\#$	29.8	789	93.6					mg/l	1	A-T-049w

Envirolab Job Number: 23/12474

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/12474/8	23/12474/9	23/12474/10					Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	R22-BH204	R22-BH205	R22-BH501							
Depth to Top	27.30	21.00	24.50							
Depth To Bottom			2							
Date Sampled	13-Dec-23	14-Dec-23	13-Dec-23							
Sample Type	WATER - GW	WATER - GW	WATER - GW							
Sample Matrix Code	N/A	N/A	N/A							
Mercury (dissolved)$_{A}^{\#}$	<0.5	<2.0	<0.5					µg/l	0.1	A-T-025w
Molybdenum (dissolved)$_{A}^{\#}$	3.4	<10.0	<2.5					µg/l	0.5	A-T-025w
Nickel (dissolved)$_{A}^{\#}$	13	55	<10					µg/l	2	A-T-025w
Selenium (dissolved)$_{A}^{\#}$	<5	<20	<5					µg/l	1	A-T-025w
Sodium (dissolved)$_{A}^{\#}$	61	5150	145					mg/l	1	A-T-049w
Sulphur, Total (dissolved)$_{A}$	27	337	26					mg/l	1	A-T-072w
Vanadium (dissolved)$_{A}^{\#}$	<5	<20	<5					µg/l	1	A-T-025w
Zinc (dissolved)$_{A}^{\#}$	<10	454	<10					µg/l	2	A-T-025w
Ali >C5-C6 (w)$_{A}^{\#}$	<1	<1	<1					µg/l	1	A-T-022w
Ali >C6-C8 (w)$_{A}^{\#}$	<1	<1	<1					µg/l	1	A-T-022w
Aro >C5-C7 (w)$_{A}^{\#}$	<1	<1	<1					µg/l	1	A-T-022w
Aro >C7-C8 (w)$_{A}^{\#}$	3	<1	<1					µg/l	1	A-T-022w
BTEX - Benzene (w)$_{A}^{\#}$	<1	<1	<1					µg/l	1	A-T-022w
BTEX - Toluene (w)$_{A}^{\#}$	3	<1	<1					µg/l	1	A-T-022w
BTEX - Ethyl Benzene (w)$_{A}^{\#}$	<1	<1	<1					µg/l	1	A-T-022w
BTEX - m & p Xylene (w)$_{A}^{\#}$	<1	<1	<1					µg/l	1	A-T-022w
BTEX - o Xylene (w)$_{A}^{\#}$	<1	<1	<1					µg/l	1	A-T-022w
MTBE (w)$_{A}^{\#}$	<1	<1	<1					µg/l	1	A-T-022w

Envirolab Job Number: 23/12474

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/12474/8	23/12474/9	23/12474/10					Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	R22-BH204	R22-BH205	R22-BH501							
Depth to Top	27.30	21.00	24.50							
Depth To Bottom			2							
Date Sampled	13-Dec-23	14-Dec-23	13-Dec-23							
Sample Type	WATER - GW	WATER - GW	WATER - GW							
Sample Matrix Code	N/A	N/A	N/A							
PAH 16MS (w)										
Acenaphthene (w)$_{A}^{\#}$	<0.01	-	<0.01					µg/l	0.01	A-T-019w
Acenaphthylene (w)$_{A}^{\#}$	<0.01	-	<0.01					µg/l	0.01	A-T-019w
Anthracene (w)$_{A}^{\#}$	<0.01	-	<0.01					µg/l	0.01	A-T-019w
Benzo(a)anthracene (w)$_{A}^{\#}$	<0.01	-	<0.01					µg/l	0.01	A-T-019w
Benzo(a)pyrene (w)$_{A}^{\#}$	<0.01	-	<0.01					µg/l	0.01	A-T-019w
Benzo(b)fluoranthene (w)$_{A}^{\#}$	<0.01	-	<0.01					µg/l	0.01	A-T-019w
Benzo(ghi)perylene (w)$_{A}^{\#}$	<0.01	-	<0.01					µg/l	0.01	A-T-019w
Benzo(k)fluoranthene (w)$_{A}^{\#}$	<0.01	-	<0.01					µg/l	0.01	A-T-019w
Chrysene (w)$_{A}^{\#}$	<0.01	-	<0.01					µg/l	0.01	A-T-019w
Dibenzo(ah)anthracene (w)$_{A}^{\#}$	<0.01	-	<0.01					µg/l	0.01	A-T-019w
Fluoranthene (w)$_{A}^{\#}$	<0.01	-	<0.01					µg/l	0.01	A-T-019w
Fluorene (w)$_{A}^{\#}$	<0.01	-	<0.01					µg/l	0.01	A-T-019w
Indeno(123-cd)pyrene (w)$_{A}^{\#}$	<0.01	-	<0.01					µg/l	0.01	A-T-019w
Naphthalene (w)$_{A}^{\#}$	0.07	-	0.03					µg/l	0.01	A-T-019w
Phenanthrene (w)$_{A}^{\#}$	0.01	-	<0.01					µg/l	0.01	A-T-019w
Pyrene (w)$_{A}^{\#}$	<0.01	-	<0.01					µg/l	0.01	A-T-019w
Total PAH 16MS (w)$_{A}^{\#}$	0.08	-	0.03					µg/l	0.01	A-T-019w
Phenols NG (speciated HPLC) (w)										
Phenol (w)$_{A}$	<0.10	<0.10	<0.01					mg/l	0.01	A-T-050w
Cresols (w)$_{A}$	<0.10	<0.10	<0.01					mg/l	0.01	A-T-050w
Catechol (w)$_{A}$	<0.10	<0.10	<0.01					mg/l	0.01	A-T-050w
Resorcinol (w) $_{A}$	<0.10	<0.10	<0.01					mg/l	0.01	A-T-050w
Xylenols & Ethylphenols (w)$_{A}$	<0.10	<0.10	<0.01					mg/l	0.01	A-T-050w
Naphthols (w)$_{A}$	<0.10	<0.10	<0.01					mg/l	0.01	A-T-050w
Trimethylphenol (w)$_{A}$	<0.10	<0.10	<0.01					mg/l	0.01	A-T-050w
Phenols - Total by HPLC (w)$_{A}$	<0.10	<0.10	<0.01					mg/l	0.01	A-T-050w

Envirolab Job Number: 23/12474

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/12474/8	23/12474/9	23/12474/10					Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	R22-BH204	R22-BH205	R22-BH501							
Depth to Top	27.30	21.00	24.50							
Depth To Bottom			2							
Date Sampled	13-Dec-23	14-Dec-23	13-Dec-23							
Sample Type	WATER - GW	WATER - GW	WATER - GW							
Sample Matrix Code	N/A	N/A	N/A							
VOC (w)										
Dichlorodifluoromethane$_{A}$	<1	<1	<1					µg/l	1	A-T-006w
Chloromethane$_{A}$	<10	<10	<10					µg/l	10	A-T-006w
Vinyl Chloride$_{A}^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
Bromomethane$_{A}^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
Chloroethane$_{A}^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
Trichlorofluoromethane$_{A}^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
trans 1,2-Dichloroethene$_{A}^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
Dichloromethane$_{A}$	<5	<5	<5					µg/l	5	A-T-006w
Carbon Disulphide$_{A}^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
1,1-Dichloroethene$_{A}^{\#}$	<1^{U}	<1^{U}	<1^{U}					µg/l	1	A-T-006w
1,1-Dichloroethane$_{A}^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
cis 1,2-Dichloroethene$_{A}^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
Bromochloromethane$_{A}^{\#}$	<5	<5	<5					µg/l	5	A-T-006w
Chloroform$_{A}^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
2,2-Dichloropropane$_{A}^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
1,2-Dichloroethane$_{A}^{\#}$	<2	<2	<2					µg/l	2	A-T-006w
1,1,1-Trichloroethane$_{A}^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
1,1-Dichloropropene$_{A}^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
Benzene$_{A}^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
Carbon Tetrachloride$_{A}^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
Dibromomethane$_{A}^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
1,2-Dichloropropane$_{A}^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
Bromodichloromethane$_{A}^{\#}$	<10	<10	<10					µg/l	10	A-T-006w
Trichloroethene$_{A}^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
cis 1,3-Dichloropropene$_{A}^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
trans 1,3-Dichloropropene$_{A}^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
1,1,2-Trichloroethane$_{A}^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
Toluene$_{A}^{\#}$	3	<1	<1					µg/l	1	A-T-006w
1,3-Dichloropropane$_{A}^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
Dibromochloromethane$_{A}^{\#}$	<3	<3	<3					µg/l	3	A-T-006w
1,2-Dibromoethane$_{A}^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
Tetrachloroethene$_{A}$	<1	<1	<1					µg/l	1	A-T-006w

Envirolab Job Number: 23/12474

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/12474/8	23/12474/9	23/12474/10					Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	R22-BH204	R22-BH205	R22-BH501							
Depth to Top	27.30	21.00	24.50							
Depth To Bottom			2							
Date Sampled	13-Dec-23	14-Dec-23	13-Dec-23							
Sample Type	WATER - GW	WATER - GW	WATER - GW							
Sample Matrix Code	N/A	N/A	N/A							
1,1,1,2-Tetrachloroethane$_{A}$	<1	<1	<1					µg/l	1	A-T-006w
Chlorobenzene$_{A}^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
Ethylbenzene$_{A}^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
m & p Xylene$_{A}^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
Bromoform$_{A}^{\#}$	<3	<3	<3					µg/l	3	A-T-006w
Styrene$_{A}^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
1,1,2,2-Tetrachloroethane$_{A}$	<1	<1	<1					µg/l	1	A-T-006w
o-Xylene$_{A}^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
1,2,3-Trichloropropane$_{A}^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
Isopropylbenzene$_{A}^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
Bromobenzene$_{A}^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
2-Chlorotoluene$_{A}^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
n-propylbenzene$_{A}^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
4-Chlorotoluene$_{A}^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
1,2,4-Trimethylbenzene$_{A}^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
4-Isopropyltoluene$_{A}^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
1,3,5-Trimethylbenzene$_{A}^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
1,2-Dichlorobenzene$_{A}^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
1,4-Dichlorobenzene$_{A}^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
sec-Butylbenzene$_{A}^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
tert-Butylbenzene$_{A}^{\#}$	<2	<2	<2					µg/l	2	A-T-006w
1,3-Dichlorobenzene$_{A}^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
n-butylbenzene$_{A}^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
1,2-Dibromo-3-chloropropane$_{A}^{\#}$	<2	<2	<2					µg/l	2	A-T-006w
1,2,4-Trichlorobenzene$_{A}^{\#}$	<3	<3	<3					µg/l	3	A-T-006w
1,2,3-Trichlorobenzene$_{A}^{\#}$	<3	<3	<3					µg/l	3	A-T-006w
Hexachlorobutadiene$_{A}^{\#}$	<1	<1	<1					µg/l	1	A-T-006w

Envirolab Job Number: 23/12474

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	23/12474/8	23/12474/9	23/12474/10					Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	R22-BH204	R22-BH205	R22-BH501							
Depth to Top	27.30	21.00	24.50							
Depth To Bottom			2							
Date Sampled	13-Dec-23	14-Dec-23	13-Dec-23							
Sample Type	WATER - GW	WATER - GW	WATER - GW							
Sample Matrix Code	N/A	N/A	N/A							
TPH CWG (w) with Clean Up										
Ali >C8-C10 $(w)_A^{\#}$	<5	-	<5					µg/l	5	A-T-055w
Ali >C10-C12 $(w)_A^{\#}$	<5	-	<5					µg/l	5	A-T-055w
Ali >C12-C16 $(w)_A^{\#}$	<5	-	<5					µg/l	5	A-T-055w
Ali >C16-C21 $(w)_A^{\#}$	<5	-	<5					µg/l	5	A-T-055w
Ali >C21-C35 $(w)_A^{\#}$	<5	-	<5					µg/l	5	A-T-055w
Total Aliphatics $(w)_A^{\#}$	<5	-	<5					µg/l	5	Calc-As Recd
Aro >C8-C10 $(w)_A$	<5	-	<5					µg/l	5	A-T-055w
Aro >C10-C12 $(w)_A^{\#}$	<5	-	<5					µg/l	5	A-T-055w
Aro >C12-C16 $(w)_A^{\#}$	6	-	<5					µg/l	5	A-T-055w
Aro >C16-C21 $(w)_A^{\#}$	7	-	<5					µg/l	5	A-T-055w
Aro >C21-C35 $(w)_A$	<10	-	<10					µg/l	10	A-T-055w
Total Aromatics $(w)_A$	16	-	<10					µg/l	10	Calc-As Recd
TPH (Ali & Aro >C5-C35) $(w)_A$	16	-	<10					µg/l	10	Calc-As Recd

Report Notes

General
This report shall not be reproduced, except in full, without written approval from Envirolab.
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 **six 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.
The client Sample No, Client Sample ID, Depth to top, Depth to Bottom and Date Sampled are all provided by the client.
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.

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 "^"	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
N/A	Not applicable

Asbestos
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
Quantification of asbestos is a 3 stage process including visual identification, hand picking and weighing, and fibre counting by sedimentation/phase contrast optical microscopy if required. 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) quantification by sedimentation is performed. 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.

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^{o}C / 11550µS/cm @ 20^{o}C fall outside the accreditation 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: Structural Soils Limited (Hemel Hempstead), 18 Frogmore Road, Hemel Hempstead, UK, HP3 9RT

Project: Sealink Richborough

Clients Project No: 563607

Project No: 23/12474

Date Received: 18/12/2023 (am)

Cool Box Temperatures (°C): 7.2 - 7.7

Lab Sample ID	23/12474/1	23/12474/2	23/12474/3	23/12474/4	23/12474/5	23/12474/6	23/12474/7	23/12474/8	23/12474/9	23/12474/10
Client Sample No										
Client Sample ID/Depth	RedP-BH-6 11.00m	RedP-BH-8 12.00m	R22-BH102 1.80m	R22-BH103 (s) 0.80m	R22-BH103 (d) 4.00m	R22-BH104 4.00m	R22-BH105 1.80m	R22-BH204 27.30m	R22-BH205 21.00m	R22-BH501 24.50-2m
Date Sampled	13/12/23	13/12/23	13/12/23	14/12/23	14/12/23	13/12/23	13/12/23	13/12/23	14/12/23	13/12/23
Deviation Code										
F	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Key
F *Maximum holding time exceeded between sampling date and analysis for analytes listed below*

HOLDING TIME EXCEEDANCES

Lab Sample ID	23/12474/1	23/12474/2	23/12474/3	23/12474/4	23/12474/5	23/12474/6	23/12474/7	23/12474/8	23/12474/9	23/12474/10
Client Sample No										
Client Sample ID/Depth	RedP-BH-6 11.00m	RedP-BH-8 12.00m	R22-BH102 1.80m	R22-BH103 (s) 0.80m	R22-BH103 (d) 4.00m	R22-BH104 4.00m	R22-BH105 1.80m	R22-BH204 27.30m	R22-BH205 21.00m	R22-BH501 24.50-2m
Date Sampled	13/12/23	13/12/23	13/12/23	14/12/23	14/12/23	13/12/23	13/12/23	13/12/23	14/12/23	13/12/23
Ammoniacal nitrogen as N (w)	✓	✓	✓		✓	✓	✓	✓	✓	✓
Phenols NG (speciated HPLC) (w)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Ammonium / Ammoniacal N as NH4 BRE (w)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

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	23/12474/1	23/12474/2	23/12474/3	23/12474/4	23/12474/5	23/12474/6	23/12474/7	23/12474/8	23/12474/9	23/12474/10
Client Sample No										
Client Sample ID/Depth	RedP-BH-6 11.00m	RedP-BH-8 12.00m	R22-BH102 1.80m	R22-BH103 (s) 0.80m	R22-BH103 (d) 4.00m	R22-BH104 4.00m	R22-BH105 1.80m	R22-BH204 27.30m	R22-BH205 21.00m	R22-BH501 24.50-2m
Date Sampled	13/12/23	13/12/23	13/12/23	14/12/23	14/12/23	13/12/23	13/12/23	13/12/23	14/12/23	13/12/23
A-T-006w	20/12/2023	20/12/2023	20/12/2023	20/12/2023	20/12/2023	20/12/2023	20/12/2023	20/12/2023	21/12/2023	20/12/2023
A-T-019w	20/12/2023	20/12/2023	20/12/2023	20/12/2023	20/12/2023	20/12/2023	20/12/2023	20/12/2023		20/12/2023
A-T-022w	21/12/2023	21/12/2023	21/12/2023	21/12/2023	21/12/2023	21/12/2023	21/12/2023	21/12/2023	21/12/2023	21/12/2023
A-T-025w	22/12/2023	22/12/2023	22/12/2023	02/01/2024	08/01/2024	02/01/2024	02/01/2024	02/01/2024	08/01/2024	02/01/2024
A-T-026w	21/12/2023	21/12/2023	21/12/2023	21/12/2023	21/12/2023	21/12/2023	21/12/2023	21/12/2023	21/12/2023	21/12/2023
A-T-026w (F)	05/01/2024	05/01/2024	05/01/2024	05/01/2024	05/01/2024	05/01/2024	05/01/2024	05/01/2024	05/01/2024	05/01/2024
A-T-026w (N)	22/12/2023	22/12/2023	22/12/2023	22/12/2023	22/12/2023	22/12/2023	22/12/2023	22/12/2023	22/12/2023	22/12/2023
A-T-031w	20/12/2023	20/12/2023	20/12/2023	20/12/2023	20/12/2023	20/12/2023	20/12/2023	20/12/2023	20/12/2023	20/12/2023
A-T-033w	05/01/2024	05/01/2024	05/01/2024	05/01/2024	05/01/2024	05/01/2024	05/01/2024	05/01/2024	05/01/2024	05/01/2024
A-T-035w	21/12/2023	21/12/2023	21/12/2023	21/12/2023	21/12/2023	21/12/2023	21/12/2023	21/12/2023	21/12/2023	21/12/2023
A-T-040w	20/12/2023	20/12/2023	20/12/2023	20/12/2023	20/12/2023	20/12/2023	20/12/2023	20/12/2023	20/12/2023	21/12/2023
A-T-042wFCN	21/12/2023	21/12/2023	21/12/2023	21/12/2023	21/12/2023	21/12/2023	21/12/2023	21/12/2023	21/12/2023	21/12/2023
A-T-042wTCN	21/12/2023	21/12/2023	21/12/2023	21/12/2023	21/12/2023	21/12/2023	21/12/2023	21/12/2023	21/12/2023	21/12/2023
A-T-049w	08/01/2024	08/01/2024	08/01/2024	08/01/2024	08/01/2024	08/01/2024	08/01/2024	08/01/2024	08/01/2024	08/01/2024
A-T-050w	08/01/2024	11/01/2024	11/01/2024	11/01/2024	11/01/2024	11/01/2024	11/01/2024	11/01/2024	11/01/2024	11/01/2024
A-T-055w	20/12/2023	20/12/2023	20/12/2023	20/12/2023	20/12/2023	20/12/2023	20/12/2023	20/12/2023		20/12/2023
A-T-072w	20/12/2023	20/12/2023	20/12/2023	20/12/2023	20/12/2023	20/12/2023	20/12/2023	20/12/2023	20/12/2023	20/12/2023
Calc	22/12/2023	22/12/2023	22/12/2023	02/01/2024	08/01/2024	02/01/2024	02/01/2024	02/01/2024	08/01/2024	02/01/2024
Calc-As Recd	21/12/2023	21/12/2023	21/12/2023	21/12/2023	21/12/2023	21/12/2023	21/12/2023	21/12/2023		21/12/2023
Titration w	20/12/2023	20/12/2023	20/12/2023	20/12/2023	20/12/2023	20/12/2023	20/12/2023	20/12/2023	20/12/2023	20/12/2023

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

envirolab
Hattersley Science & Technology Park
Stockport Road, Hattersley, SK14 3QU

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 24/00112
Issue Number: 1 **Date:** 23 January, 2024

Client: Structural Soils Limited (Hemel Hempstead)
18 Frogmore Road
Hemel Hempstead
UK
HP3 9RT

Project Manager: [redacted]
Project Name: Sealink Richborough
Project Ref: 563607
Order No: N/A
Date Samples Received: 05/01/24
Date Instructions Received: 08/01/24
Date Analysis Completed: 23/01/24

Approved by:

[redacted]
Client Manager

Envirolab Job Number: 24/00112

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	24/00112/1	24/00112/2	24/00112/3	24/00112/4	24/00112/5	24/00112/6	24/00112/7	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	RedP-BH-6	RedP-BH-8	R22-BH102	R22-BH103 (s)	R22-BH103 (d)	R22-BH104	R22-BH105			
Depth to Top	11.00	12.00	1.50	0.80	4.00	4.00	1.50			
Depth To Bottom										
Date Sampled	03-Jan-24	03-Jan-24	03-Jan-24	03-Jan-24	03-Jan-24	04-Jan-24	03-Jan-24			
Sample Type	WATER - GW	WATER - GW	WATER - GW	WATER - GW	WATER - GW	WATER - GW	WATER - GW			
Sample Matrix Code	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
pH (w)$_A^{\#}$	7.52	7.74	8.10	7.59	7.22	7.31	7.10	pH	0.01	A-T-031w
pH BRE (w)$_A^{\#}$	7.52	7.74	8.10	7.59	7.22	7.31	7.10	pH	0.01	A-T-031w
Alkalinity by titration (bicarbonate) (w)$_A$	290	280	300	890	1035	595	695	mg/l Ca CO3	15	Titration w
Hardness Total$_A^{\#}$	357	356	504	1950	4900	3460	1627	mg/l Ca CO3	4	A-T-049w
Total Dissolved Solids (w)$_A^{\#}$	611	592	1391	2861	25683	17044	5905	mg/l	20	A-T-035w
Ammoniacal nitrogen as N (w)$_A^{\#}$	<0.05	<0.05	0.30	1.44	9.91	2.69	0.63	mg/l	0.05	A-T-033w
Ammonium / Ammoniacal N as NH4 BRE (w)$_A^{\#}$	<0.065	<0.065	0.390	1.857	12.790	3.469	0.810	mg/l	0.065	A-T-033w
Chloride (w)$_A^{\#}$	97	108	406	6960	16300	8990	2860	mg/l	1	A-T-026w
Chloride BRE (w)$_A^{\#}$	97.07	108.34	406.42	6960.58	16303.06	8986.90	2862.55	mg/l	1	A-T-026w
Fluoride (w)$_A^{\#}$	0.31	0.32	0.52	0.53	0.40	0.75	0.94	mg/l	0.1	A-T-026w (F)
Nitrate (w)$_A^{\#}$	40.2	28.8	2.4	9.8	<0.1	<0.1	<0.1	mg/l	0.1	A-T-026w (N)
Nitrate BRE (w)$_A^{\#}$	40.2	28.8	2.4	9.8	<0.1	<0.1	<0.1	mg/l	0.1	A-T-026w (N)
Sulphate (w)$_A^{\#}$	33	33	100	745	1300	1130	23	mg/l	1	A-T-026w
Sulphate BRE (w)$_A^{\#}$	33	33	100	745	1295	1130	23	mg/l	1	A-T-026w
Cyanide (free) (w)$_A^{\#}$	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/l	0.005	A-T-042wFCN
Cyanide (total) (w)$_A^{\#}$	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/l	0.005	A-T-042wTCN
Antimony (dissolved)$_A$	<1	<1	2	<10	<20	<10	<2	µg/l	1	A-T-025w
Arsenic (dissolved)$_A^{\#}$	<1	<1	<1	<10	<20	<10	<2	µg/l	1	A-T-025w
Boron (dissolved)$_A^{\#}$	71	81	231	986	3440	784	123	µg/l	10	A-T-025w
Barium (dissolved)$_A^{\#}$	81	103	99	186	263	273	407	µg/l	1	A-T-025w
Beryllium (dissolved)$_A^{\#}$	<1	<1	<1	<10	<20	<10	<2	µg/l	1	A-T-025w
Cadmium (dissolved)$_A^{\#}$	<0.2	<0.2	<0.2	<2.0	<4.0	<2.0	<0.4	µg/l	0.2	A-T-025w
Calcium (dissolved)$_A^{\#}$	126	123	158	259	512	532	316	mg/l	1	A-T-049w
Copper (dissolved)$_A$	19	19	13	<40	<80	<40	<8	µg/l	4	A-T-025w
Chromium (dissolved)$_A^{\#}$	<1	<1	1	<10	<20	<10	<2	µg/l	1	A-T-025w
Chromium (hexavalent) (w)$_A^{\#}$	<0.01	<0.01	<0.01	<0.02	<0.02	<0.01	<0.01	mg/l	0.01	A-T-040w
Chromium (trivalent) (w)	<0.01	<0.01	<0.01	<0.02	<0.02	<0.01	<0.01	mg/l	0.01	Calc
Iron (dissolved)$_A^{\#}$	30	<10	28	962	2810	846	27200	µg/l	10	A-T-025w
Lead (dissolved)$_A^{\#}$	<1	<1	<1	<10	<20	<10	<2	µg/l	1	A-T-025w
Manganese (dissolved)$_A^{\#}$	2	1	41	1760	3210	6620	14900	µg/l	1	A-T-025w
Magnesium (dissolved)$_A^{\#}$	10	12	26	316	879	516	203	mg/l	1	A-T-049w
Magnesium BRE (dissolved)$_A^{\#}$	10.4	12.0	26.5	316	879	516	203	mg/l	1	A-T-049w

Envirolab Job Number: 24/00112

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	24/00112/1	24/00112/2	24/00112/3	24/00112/4	24/00112/5	24/00112/6	24/00112/7	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	RedP-BH-6	RedP-BH-8	R22-BH102	R22-BH103 (s)	R22-BH103 (d)	R22-BH104	R22-BH105			
Depth to Top	11.00	12.00	1.50	0.80	4.00	4.00	1.50			
Depth To Bottom										
Date Sampled	03-Jan-24	03-Jan-24	03-Jan-24	03-Jan-24	03-Jan-24	04-Jan-24	03-Jan-24			
Sample Type	WATER - GW	WATER - GW	WATER - GW	WATER - GW	WATER - GW	WATER - GW	WATER - GW			
Sample Matrix Code	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
Mercury (dissolved)$_{A}^{\#}$	<0.1	<0.1	<0.1	<1.0	3.3	<1.0	<0.2	µg/l	0.1	A-T-025w
Molybdenum (dissolved)$_{A}^{\#}$	0.5	<0.5	2.3	<5.0	<10.0	<5.0	<0.5	µg/l	0.5	A-T-025w
Nickel (dissolved)$_{A}^{\#}$	7	4	8	<20	<40	<20	<4	µg/l	2	A-T-025w
Selenium (dissolved)$_{A}^{\#}$	3	3	6	<10	<20	<10	<2	µg/l	1	A-T-025w
Sodium (dissolved)$_{A}^{\#}$	51	64	292	4230	7690	5090	1450	mg/l	1	A-T-049w
Sulphur, Total (dissolved)$_{A}$	12	12	41	275	471	410	11	mg/l	1	A-T-072w
Vanadium (dissolved)$_{A}^{\#}$	<1	<1	<1	<10	<20	<10	<2	µg/l	1	A-T-025w
Zinc (dissolved)$_{A}^{\#}$	31	34	6	23	<40	<20	<4	µg/l	2	A-T-025w

Envirolab Job Number: 24/00112

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	24/00112/1	24/00112/2	24/00112/3	24/00112/4	24/00112/5	24/00112/6	24/00112/7	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	RedP-BH-6	RedP-BH-8	R22-BH102	R22-BH103 (s)	R22-BH103 (d)	R22-BH104	R22-BH105			
Depth to Top	11.00	12.00	1.50	0.80	4.00	4.00	1.50			
Depth To Bottom										
Date Sampled	03-Jan-24	03-Jan-24	03-Jan-24	03-Jan-24	03-Jan-24	04-Jan-24	03-Jan-24			
Sample Type	WATER - GW	WATER - GW	WATER - GW	WATER - GW	WATER - GW	WATER - GW	WATER - GW			
Sample Matrix Code	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
PAH 16MS (w)										
Acenaphthene (w)$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	µg/l	0.01	A-T-019w
Acenaphthylene (w)$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	µg/l	0.01	A-T-019w
Anthracene (w)$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	µg/l	0.01	A-T-019w
Benzo(a)anthracene (w)$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	µg/l	0.01	A-T-019w
Benzo(a)pyrene (w)$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	µg/l	0.01	A-T-019w
Benzo(b)fluoranthene (w)$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	µg/l	0.01	A-T-019w
Benzo(ghi)perylene (w)$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	µg/l	0.01	A-T-019w
Benzo(k)fluoranthene (w)$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	µg/l	0.01	A-T-019w
Chrysene (w)$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	µg/l	0.01	A-T-019w
Dibenzo(ah)anthracene (w)$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	µg/l	0.01	A-T-019w
Fluoranthene (w)$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	µg/l	0.01	A-T-019w
Fluorene (w)$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	µg/l	0.01	A-T-019w
Indeno(123-cd)pyrene (w)$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	µg/l	0.01	A-T-019w
Naphthalene (w)$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	0.05	µg/l	0.01	A-T-019w
Phenanthrene (w)$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	µg/l	0.01	A-T-019w
Pyrene (w)$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	µg/l	0.01	A-T-019w
Total PAH 16MS (w)$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	0.08	µg/l	0.01	A-T-019w
Phenols NG (speciated HPLC) (w)										
Phenol (w)$_A$	<0.01	<0.01	<0.01	<0.10	<0.10	<0.10	<0.10	mg/l	0.01	A-T-050w
Cresols (w)$_A$	<0.01	<0.01	<0.01	<0.10	<0.10	<0.10	<0.10	mg/l	0.01	A-T-050w
Catechol (w)$_A$	<0.01	<0.01	<0.01	<0.10	<0.10	<0.10	<0.10	mg/l	0.01	A-T-050w
Resorcinol (w) $_A$	<0.01	<0.01	<0.01	<0.10	<0.10	<0.10	<0.10	mg/l	0.01	A-T-050w
Xylenols & Ethylphenols (w)$_A$	<0.01	<0.01	<0.01	<0.10	<0.10	<0.10	<0.10	mg/l	0.01	A-T-050w
Naphthols (w)$_A$	<0.01	<0.01	<0.01	<0.10	<0.10	<0.10	<0.10	mg/l	0.01	A-T-050w
Trimethylphenol (w)$_A$	<0.01	<0.01	<0.01	<0.10	<0.10	<0.10	<0.10	mg/l	0.01	A-T-050w
Phenols - Total by HPLC (w)$_A$	<0.01	<0.01	<0.01	<0.10	<0.10	<0.10	<0.10	mg/l	0.01	A-T-050w

Envirolab Job Number: 24/00112

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	24/00112/1	24/00112/2	24/00112/3	24/00112/4	24/00112/5	24/00112/6	24/00112/7	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	RedP-BH-6	RedP-BH-8	R22-BH102	R22-BH103 (s)	R22-BH103 (d)	R22-BH104	R22-BH105			
Depth to Top	11.00	12.00	1.50	0.80	4.00	4.00	1.50			
Depth To Bottom										
Date Sampled	03-Jan-24	03-Jan-24	03-Jan-24	03-Jan-24	03-Jan-24	04-Jan-24	03-Jan-24			
Sample Type	WATER - GW	WATER - GW	WATER - GW	WATER - GW	WATER - GW	WATER - GW	WATER - GW			
Sample Matrix Code	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
VOC (w)										
Dichlorodifluoromethane$_A$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Chloromethane$_A$	<10	<10	<10	<10	<10	<10	<10	µg/l	10	A-T-006w
Vinyl Chloride$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Bromomethane$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Chloroethane$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Trichlorofluoromethane$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
trans 1,2-Dichloroethene$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Dichloromethane$_A$	<5	<5	<5	<5	<5	<5	<5	µg/l	5	A-T-006w
Carbon Disulphide$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
1,1-Dichloroethene$_A^{\#}$	<1^U	<1^U	<1^U	<1^U	<1^U	<1^U	<1^U	µg/l	1	A-T-006w
1,1-Dichloroethane$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
cis 1,2-Dichloroethene$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Bromochloromethane$_A^{\#}$	<5	<5	<5	<5	<5	<5	<5	µg/l	5	A-T-006w
Chloroform$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
2,2-Dichloropropane$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
1,2-Dichloroethane$_A^{\#}$	<2	<2	<2	<2	<2	<2	<2	µg/l	2	A-T-006w
1,1,1-Trichloroethane$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
1,1-Dichloropropene$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Benzene$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Carbon Tetrachloride$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Dibromomethane$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
1,2-Dichloropropane$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Bromodichloromethane$_A^{\#}$	<10	<10	<10	<10	<10	<10	<10	µg/l	10	A-T-006w
Trichloroethene$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
cis 1,3-Dichloropropene$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
trans 1,3-Dichloropropene$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
1,1,2-Trichloroethane$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Toluene$_A^{\#}$	<1	<1	<1	<1	<1	<1	3	µg/l	1	A-T-006w
1,3-Dichloropropane$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Dibromochloromethane$_A^{\#}$	<3	<3	<3	<3	<3	<3	<3	µg/l	3	A-T-006w
1,2-Dibromoethane$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Tetrachloroethene$_A$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w

Envirolab Job Number: 24/00112

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	24/00112/1	24/00112/2	24/00112/3	24/00112/4	24/00112/5	24/00112/6	24/00112/7	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	RedP-BH-6	RedP-BH-8	R22-BH102	R22-BH103 (s)	R22-BH103 (d)	R22-BH104	R22-BH105			
Depth to Top	11.00	12.00	1.50	0.80	4.00	4.00	1.50			
Depth To Bottom										
Date Sampled	03-Jan-24	03-Jan-24	03-Jan-24	03-Jan-24	03-Jan-24	04-Jan-24	03-Jan-24			
Sample Type	WATER - GW	WATER - GW	WATER - GW	WATER - GW	WATER - GW	WATER - GW	WATER - GW			
Sample Matrix Code	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
1,1,1,2-Tetrachloroethane$_A$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Chlorobenzene$_A^\#$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Ethylbenzene$_A^\#$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
m & p Xylene$_A^\#$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Bromoform$_A^\#$	<3	<3	<3	<3	<3	<3	<3	µg/l	3	A-T-006w
Styrene$_A^\#$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
1,1,2,2-Tetrachloroethane$_A$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
o-Xylene$_A^\#$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
1,2,3-Trichloropropane$_A^\#$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Isopropylbenzene$_A^\#$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Bromobenzene$_A^\#$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
2-Chlorotoluene$_A^\#$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
n-propylbenzene$_A^\#$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
4-Chlorotoluene$_A^\#$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
1,2,4-Trimethylbenzene$_A^\#$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
4-Isopropyltoluene$_A^\#$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
1,3,5-Trimethylbenzene$_A^\#$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
1,2-Dichlorobenzene$_A^\#$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
1,4-Dichlorobenzene$_A^\#$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
sec-Butylbenzene$_A^\#$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
tert-Butylbenzene$_A^\#$	<2	<2	<2	<2	<2	<2	<2	µg/l	2	A-T-006w
1,3-Dichlorobenzene$_A^\#$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
n-butylbenzene$_A^\#$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
1,2-Dibromo-3-chloropropane$_A^\#$	<2	<2	<2	<2	<2	<2	<2	µg/l	2	A-T-006w
1,2,4-Trichlorobenzene$_A^\#$	<3	<3	<3	<3	<3	<3	<3	µg/l	3	A-T-006w
1,2,3-Trichlorobenzene$_A^\#$	<3	<3	<3	<3	<3	<3	<3	µg/l	3	A-T-006w
Hexachlorobutadiene$_A^\#$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w

Envirolab Job Number: 24/00112

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	24/00112/1	24/00112/2	24/00112/3	24/00112/4	24/00112/5	24/00112/6	24/00112/7	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	RedP-BH-6	RedP-BH-8	R22-BH102	R22-BH103 (s)	R22-BH103 (d)	R22-BH104	R22-BH105			
Depth to Top	11.00	12.00	1.50	0.80	4.00	4.00	1.50			
Depth To Bottom										
Date Sampled	03-Jan-24	03-Jan-24	03-Jan-24	03-Jan-24	03-Jan-24	04-Jan-24	03-Jan-24			
Sample Type	WATER - GW	WATER - GW	WATER - GW	WATER - GW	WATER - GW	WATER - GW	WATER - GW			
Sample Matrix Code	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
TPH CWG (w) with Clean Up										
Ali >C5-C6 $(w)_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-022w
Ali >C6-C8 $(w)_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-022w
Ali >C8-C10 $(w)_A^{\#}$	<5	<5	<5	<5	<5	<5	26	µg/l	5	A-T-055w
Ali >C10-C12 $(w)_A^{\#}$	<5	<5	<5	<5	<5	<5	<5	µg/l	5	A-T-055w
Ali >C12-C16 $(w)_A^{\#}$	<5	<5	<5	<5	<5	<5	<5	µg/l	5	A-T-055w
Ali >C16-C21 $(w)_A^{\#}$	<5	<5	<5	<5	<5	<5	<5	µg/l	5	A-T-055w
Ali >C21-C35 $(w)_A^{\#}$	<5	<5	<5	<5	<5	<5	<5	µg/l	5	A-T-055w
Total Aliphatics $(w)_A^{\#}$	<5	<5	<5	<5	<5	<5	26	µg/l	5	Calc-As Recd
Aro >C5-C7 $(w)_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-022w
Aro >C7-C8 $(w)_A^{\#}$	<1	<1	<1	<1	<1	<1	3	µg/l	1	A-T-022w
Aro >C8-C10 $(w)_A$	<5	<5	<5	<5	<5	<5	146	µg/l	5	A-T-055w
Aro >C10-C12 $(w)_A^{\#}$	<5	<5	<5	<5	<5	<5	6	µg/l	5	A-T-055w
Aro >C12-C16 $(w)_A^{\#}$	<5	<5	<5	5	<5	<5	9	µg/l	5	A-T-055w
Aro >C16-C21 $(w)_A^{\#}$	<5	<5	<5	5	<5	<5	8	µg/l	5	A-T-055w
Aro >C21-C35 $(w)_A$	<10	<10	<10	<10	<10	<10	<10	µg/l	10	A-T-055w
Total Aromatics $(w)_A$	<10	<10	<10	10	<10	<10	172	µg/l	10	Calc-As Recd
TPH (Ali & Aro >C5-C35) $(w)_A$	<10	<10	<10	10	<10	<10	198	µg/l	10	Calc-As Recd
BTEX - Benzene $(w)_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-022w
BTEX - Toluene $(w)_A^{\#}$	<1	<1	<1	<1	<1	<1	3	µg/l	1	A-T-022w
BTEX - Ethyl Benzene $(w)_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-022w
BTEX - m & p Xylene $(w)_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-022w
BTEX - o Xylene $(w)_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-022w
MTBE $(w)_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-022w

Lab Sample ID	24/00112/8	24/00112/9	24/00112/10					Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	R22-BH204	R22-BH205	R22-BH501							
Depth to Top	27.30	21.00	24.65							
Depth To Bottom										
Date Sampled	03-Jan-24	03-Jan-24	04-Jan-24							
Sample Type	WATER - GW	WATER - GW	WATER - GW							
Sample Matrix Code	N/A	N/A	N/A							
pH (w)$_{A}^{\#}$	7.91	6.97	7.50					pH	0.01	A-T-031w
pH BRE (w)$_{A}^{\#}$	7.91	6.97	7.50					pH	0.01	A-T-031w
Alkalinity by titration (bicarbonate) (w)$_{A}$	375	460	350					mg/l Ca CO3	15	Titration w
Hardness Total$_{A}^{\#}$	397	7320	1043					mg/l Ca CO3	4	A-T-049w
Total Dissolved Solids (w)$_{A}^{\#}$	602	20578	1337					mg/l	20	A-T-035w
Ammoniacal nitrogen as N (w)$_{A}^{\#}$	0.35	5.26	1.22					mg/l	0.05	A-T-033w
Ammonium / Ammoniacal N as NH4 BRE (w)$_{A}^{\#}$	0.453	6.792	1.578					mg/l	0.065	A-T-033w
Chloride (w)$_{A}^{\#}$	64	11800	539					mg/l	1	A-T-026w
Chloride BRE (w)$_{A}^{\#}$	63.85	11809.79	538.66					mg/l	1	A-T-026w
Fluoride (w)$_{A}^{\#}$	1.04	0.12	0.99					mg/l	0.1	A-T-026w (F)
Nitrate (w)$_{A}^{\#}$	0.6	<0.1	0.1					mg/l	0.1	A-T-026w (N)
Nitrate BRE (w)$_{A}^{\#}$	0.6	<0.1	0.1					mg/l	0.1	A-T-026w (N)
Sulphate (w)$_{A}^{\#}$	63	909	69					mg/l	1	A-T-026w
Sulphate BRE (w)$_{A}^{\#}$	63	909	69					mg/l	1	A-T-026w
Cyanide (free) (w)$_{A}^{\#}$	<0.005	<0.005	<0.005					mg/l	0.005	A-T-042wFCN
Cyanide (total) (w)$_{A}^{\#}$	<0.005	<0.005	<0.005					mg/l	0.005	A-T-042wTCN
Antimony (dissolved)$_{A}$	<1	<20	<2					µg/l	1	A-T-025w
Arsenic (dissolved)$_{A}^{\#}$	<1	<20	<2					µg/l	1	A-T-025w
Boron (dissolved)$_{A}^{\#}$	147	793	136					µg/l	10	A-T-025w
Barium (dissolved)$_{A}^{\#}$	70	191	94					µg/l	1	A-T-025w
Beryllium (dissolved)$_{A}^{\#}$	<1	<20	<2					µg/l	1	A-T-025w
Cadmium (dissolved)$_{A}^{\#}$	<0.2	<4.0	<0.4					µg/l	0.2	A-T-025w
Calcium (dissolved)$_{A}^{\#}$	101	1350	210					mg/l	1	A-T-049w
Copper (dissolved)$_{A}$	<4	144	<8					µg/l	4	A-T-025w
Chromium (dissolved)$_{A}^{\#}$	<1	<20	<2					µg/l	1	A-T-025w
Chromium (hexavalent) (w)$_{A}^{\#}$	<0.01	<0.01	<0.02					mg/l	0.01	A-T-040w
Chromium (trivalent) (w)	<0.01	<0.02	<0.02					mg/l	0.01	Calc
Iron (dissolved)$_{A}^{\#}$	1040	5110	997					µg/l	10	A-T-025w
Lead (dissolved)$_{A}^{\#}$	<1	<20	<2					µg/l	1	A-T-025w
Manganese (dissolved)$_{A}^{\#}$	718	1320	146					µg/l	1	A-T-025w
Magnesium (dissolved)$_{A}^{\#}$	35	962	126					mg/l	1	A-T-049w
Magnesium BRE (dissolved)$_{A}^{\#}$	35.0	962	126					mg/l	1	A-T-049w

Envirolab Job Number: 24/00112

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	24/00112/8	24/00112/9	24/00112/10					Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	R22-BH204	R22-BH205	R22-BH501							
Depth to Top	27.30	21.00	24.65							
Depth To Bottom										
Date Sampled	03-Jan-24	03-Jan-24	04-Jan-24							
Sample Type	WATER - GW	WATER - GW	WATER - GW							
Sample Matrix Code	N/A	N/A	N/A							
Mercury (dissolved)$_{A}^{\#}$	<0.1	<2.0	<0.2					µg/l	0.1	A-T-025w
Molybdenum (dissolved)$_{A}^{\#}$	1.7	<10.0	<1.0					µg/l	0.5	A-T-025w
Nickel (dissolved)$_{A}^{\#}$	5	<40	<4					µg/l	2	A-T-025w
Selenium (dissolved)$_{A}^{\#}$	<1	<20	<2					µg/l	1	A-T-025w
Sodium (dissolved)$_{A}^{\#}$	70	4460	189					mg/l	1	A-T-049w
Sulphur, Total (dissolved)$_{A}$	35	347	23					mg/l	1	A-T-072w
Vanadium (dissolved)$_{A}^{\#}$	<1	<20	<2					µg/l	1	A-T-025w
Zinc (dissolved)$_{A}^{\#}$	<2	229	15					µg/l	2	A-T-025w

Envirolab Job Number: 24/00112

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	24/00112/8	24/00112/9	24/00112/10					Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	R22-BH204	R22-BH205	R22-BH501							
Depth to Top	27.30	21.00	24.65							
Depth To Bottom										
Date Sampled	03-Jan-24	03-Jan-24	04-Jan-24							
Sample Type	WATER - GW	WATER - GW	WATER - GW							
Sample Matrix Code	N/A	N/A	N/A							
PAH 16MS (w)										
Acenaphthene (w)$_A^{\#}$	<0.01	<0.01	<0.01					µg/l	0.01	A-T-019w
Acenaphthylene (w)$_A^{\#}$	<0.01	<0.01	<0.01					µg/l	0.01	A-T-019w
Anthracene (w)$_A^{\#}$	<0.01	<0.01	<0.01					µg/l	0.01	A-T-019w
Benzo(a)anthracene (w)$_A^{\#}$	<0.01	<0.01	<0.01					µg/l	0.01	A-T-019w
Benzo(a)pyrene (w)$_A^{\#}$	<0.01	<0.01	<0.01					µg/l	0.01	A-T-019w
Benzo(b)fluoranthene (w)$_A^{\#}$	<0.01	<0.01	<0.01					µg/l	0.01	A-T-019w
Benzo(ghi)perylene (w)$_A^{\#}$	<0.01	<0.01	<0.01					µg/l	0.01	A-T-019w
Benzo(k)fluoranthene (w)$_A^{\#}$	<0.01	<0.01	<0.01					µg/l	0.01	A-T-019w
Chrysene (w)$_A^{\#}$	<0.01	<0.01	<0.01					µg/l	0.01	A-T-019w
Dibenzo(ah)anthracene (w)$_A^{\#}$	<0.01	<0.01	<0.01					µg/l	0.01	A-T-019w
Fluoranthene (w)$_A^{\#}$	<0.01	<0.01	<0.01					µg/l	0.01	A-T-019w
Fluorene (w)$_A^{\#}$	<0.01	<0.01	<0.01					µg/l	0.01	A-T-019w
Indeno(123-cd)pyrene (w)$_A^{\#}$	<0.01	<0.01	<0.01					µg/l	0.01	A-T-019w
Naphthalene (w)$_A^{\#}$	0.06	0.02	<0.01					µg/l	0.01	A-T-019w
Phenanthrene (w)$_A^{\#}$	0.01	<0.01	<0.01					µg/l	0.01	A-T-019w
Pyrene (w)$_A^{\#}$	<0.01	<0.01	<0.01					µg/l	0.01	A-T-019w
Total PAH 16MS (w)$_A^{\#}$	0.07	0.02	<0.01					µg/l	0.01	A-T-019w
Phenols NG (speciated HPLC) (w)										
Phenol (w)$_A$	<0.10	<0.01	<0.01					mg/l	0.01	A-T-050w
Cresols (w)$_A$	<0.10	<0.01	<0.01					mg/l	0.01	A-T-050w
Catechol (w)$_A$	0.84	<0.01	<0.01					mg/l	0.01	A-T-050w
Resorcinol (w) $_A$	<0.10	<0.01	<0.01					mg/l	0.01	A-T-050w
Xylenols & Ethylphenols (w)$_A$	<0.10	<0.01	<0.01					mg/l	0.01	A-T-050w
Naphthols (w)$_A$	<0.10	<0.01	<0.01					mg/l	0.01	A-T-050w
Trimethylphenol (w)$_A$	<0.10	<0.01	<0.01					mg/l	0.01	A-T-050w
Phenols - Total by HPLC (w)$_A$	0.84	<0.01	<0.01					mg/l	0.01	A-T-050w

Envirolab Job Number: 24/00112

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	24/00112/8	24/00112/9	24/00112/10					Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	R22-BH204	R22-BH205	R22-BH501							
Depth to Top	27.30	21.00	24.65							
Depth To Bottom										
Date Sampled	03-Jan-24	03-Jan-24	04-Jan-24							
Sample Type	WATER - GW	WATER - GW	WATER - GW							
Sample Matrix Code	N/A	N/A	N/A							
VOC (w)										
Dichlorodifluoromethane$_A$	<1	<1	<1					µg/l	1	A-T-006w
Chloromethane$_A$	<10	<10	<10					µg/l	10	A-T-006w
Vinyl Chloride$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
Bromomethane$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
Chloroethane$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
Trichlorofluoromethane$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
trans 1,2-Dichloroethene$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
Dichloromethane$_A$	<5	<5	<5					µg/l	5	A-T-006w
Carbon Disulphide$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
1,1-Dichloroethene$_A^{\#}$	<1^U	<1^U	<1^U					µg/l	1	A-T-006w
1,1-Dichloroethane$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
cis 1,2-Dichloroethene$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
Bromochloromethane$_A^{\#}$	<5	<5	<5					µg/l	5	A-T-006w
Chloroform$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
2,2-Dichloropropane$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
1,2-Dichloroethane$_A^{\#}$	<2	<2	<2					µg/l	2	A-T-006w
1,1,1-Trichloroethane$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
1,1-Dichloropropene$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
Benzene$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
Carbon Tetrachloride$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
Dibromomethane$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
1,2-Dichloropropane$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
Bromodichloromethane$_A^{\#}$	<10	<10	<10					µg/l	10	A-T-006w
Trichloroethene$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
cis 1,3-Dichloropropene$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
trans 1,3-Dichloropropene$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
1,1,2-Trichloroethane$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
Toluene$_A^{\#}$	2	<1	<1					µg/l	1	A-T-006w
1,3-Dichloropropane$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
Dibromochloromethane$_A^{\#}$	<3	<3	<3					µg/l	3	A-T-006w
1,2-Dibromoethane$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
Tetrachloroethene$_A$	<1	<1	<1					µg/l	1	A-T-006w

Envirolab Job Number: 24/00112

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	24/00112/8	24/00112/9	24/00112/10					Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	R22-BH204	R22-BH205	R22-BH501							
Depth to Top	27.30	21.00	24.65							
Depth To Bottom										
Date Sampled	03-Jan-24	03-Jan-24	04-Jan-24							
Sample Type	WATER - GW	WATER - GW	WATER - GW							
Sample Matrix Code	N/A	N/A	N/A							
1,1,1,2-Tetrachloroethane$_A$	<1	<1	<1					µg/l	1	A-T-006w
Chlorobenzene$_A^\#$	<1	<1	<1					µg/l	1	A-T-006w
Ethylbenzene$_A^\#$	<1	<1	<1					µg/l	1	A-T-006w
m & p Xylene$_A^\#$	<1	<1	<1					µg/l	1	A-T-006w
Bromoform$_A^\#$	<3	<3	<3					µg/l	3	A-T-006w
Styrene$_A^\#$	<1	<1	<1					µg/l	1	A-T-006w
1,1,2,2-Tetrachloroethane$_A$	<1	<1	<1					µg/l	1	A-T-006w
o-Xylene$_A^\#$	<1	<1	<1					µg/l	1	A-T-006w
1,2,3-Trichloropropane$_A^\#$	<1	<1	<1					µg/l	1	A-T-006w
Isopropylbenzene$_A^\#$	<1	<1	<1					µg/l	1	A-T-006w
Bromobenzene$_A^\#$	<1	<1	<1					µg/l	1	A-T-006w
2-Chlorotoluene$_A^\#$	<1	<1	<1					µg/l	1	A-T-006w
n-propylbenzene$_A^\#$	<1	<1	<1					µg/l	1	A-T-006w
4-Chlorotoluene$_A^\#$	<1	<1	<1					µg/l	1	A-T-006w
1,2,4-Trimethylbenzene$_A^\#$	<1	<1	<1					µg/l	1	A-T-006w
4-Isopropyltoluene$_A^\#$	<1	<1	<1					µg/l	1	A-T-006w
1,3,5-Trimethylbenzene$_A^\#$	<1	<1	<1					µg/l	1	A-T-006w
1,2-Dichlorobenzene$_A^\#$	<1	<1	<1					µg/l	1	A-T-006w
1,4-Dichlorobenzene$_A^\#$	<1	<1	<1					µg/l	1	A-T-006w
sec-Butylbenzene$_A^\#$	<1	<1	<1					µg/l	1	A-T-006w
tert-Butylbenzene$_A^\#$	<2	<2	<2					µg/l	2	A-T-006w
1,3-Dichlorobenzene$_A^\#$	<1	<1	<1					µg/l	1	A-T-006w
n-butylbenzene$_A^\#$	<1	<1	<1					µg/l	1	A-T-006w
1,2-Dibromo-3-chloropropane$_A^\#$	<2	<2	<2					µg/l	2	A-T-006w
1,2,4-Trichlorobenzene$_A^\#$	<3	<3	<3					µg/l	3	A-T-006w
1,2,3-Trichlorobenzene$_A^\#$	<3	<3	<3					µg/l	3	A-T-006w
Hexachlorobutadiene$_A^\#$	<1	<1	<1					µg/l	1	A-T-006w

Envirolab Job Number: 24/00112

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	24/00112/8	24/00112/9	24/00112/10					Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	R22-BH204	R22-BH205	R22-BH501							
Depth to Top	27.30	21.00	24.65							
Depth To Bottom										
Date Sampled	03-Jan-24	03-Jan-24	04-Jan-24							
Sample Type	WATER - GW	WATER - GW	WATER - GW							
Sample Matrix Code	N/A	N/A	N/A							
TPH CWG (w) with Clean Up										
Ali >C5-C6 (w)$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-022w
Ali >C6-C8 (w)$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-022w
Ali >C8-C10 (w)$_A^{\#}$	<5	<5	<5					µg/l	5	A-T-055w
Ali >C10-C12 (w)$_A^{\#}$	<5	<5	<5					µg/l	5	A-T-055w
Ali >C12-C16 (w)$_A^{\#}$	<5	<5	<5					µg/l	5	A-T-055w
Ali >C16-C21 (w)$_A^{\#}$	<5	<5	<5					µg/l	5	A-T-055w
Ali >C21-C35 (w)$_A^{\#}$	<5	<5	<5					µg/l	5	A-T-055w
Total Aliphatics (w)$_A^{\#}$	<5	<5	<5					µg/l	5	Calc-As Recd
Aro >C5-C7 (w)$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-022w
Aro >C7-C8 (w)$_A^{\#}$	2	<1	<1					µg/l	1	A-T-022w
Aro >C8-C10 (w)$_A$	<5	<5	<5					µg/l	5	A-T-055w
Aro >C10-C12 (w)$_A^{\#}$	7	<5	<5					µg/l	5	A-T-055w
Aro >C12-C16 (w)$_A^{\#}$	11	<5	<5					µg/l	5	A-T-055w
Aro >C16-C21 (w)$_A^{\#}$	12	<5	<5					µg/l	5	A-T-055w
Aro >C21-C35 (w)$_A$	<10	<10	<10					µg/l	10	A-T-055w
Total Aromatics (w)$_A$	32	<10	<10					µg/l	10	Calc-As Recd
TPH (Ali & Aro >C5-C35) (w)$_A$	32	<10	<10					µg/l	10	Calc-As Recd
BTEX - Benzene (w)$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-022w
BTEX - Toluene (w)$_A^{\#}$	2	<1	<1					µg/l	1	A-T-022w
BTEX - Ethyl Benzene (w)$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-022w
BTEX - m & p Xylene (w)$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-022w
BTEX - o Xylene (w)$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-022w
MTBE (w)$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-022w

Report Notes

General
This report shall not be reproduced, except in full, without written approval from Envirolab.
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.
The client Sample No, Client Sample ID, Depth to top, Depth to Bottom and Date Sampled are all provided by the client.
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.

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 "^"	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
N/A	Not applicable

Asbestos
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
Quantification of asbestos is a 3 stage process including visual identification, hand picking and weighing, and fibre counting by sedimentation/phase contrast optical microscopy if required. 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) quantification by sedimentation is performed. 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.

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^{o}C / 11550µS/cm @ 20^{o}C fall outside the accreditation 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: Structural Soils Limited (Hemel Hempstead), 18 Frogmore Road, Hemel Hempstead, UK, HP3 9RT

Project: Sealink Richborough

Clients Project No: 563607

Project No: 24/00112

Date Received: 08/01/2024 (am)

Cool Box Temperatures (°C): 7.8 - 8.5

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	24/00112/1	24/00112/2	24/00112/3	24/00112/4	24/00112/5	24/00112/6	24/00112/7	24/00112/8	24/00112/9	24/00112/10
Client Sample No										
Client Sample ID/Depth	RedP-BH-6 11.00m	RedP-BH-8 12.00m	R22-BH102 1.50m	R22-BH103 (s) 0.80m	R22-BH103 (d) 4.00m	R22-BH104 4.00m	R22-BH105 1.50m	R22-BH204 27.30m	R22-BH205 21.00m	R22-BH501 24.65m
Date Sampled	03/01/24	03/01/24	03/01/24	03/01/24	03/01/24	04/01/24	03/01/24	03/01/24	03/01/24	04/01/24
A-T-006w	11/01/2024	11/01/2024	11/01/2024	11/01/2024	11/01/2024	11/01/2024	11/01/2024	11/01/2024	11/01/2024	11/01/2024
A-T-019w	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024	12/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024
A-T-022w	11/01/2024	11/01/2024	11/01/2024	11/01/2024	11/01/2024	11/01/2024	11/01/2024	11/01/2024	11/01/2024	11/01/2024
A-T-025w	11/01/2024	11/01/2024	11/01/2024	19/01/2024	19/01/2024	19/01/2024	19/01/2024	19/01/2024	19/01/2024	19/01/2024
A-T-026w	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024
A-T-026w (F)	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024
A-T-026w (N)	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024
A-T-031w	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024
A-T-033w	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024
A-T-035w	15/01/2024	15/01/2024	15/01/2024	15/01/2024	15/01/2024	15/01/2024	15/01/2024	15/01/2024	15/01/2024	15/01/2024
A-T-040w	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024
A-T-042wFCN	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024
A-T-042wTCN	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024
A-T-049w	12/01/2024	12/01/2024	12/01/2024	12/01/2024	12/01/2024	12/01/2024	12/01/2024	12/01/2024	12/01/2024	12/01/2024
A-T-050w	23/01/2024	23/01/2024	23/01/2024	23/01/2024	23/01/2024	23/01/2024	23/01/2024	23/01/2024	23/01/2024	18/01/2024
A-T-055w	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024
A-T-072w	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024
Calc	11/01/2024	11/01/2024	11/01/2024	12/01/2024	19/01/2024	19/01/2024	19/01/2024	11/01/2024	19/01/2024	19/01/2024
Calc-As Recd	11/01/2024	11/01/2024	11/01/2024	11/01/2024	11/01/2024	11/01/2024	11/01/2024	11/01/2024	11/01/2024	11/01/2024
Titration w	16/01/2024	16/01/2024	16/01/2024	16/01/2024	16/01/2024	16/01/2024	16/01/2024	16/01/2024	16/01/2024	16/01/2024

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

envirolab
Hattersley Science & Technology Park
Stockport Road, Hattersley, SK14 3QU

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 24/00607
Issue Number: 1 **Date:** 05 February, 2024

Client: Structural Soils Limited (Hemel Hempstead)
18 Frogmore Road
Hemel Hempstead
UK
HP3 9RT

Project Manager: [redacted]
Project Name: Sealink Richborough
Project Ref: 563607
Order No: N/A
Date Samples Received: 22/01/24
Date Instructions Received: 23/01/24
Date Analysis Completed: 05/02/24

Approved by:

[redacted]
Client Manager

UKAS TESTING 1247

Envirolab Job Number: 24/00607

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	24/00607/1	24/00607/2	24/00607/3	24/00607/4	24/00607/5	24/00607/6	24/00607/7	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	RedP-BH-6	RedP-BH-8	R22-BH102	R22-BH103 (s)	R22-BH103 (d)	R22-BH104	R22-BH105			
Depth to Top	11.00	12.00	1.80	0.80	4.00	4.00	1.80			
Depth To Bottom										
Date Sampled	18-Jan-24	18-Jan-24	18-Jan-24	18-Jan-24	18-Jan-24	18-Jan-24	18-Jan-24			
Sample Type	WATER - EW	WATER - EW	WATER - EW	WATER - EW	WATER - EW	WATER - EW	WATER - EW			
Sample Matrix Code	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
pH (w)$_{A}^{\#}$	7.60	8.15	8.20	7.79	7.27	7.93	7.16	pH	0.01	A-T-031w
pH BRE (w)$_{A}^{\#}$	7.60	8.15	8.20	7.79	7.27	7.93	7.16	pH	0.01	A-T-031w
Alkalinity by titration (bicarbonate) (w)$_{A}$	295	305	330	850	1285	895	355	mg/l CaCO3	15	Titration w
Hardness Total$_{A}^{\#}$	349	348	488	1640	4850	1553	2310	mg/l CaCO3	4	A-T-049w
Total Dissolved Solids (w)$_{A}^{\#}$	591	646	1454	10903	27176	11144	6799	mg/l	20	A-T-035w
Ammoniacal nitrogen as N (w)$_{A}^{\#}$	0.13	0.14	0.20	0.96	11.3	2.19	0.76	mg/l	0.05	A-T-033w
Ammonium / Ammoniacal N as NH4 BRE (w)$_{A}^{\#}$	0.169	0.186	0.260	1.235	14.556	2.825	0.975	mg/l	0.065	A-T-033w
Chloride (w)$_{A}^{\#}$	96	117	511	5840	13800	5470	3480	mg/l	1	A-T-026w
Chloride BRE (w)$_{A}^{\#}$	95.51	117.23	511.41	5841.95	13798.80	5469.77	3478.27	mg/l	1	A-T-026w
Fluoride (w)$_{A}^{\#}$	0.33	0.34	0.67	0.62	0.35	1.08	0.81	mg/l	0.1	A-T-026w (F)
Nitrate (w)$_{A}^{\#}$	38.4	39.5	1.2	6.4	<0.1	<0.1	<0.1	mg/l	0.1	A-T-026w (N)
Nitrate BRE (w)$_{A}^{\#}$	38.4	39.5	1.2	6.4	<0.1	<0.1	<0.1	mg/l	0.1	A-T-026w (N)
Sulphate (w)$_{A}^{\#}$	35	38	125	657	1390	881	12	mg/l	1	A-T-026w
Sulphate BRE (w)$_{A}^{\#}$	35	38	125	657	1388	881	12	mg/l	1	A-T-026w
Cyanide (free) (w)$_{A}^{\#}$	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/l	0.005	A-T-042wFCN
Cyanide (total) (w)$_{A}^{\#}$	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/l	0.005	A-T-042wTCN
Antimony (dissolved)$_{A}$	<1	<1	1	<5	<20	<5	<5	µg/l	1	A-T-025w
Arsenic (dissolved)$_{A}^{\#}$	<1	<1	<1	<5	<20	<5	7	µg/l	1	A-T-025w
Boron (dissolved)$_{A}^{\#}$	68	79	248	1230	3680	867	1090	µg/l	10	A-T-025w
Barium (dissolved)$_{A}^{\#}$	81	106	106	135	276	314	3070	µg/l	1	A-T-025w
Beryllium (dissolved)$_{A}^{\#}$	<1	<1	<1	<5	<20	<5	<5	µg/l	1	A-T-025w
Cadmium (dissolved)$_{A}^{\#}$	<0.2	<0.2	<0.2	<1.0	<40.0	<1.0	<1.0	µg/l	0.2	A-T-025w
Calcium (dissolved)$_{A}^{\#}$	123	120	150	242	492	209	409	mg/l	1	A-T-049w
Copper (dissolved)$_{A}$	7	6	9	<20	<80	<20	<20	µg/l	4	A-T-025w
Chromium (dissolved)$_{A}^{\#}$	<1	1	1	<5	<20	<5	<5	µg/l	1	A-T-025w
Chromium (hexavalent) (w)$_{A}^{\#}$	<0.01	<0.01	<0.02	<0.01	<0.02	<0.01	<0.01	mg/l	0.01	A-T-040w
Chromium (trivalent) (w)	<0.01	<0.01	<0.02	<0.01	<0.02	<0.01	<0.01	mg/l	0.01	Calc
Iron (dissolved)$_{A}^{\#}$	18	<10	23	<50	2020	327	28600	µg/l	10	A-T-025w
Lead (dissolved)$_{A}^{\#}$	2	<1	<1	<5	<20	<5	<5	µg/l	1	A-T-025w
Manganese (dissolved)$_{A}^{\#}$	2	<1	51	936	3860	3850	20200	µg/l	1	A-T-025w
Magnesium (dissolved)$_{A}^{\#}$	10	12	28	251	880	250	313	mg/l	1	A-T-049w
Magnesium BRE (dissolved)$_{A}^{\#}$	10.2	11.7	27.6	251	880	250	312	mg/l	1	A-T-049w

Envirolab Job Number: 24/00607

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	24/00607/1	24/00607/2	24/00607/3	24/00607/4	24/00607/5	24/00607/6	24/00607/7	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	RedP-BH-6	RedP-BH-8	R22-BH102	R22-BH103 (s)	R22-BH103 (d)	R22-BH104	R22-BH105			
Depth to Top	11.00	12.00	1.80	0.80	4.00	4.00	1.80			
Depth To Bottom										
Date Sampled	18-Jan-24	18-Jan-24	18-Jan-24	18-Jan-24	18-Jan-24	18-Jan-24	18-Jan-24			
Sample Type	WATER - EW	WATER - EW	WATER - EW	WATER - EW	WATER - EW	WATER - EW	WATER - EW			
Sample Matrix Code	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
Mercury (dissolved)$_{A}^{\#}$	<0.1	<0.1	<0.1	<0.5	<2.0	<0.5	<0.5	µg/l	0.1	A-T-025w
Molybdenum (dissolved)$_{A}^{\#}$	0.6	0.7	2.1	6.7	<10.0	4.8	<2.5	µg/l	0.5	A-T-025w
Nickel (dissolved)$_{A}^{\#}$	3	4	9	16	<40	14	<10	µg/l	2	A-T-025w
Selenium (dissolved)$_{A}^{\#}$	3	3	3	<5	<20	<5	<5	µg/l	1	A-T-025w
Sodium (dissolved)$_{A}^{\#}$	50	64	311	3070	8130	3500	2620	mg/l	1	A-T-049w
Sulphur, Total (dissolved)$_{A}$	11	12	41	233	458	305	2	mg/l	1	A-T-072w
Vanadium (dissolved)$_{A}^{\#}$	<1	<1	<1	<5	<20	<5	<5	µg/l	1	A-T-025w
Zinc (dissolved)$_{A}^{\#}$	22	28	5	<10	<40	<10	<10	µg/l	2	A-T-025w

Envirolab Job Number: 24/00607

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	24/00607/1	24/00607/2	24/00607/3	24/00607/4	24/00607/5	24/00607/6	24/00607/7	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	RedP-BH-6	RedP-BH-8	R22-BH102	R22-BH103 (s)	R22-BH103 (d)	R22-BH104	R22-BH105			
Depth to Top	11.00	12.00	1.80	0.80	4.00	4.00	1.80			
Depth To Bottom										
Date Sampled	18-Jan-24	18-Jan-24	18-Jan-24	18-Jan-24	18-Jan-24	18-Jan-24	18-Jan-24			
Sample Type	WATER - EW	WATER - EW	WATER - EW	WATER - EW	WATER - EW	WATER - EW	WATER - EW			
Sample Matrix Code	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
PAH 16MS (w)										
Acenaphthene (w)$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	µg/l	0.01	A-T-019w
Acenaphthylene (w)$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	µg/l	0.01	A-T-019w
Anthracene (w)$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	µg/l	0.01	A-T-019w
Benzo(a)anthracene (w)$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	µg/l	0.01	A-T-019w
Benzo(a)pyrene (w)$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	µg/l	0.01	A-T-019w
Benzo(b)fluoranthene (w)$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	µg/l	0.01	A-T-019w
Benzo(ghi)perylene (w)$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	µg/l	0.01	A-T-019w
Benzo(k)fluoranthene (w)$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	µg/l	0.01	A-T-019w
Chrysene (w)$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	µg/l	0.01	A-T-019w
Dibenzo(ah)anthracene (w)$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	µg/l	0.01	A-T-019w
Fluoranthene (w)$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	µg/l	0.01	A-T-019w
Fluorene (w)$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	µg/l	0.01	A-T-019w
Indeno(123-cd)pyrene (w)$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	µg/l	0.01	A-T-019w
Naphthalene (w)$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	0.03	0.09	µg/l	0.01	A-T-019w
Phenanthrene (w)$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	µg/l	0.01	A-T-019w
Pyrene (w)$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	µg/l	0.01	A-T-019w
Total PAH 16MS (w)$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	0.03	0.09	µg/l	0.01	A-T-019w
Phenols NG (speciated HPLC) (w)										
Phenol (w)$_A$	<0.01	<0.01	<0.01	<0.10	<0.10	<0.10	<0.20	mg/l	0.01	A-T-050w
Cresols (w)$_A$	<0.01	<0.01	<0.01	<0.10	<0.10	<0.10	<0.20	mg/l	0.01	A-T-050w
Catechol (w)$_A$	<0.01	<0.01	<0.01	<0.10	<0.10	<0.10	<0.20	mg/l	0.01	A-T-050w
Resorcinol (w) $_A$	<0.01	<0.01	<0.01	<0.10	<0.10	<0.10	<0.20	mg/l	0.01	A-T-050w
Xylenols & Ethylphenols (w)$_A$	<0.01	<0.01	<0.01	<0.10	<0.10	<0.10	<0.20	mg/l	0.01	A-T-050w
Naphthols (w)$_A$	<0.01	<0.01	<0.01	<0.10	<0.10	<0.10	<0.20	mg/l	0.01	A-T-050w
Trimethylphenol (w)$_A$	<0.01	<0.01	<0.01	<0.10	<0.10	<0.10	<0.20	mg/l	0.01	A-T-050w
Phenols - Total by HPLC (w)$_A$	<0.01	<0.01	<0.01	<0.10	<0.10	<0.10	<0.20	mg/l	0.01	A-T-050w

Envirolab Job Number: 24/00607

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	24/00607/1	24/00607/2	24/00607/3	24/00607/4	24/00607/5	24/00607/6	24/00607/7	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	RedP-BH-6	RedP-BH-8	R22-BH102	R22-BH103 (s)	R22-BH103 (d)	R22-BH104	R22-BH105			
Depth to Top	11.00	12.00	1.80	0.80	4.00	4.00	1.80			
Depth To Bottom										
Date Sampled	18-Jan-24	18-Jan-24	18-Jan-24	18-Jan-24	18-Jan-24	18-Jan-24	18-Jan-24			
Sample Type	WATER - EW	WATER - EW	WATER - EW	WATER - EW	WATER - EW	WATER - EW	WATER - EW			
Sample Matrix Code	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
VOC (w)										
Dichlorodifluoromethane$_A$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Chloromethane$_A$	<10	<10	<10	<10	<10	<10	<10	µg/l	10	A-T-006w
Vinyl Chloride$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Bromomethane$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Chloroethane$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Trichlorofluoromethane$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
trans 1,2-Dichloroethene$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Dichloromethane$_A$	<5	<5	<5	<5	<5	<5	<5	µg/l	5	A-T-006w
Carbon Disulphide$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
1,1-Dichloroethene$_A^{\#}$	<1^U	<1^U	<1^U	<1^U	<1^U	<1^U	<1^U	µg/l	1	A-T-006w
1,1-Dichloroethane$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
cis 1,2-Dichloroethene$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Bromochloromethane$_A^{\#}$	<5	<5	<5	<5	<5	<5	<5	µg/l	5	A-T-006w
Chloroform$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
2,2-Dichloropropane$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
1,2-Dichloroethane$_A^{\#}$	<2	<2	<2	<2	<2	<2	<2	µg/l	2	A-T-006w
1,1,1-Trichloroethane$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
1,1-Dichloropropene$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Benzene$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Carbon Tetrachloride$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Dibromomethane$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
1,2-Dichloropropane$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Bromodichloromethane$_A^{\#}$	<10	<10	<10	<10	<10	<10	<10	µg/l	10	A-T-006w
Trichloroethene$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
cis 1,3-Dichloropropene$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
trans 1,3-Dichloropropene$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
1,1,2-Trichloroethane$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Toluene$_A^{\#}$	<1	<1	<1	<1	<1	<1	6	µg/l	1	A-T-006w
1,3-Dichloropropane$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Dibromochloromethane$_A^{\#}$	<3	<3	<3	<3	<3	<3	<3	µg/l	3	A-T-006w
1,2-Dibromoethane$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Tetrachloroethene$_A$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w

Envirolab Job Number: 24/00607

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	24/00607/1	24/00607/2	24/00607/3	24/00607/4	24/00607/5	24/00607/6	24/00607/7	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	RedP-BH-6	RedP-BH-8	R22-BH102	R22-BH103 (s)	R22-BH103 (d)	R22-BH104	R22-BH105			
Depth to Top	11.00	12.00	1.80	0.80	4.00	4.00	1.80			
Depth To Bottom										
Date Sampled	18-Jan-24	18-Jan-24	18-Jan-24	18-Jan-24	18-Jan-24	18-Jan-24	18-Jan-24			
Sample Type	WATER - EW	WATER - EW	WATER - EW	WATER - EW	WATER - EW	WATER - EW	WATER - EW			
Sample Matrix Code	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
1,1,1,2-Tetrachloroethane$_{A}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Chlorobenzene$_{A}^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Ethylbenzene$_{A}^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
m & p Xylene$_{A}^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Bromoform$_{A}^{\#}$	<3	<3	<3	<3	<3	<3	<3	µg/l	3	A-T-006w
Styrene$_{A}^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
1,1,2,2-Tetrachloroethane$_{A}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
o-Xylene$_{A}^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
1,2,3-Trichloropropane$_{A}^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Isopropylbenzene$_{A}^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
Bromobenzene$_{A}^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
2-Chlorotoluene$_{A}^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
n-propylbenzene$_{A}^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
4-Chlorotoluene$_{A}^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
1,2,4-Trimethylbenzene$_{A}^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
4-Isopropyltoluene$_{A}^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
1,3,5-Trimethylbenzene$_{A}^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
1,2-Dichlorobenzene$_{A}^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
1,4-Dichlorobenzene$_{A}^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
sec-Butylbenzene$_{A}^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
tert-Butylbenzene$_{A}^{\#}$	<2	<2	<2	<2	<2	<2	<2	µg/l	2	A-T-006w
1,3-Dichlorobenzene$_{A}^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
n-butylbenzene$_{A}^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w
1,2-Dibromo-3-chloropropane$_{A}^{\#}$	<2	<2	<2	<2	<2	<2	<2	µg/l	2	A-T-006w
1,2,4-Trichlorobenzene$_{A}^{\#}$	<3	<3	<3	<3	<3	<3	<3	µg/l	3	A-T-006w
1,2,3-Trichlorobenzene$_{A}^{\#}$	<3	<3	<3	<3	<3	<3	<3	µg/l	3	A-T-006w
Hexachlorobutadiene$_{A}^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-006w

Envirolab Job Number: 24/00607

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	24/00607/1	24/00607/2	24/00607/3	24/00607/4	24/00607/5	24/00607/6	24/00607/7	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	RedP-BH-6	RedP-BH-8	R22-BH102	R22-BH103 (s)	R22-BH103 (d)	R22-BH104	R22-BH105			
Depth to Top	11.00	12.00	1.80	0.80	4.00	4.00	1.80			
Depth To Bottom										
Date Sampled	18-Jan-24	18-Jan-24	18-Jan-24	18-Jan-24	18-Jan-24	18-Jan-24	18-Jan-24			
Sample Type	WATER - EW	WATER - EW	WATER - EW	WATER - EW	WATER - EW	WATER - EW	WATER - EW			
Sample Matrix Code	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
TPH CWG (w) with Clean Up										
Ali >C5-C6 (w)$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-022w
Ali >C6-C8 (w)$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-022w
Ali >C8-C10 (w)$_A^{\#}$	<5	<5	<5	<5	<5	<5	53	µg/l	5	A-T-055w
Ali >C10-C12 (w)$_A^{\#}$	<5	<5	<5	<5	<5	<5	<5	µg/l	5	A-T-055w
Ali >C12-C16 (w)$_A^{\#}$	<5	<5	<5	<5	<5	<5	<5	µg/l	5	A-T-055w
Ali >C16-C21 (w)$_A^{\#}$	<5	<5	<5	<5	<5	<5	<5	µg/l	5	A-T-055w
Ali >C21-C35 (w)$_A^{\#}$	<5	<5	<5	<5	<5	<5	11	µg/l	5	A-T-055w
Total Aliphatics (w)$_A^{\#}$	<5	<5	<5	<5	<5	<5	64	µg/l	5	Calc-As Recd
Aro >C5-C7 (w)$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-022w
Aro >C7-C8 (w)$_A^{\#}$	<1	<1	<1	<1	<1	<1	4	µg/l	1	A-T-022w
Aro >C8-C10 (w)$_A$	<5	<5	<5	<5	<5	<5	78	µg/l	5	A-T-055w
Aro >C10-C12 (w)$_A^{\#}$	<5	<5	<5	<5	<5	<5	7	µg/l	5	A-T-055w
Aro >C12-C16 (w)$_A^{\#}$	<5	<5	<5	<5	<5	<5	13	µg/l	5	A-T-055w
Aro >C16-C21 (w)$_A^{\#}$	<5	<5	<5	<5	<5	<5	14	µg/l	5	A-T-055w
Aro >C21-C35 (w)$_A^{\#}$	<10	<10	<10	<10	<10	<10	12	µg/l	10	A-T-055w
Total Aromatics (w)$_A^{\#}$	<10	<10	<10	<10	<10	<10	128	µg/l	10	Calc-As Recd
TPH (Ali & Aro >C5-C35) (w)$_A$	<10	<10	<10	<10	<10	<10	192	µg/l	10	Calc-As Recd
BTEX - Benzene (w)$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-022w
BTEX - Toluene (w)$_A^{\#}$	<1	<1	<1	<1	<1	<1	4	µg/l	1	A-T-022w
BTEX - Ethyl Benzene (w)$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-022w
BTEX - m & p Xylene (w)$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-022w
BTEX - o Xylene (w)$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-022w
MTBE (w)$_A^{\#}$	<1	<1	<1	<1	<1	<1	<1	µg/l	1	A-T-022w

Lab Sample ID	24/00607/8	24/00607/9	24/00607/10					Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	R22-BH204	R22-BH205	R22-BH501							
Depth to Top	27.30	21.00	24.65							
Depth To Bottom										
Date Sampled	18-Jan-24	18-Jan-24	18-Jan-24							
Sample Type	WATER - EW	WATER - EW	WATER - EW							
Sample Matrix Code	N/A	N/A	N/A							
pH (w)$_{A}^{\#}$	8.00	7.23	7.79					pH	0.01	A-T-031w
pH BRE (w)$_{A}^{\#}$	8.00	7.23	7.79					pH	0.01	A-T-031w
Alkalinity by titration (bicarbonate) (w)$_{A}$	375	525	340					mg/l Ca CO3	15	Titration w
Hardness Total$_{A}^{\#}$	352	6760	766					mg/l Ca CO3	4	A-T-049w
Total Dissolved Solids (w)$_{A}^{\#}$	573	21315	1477					mg/l	20	A-T-035w
Ammoniacal nitrogen as N (w)$_{A}^{\#}$	0.37	5.35	1.15					mg/l	0.05	A-T-033w
Ammonium / Ammoniacal N as NH4 BRE (w)$_{A}^{\#}$	0.474	6.896	1.489					mg/l	0.065	A-T-033w
Chloride (w)$_{A}^{\#}$	62	11800	479					mg/l	1	A-T-026w
Chloride BRE (w)$_{A}^{\#}$	61.73	11782.59	479.35					mg/l	1	A-T-026w
Fluoride (w)$_{A}^{\#}$	1.09	0.11	0.98					mg/l	0.1	A-T-026w (F)
Nitrate (w)$_{A}^{\#}$	<0.1	<0.1	<0.1					mg/l	0.1	A-T-026w (N)
Nitrate BRE (w)$_{A}^{\#}$	<0.1	<0.1	<0.1					mg/l	0.1	A-T-026w (N)
Sulphate (w)$_{A}^{\#}$	69	979	69					mg/l	1	A-T-026w
Sulphate BRE (w)$_{A}^{\#}$	69	979	69					mg/l	1	A-T-026w
Cyanide (free) (w)$_{A}^{\#}$	<0.005	<0.005	<0.005					mg/l	0.005	A-T-042wFCN
Cyanide (total) (w)$_{A}^{\#}$	<0.005	<0.005	<0.005					mg/l	0.005	A-T-042wTCN
Antimony (dissolved)$_{A}$	<1	<20	<1					µg/l	1	A-T-025w
Arsenic (dissolved)$_{A}^{\#}$	<1	<20	<1					µg/l	1	A-T-025w
Boron (dissolved)$_{A}^{\#}$	143	782	131					µg/l	10	A-T-025w
Barium (dissolved)$_{A}^{\#}$	252	142	76					µg/l	1	A-T-025w
Beryllium (dissolved)$_{A}^{\#}$	<1	<20	<1					µg/l	1	A-T-025w
Cadmium (dissolved)$_{A}^{\#}$	<0.2	<4.0	<0.2					µg/l	0.2	A-T-025w
Calcium (dissolved)$_{A}^{\#}$	87	1250	172					mg/l	1	A-T-049w
Copper (dissolved)$_{A}$	<4	<80	<4					µg/l	4	A-T-025w
Chromium (dissolved)$_{A}^{\#}$	<1	<20	<1					µg/l	1	A-T-025w
Chromium (hexavalent) (w)$_{A}^{\#}$	<0.01	<0.01	<0.01					mg/l	0.01	A-T-040w
Chromium (trivalent) (w)	<0.01	<0.02	<0.01					mg/l	0.01	Calc
Iron (dissolved)$_{A}^{\#}$	2480	5950	745					µg/l	10	A-T-025w
Lead (dissolved)$_{A}^{\#}$	<1	<20	<1					µg/l	1	A-T-025w
Manganese (dissolved)$_{A}^{\#}$	1890	1030	60					µg/l	1	A-T-025w
Magnesium (dissolved)$_{A}^{\#}$	33	886	82					mg/l	1	A-T-049w
Magnesium BRE (dissolved)$_{A}^{\#}$	32.5	886	81.8					mg/l	1	A-T-049w

Envirolab Job Number: 24/00607

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	24/00607/8	24/00607/9	24/00607/10					Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	R22-BH204	R22-BH205	R22-BH501							
Depth to Top	27.30	21.00	24.65							
Depth To Bottom										
Date Sampled	18-Jan-24	18-Jan-24	18-Jan-24							
Sample Type	WATER - EW	WATER - EW	WATER - EW							
Sample Matrix Code	N/A	N/A	N/A							
Mercury (dissolved)$_{A}^{\#}$	<0.1	<2.0	<0.1					µg/l	0.1	A-T-025w
Molybdenum (dissolved)$_{A}^{\#}$	2.0	<10.0	0.9					µg/l	0.5	A-T-025w
Nickel (dissolved)$_{A}^{\#}$	3	<40	<2					µg/l	2	A-T-025w
Selenium (dissolved)$_{A}^{\#}$	<1	<20	<1					µg/l	1	A-T-025w
Sodium (dissolved)$_{A}^{\#}$	56	4140	107					mg/l	1	A-T-049w
Sulphur, Total (dissolved)$_{A}$	24	331	22					mg/l	1	A-T-072w
Vanadium (dissolved)$_{A}^{\#}$	<1	<20	<1					µg/l	1	A-T-025w
Zinc (dissolved)$_{A}^{\#}$	<2	101	9					µg/l	2	A-T-025w

Envirolab Job Number: 24/00607

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	24/00607/8	24/00607/9	24/00607/10					Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	R22-BH204	R22-BH205	R22-BH501							
Depth to Top	27.30	21.00	24.65							
Depth To Bottom										
Date Sampled	18-Jan-24	18-Jan-24	18-Jan-24							
Sample Type	WATER - EW	WATER - EW	WATER - EW							
Sample Matrix Code	N/A	N/A	N/A							
PAH 16MS (w)										
Acenaphthene (w)$_{A}^{\#}$	<0.01	<0.01	<0.01					µg/l	0.01	A-T-019w
Acenaphthylene (w)$_{A}^{\#}$	<0.01	<0.01	<0.01					µg/l	0.01	A-T-019w
Anthracene (w)$_{A}^{\#}$	<0.01	<0.01	<0.01					µg/l	0.01	A-T-019w
Benzo(a)anthracene (w)$_{A}^{\#}$	<0.01	<0.01	<0.01					µg/l	0.01	A-T-019w
Benzo(a)pyrene (w)$_{A}^{\#}$	<0.01	<0.01	<0.01					µg/l	0.01	A-T-019w
Benzo(b)fluoranthene (w)$_{A}^{\#}$	<0.01	<0.01	<0.01					µg/l	0.01	A-T-019w
Benzo(ghi)perylene (w)$_{A}^{\#}$	<0.01	<0.01	<0.01					µg/l	0.01	A-T-019w
Benzo(k)fluoranthene (w)$_{A}^{\#}$	<0.01	<0.01	<0.01					µg/l	0.01	A-T-019w
Chrysene (w)$_{A}^{\#}$	<0.01	<0.01	<0.01					µg/l	0.01	A-T-019w
Dibenzo(ah)anthracene (w)$_{A}^{\#}$	<0.01	<0.01	<0.01					µg/l	0.01	A-T-019w
Fluoranthene (w)$_{A}^{\#}$	<0.01	<0.01	<0.01					µg/l	0.01	A-T-019w
Fluorene (w)$_{A}^{\#}$	<0.01	<0.01	<0.01					µg/l	0.01	A-T-019w
Indeno(123-cd)pyrene (w)$_{A}^{\#}$	<0.01	<0.01	<0.01					µg/l	0.01	A-T-019w
Naphthalene (w)$_{A}^{\#}$	0.07	0.02	<0.01					µg/l	0.01	A-T-019w
Phenanthrene (w)$_{A}^{\#}$	0.01	<0.01	<0.01					µg/l	0.01	A-T-019w
Pyrene (w)$_{A}^{\#}$	<0.01	<0.01	<0.01					µg/l	0.01	A-T-019w
Total PAH 16MS (w)$_{A}^{\#}$	0.08	0.02	<0.01					µg/l	0.01	A-T-019w
Phenols NG (speciated HPLC) (w)										
Phenol (w)$_{A}$	<0.10	<0.10	<0.01					mg/l	0.01	A-T-050w
Cresols (w)$_{A}$	<0.10	<0.10	<0.01					mg/l	0.01	A-T-050w
Catechol (w)$_{A}$	<0.10	<0.10	<0.01					mg/l	0.01	A-T-050w
Resorcinol (w) $_{A}$	<0.10	<0.10	<0.01					mg/l	0.01	A-T-050w
Xylenols & Ethylphenols (w)$_{A}$	<0.10	<0.10	<0.01					mg/l	0.01	A-T-050w
Naphthols (w)$_{A}$	<0.10	<0.10	<0.01					mg/l	0.01	A-T-050w
Trimethylphenol (w)$_{A}$	<0.10	<0.10	<0.01					mg/l	0.01	A-T-050w
Phenols - Total by HPLC (w)$_{A}$	<0.10	<0.10	<0.01					mg/l	0.01	A-T-050w

Envirolab Job Number: 24/00607

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	24/00607/8	24/00607/9	24/00607/10					Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	R22-BH204	R22-BH205	R22-BH501							
Depth to Top	27.30	21.00	24.65							
Depth To Bottom										
Date Sampled	18-Jan-24	18-Jan-24	18-Jan-24							
Sample Type	WATER - EW	WATER - EW	WATER - EW							
Sample Matrix Code	N/A	N/A	N/A							
VOC (w)										
Dichlorodifluoromethane$_A$	<1	<1	<1					µg/l	1	A-T-006w
Chloromethane$_A$	<10	<10	<10					µg/l	10	A-T-006w
Vinyl Chloride$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
Bromomethane$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
Chloroethane$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
Trichlorofluoromethane$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
trans 1,2-Dichloroethene$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
Dichloromethane$_A$	<5	<5	<5					µg/l	5	A-T-006w
Carbon Disulphide$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
1,1-Dichloroethene$_A^{\#}$	<1^U	<1^U	<1^U					µg/l	1	A-T-006w
1,1-Dichloroethane$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
cis 1,2-Dichloroethene$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
Bromochloromethane$_A^{\#}$	<5	<5	<5					µg/l	5	A-T-006w
Chloroform$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
2,2-Dichloropropane$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
1,2-Dichloroethane$_A^{\#}$	<2	<2	<2					µg/l	2	A-T-006w
1,1,1-Trichloroethane$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
1,1-Dichloropropene$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
Benzene$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
Carbon Tetrachloride$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
Dibromomethane$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
1,2-Dichloropropane$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
Bromodichloromethane$_A^{\#}$	<10	<10	<10					µg/l	10	A-T-006w
Trichloroethene$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
cis 1,3-Dichloropropene$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
trans 1,3-Dichloropropene$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
1,1,2-Trichloroethane$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
Toluene$_A^{\#}$	2	<1	<1					µg/l	1	A-T-006w
1,3-Dichloropropane$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
Dibromochloromethane$_A^{\#}$	<3	<3	<3					µg/l	3	A-T-006w
1,2-Dibromoethane$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
Tetrachloroethene$_A$	<1	<1	<1					µg/l	1	A-T-006w

Envirolab Job Number: 24/00607

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	24/00607/8	24/00607/9	24/00607/10					Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	R22-BH204	R22-BH205	R22-BH501							
Depth to Top	27.30	21.00	24.65							
Depth To Bottom										
Date Sampled	18-Jan-24	18-Jan-24	18-Jan-24							
Sample Type	WATER - EW	WATER - EW	WATER - EW							
Sample Matrix Code	N/A	N/A	N/A							
1,1,1,2-Tetrachloroethane$_A$	<1	<1	<1					µg/l	1	A-T-006w
Chlorobenzene$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
Ethylbenzene$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
m & p Xylene$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
Bromoform$_A^{\#}$	<3	<3	<3					µg/l	3	A-T-006w
Styrene$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
1,1,2,2-Tetrachloroethane$_A$	<1	<1	<1					µg/l	1	A-T-006w
o-Xylene$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
1,2,3-Trichloropropane$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
Isopropylbenzene$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
Bromobenzene$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
2-Chlorotoluene$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
n-propylbenzene$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
4-Chlorotoluene$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
1,2,4-Trimethylbenzene$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
4-Isopropyltoluene$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
1,3,5-Trimethylbenzene$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
1,2-Dichlorobenzene$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
1,4-Dichlorobenzene$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
sec-Butylbenzene$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
tert-Butylbenzene$_A^{\#}$	<2	<2	<2					µg/l	2	A-T-006w
1,3-Dichlorobenzene$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
n-butylbenzene$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w
1,2-Dibromo-3-chloropropane$_A^{\#}$	<2	<2	<2					µg/l	2	A-T-006w
1,2,4-Trichlorobenzene$_A^{\#}$	<3	<3	<3					µg/l	3	A-T-006w
1,2,3-Trichlorobenzene$_A^{\#}$	<3	<3	<3					µg/l	3	A-T-006w
Hexachlorobutadiene$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-006w

Envirolab Job Number: 24/00607

Client Project Name: Sealink Richborough

Client Project Ref: 563607

Lab Sample ID	24/00607/8	24/00607/9	24/00607/10					Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	R22-BH204	R22-BH205	R22-BH501							
Depth to Top	27.30	21.00	24.65							
Depth To Bottom										
Date Sampled	18-Jan-24	18-Jan-24	18-Jan-24							
Sample Type	WATER - EW	WATER - EW	WATER - EW							
Sample Matrix Code	N/A	N/A	N/A							
TPH CWG (w) with Clean Up										
Ali >C5-C6 (w)$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-022w
Ali >C6-C8 (w)$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-022w
Ali >C8-C10 (w)$_A^{\#}$	<5	<5	<5					µg/l	5	A-T-055w
Ali >C10-C12 (w)$_A^{\#}$	<5	<5	<5					µg/l	5	A-T-055w
Ali >C12-C16 (w)$_A^{\#}$	<5	<5	<5					µg/l	5	A-T-055w
Ali >C16-C21 (w)$_A^{\#}$	<5	<5	<5					µg/l	5	A-T-055w
Ali >C21-C35 (w)$_A^{\#}$	<5	<5	<5					µg/l	5	A-T-055w
Total Aliphatics (w)$_A^{\#}$	<5	<5	<5					µg/l	5	Calc-As Recd
Aro >C5-C7 (w)$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-022w
Aro >C7-C8 (w)$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-022w
Aro >C8-C10 (w)$_A$	<5	<5	<5					µg/l	5	A-T-055w
Aro >C10-C12 (w)$_A^{\#}$	<5	<5	<5					µg/l	5	A-T-055w
Aro >C12-C16 (w)$_A^{\#}$	<5	<5	<5					µg/l	5	A-T-055w
Aro >C16-C21 (w)$_A^{\#}$	<5	<5	<5					µg/l	5	A-T-055w
Aro >C21-C35 (w)$_A^{\#}$	<10	<10	<10					µg/l	10	A-T-055w
Total Aromatics (w)$_A^{\#}$	<10	<10	<10					µg/l	10	Calc-As Recd
TPH (Ali & Aro >C5-C35) (w)$_A$	<10	<10	<10					µg/l	10	Calc-As Recd
BTEX - Benzene (w)$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-022w
BTEX - Toluene (w)$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-022w
BTEX - Ethyl Benzene (w)$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-022w
BTEX - m & p Xylene (w)$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-022w
BTEX - o Xylene (w)$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-022w
MTBE (w)$_A^{\#}$	<1	<1	<1					µg/l	1	A-T-022w

Report Notes

General
This report shall not be reproduced, except in full, without written approval from Envirolab.
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.
The client Sample No, Client Sample ID, Depth to top, Depth to Bottom and Date Sampled are all provided by the client.
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.

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 "^"	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
N/A	Not applicable

Asbestos
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
Quantification of asbestos is a 3 stage process including visual identification, hand picking and weighing, and fibre counting by sedimentation/phase contrast optical microscopy if required. 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) quantification by sedimentation is performed. 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.

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^{o}C / 11550µS/cm @ 20^{o}C fall outside the accreditation 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: Structural Soils Limited (Hemel Hempstead), 18 Frogmore Road, Hemel Hempstead, UK, HP3 9RT

Project: Sealink Richborough

Clients Project No: 563607

Project No: 24/00607

Date Received: 23/01/2024 (am)

Cool Box Temperatures (°C): 8.0-8.5

Lab Sample ID	24/00607/1	24/00607/2	24/00607/3	24/00607/4	24/00607/5	24/00607/6	24/00607/7	24/00607/8	24/00607/9	24/00607/10
Client Sample No										
Client Sample ID/Depth	RedP-BH-6 11.00m	RedP-BH-8 12.00m	R22-BH102 1.80m	R22-BH103 (s) 0.80m	R22-BH103 (d) 4.00m	R22-BH104 4.00m	R22-BH105 1.80m	R22-BH204 27.30m	R22-BH205 21.00m	R22-BH501 24.65m
Date Sampled	18/01/24	18/01/24	18/01/24	18/01/24	18/01/24	18/01/24	18/01/24	18/01/24	18/01/24	18/01/24
Deviation Code										
F	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Key

F *Maximum holding time exceeded between sampling date and analysis for analytes listed below*

HOLDING TIME EXCEEDANCES

Lab Sample ID	24/00607/1	24/00607/2	24/00607/3	24/00607/4	24/00607/5	24/00607/6	24/00607/7	24/00607/8	24/00607/9	24/00607/10
Client Sample No										
Client Sample ID/Depth	RedP-BH-6 11.00m	RedP-BH-8 12.00m	R22-BH102 1.80m	R22-BH103 (s) 0.80m	R22-BH103 (d) 4.00m	R22-BH104 4.00m	R22-BH105 1.80m	R22-BH204 27.30m	R22-BH205 21.00m	R22-BH501 24.65m
Date Sampled	18/01/24	18/01/24	18/01/24	18/01/24	18/01/24	18/01/24	18/01/24	18/01/24	18/01/24	18/01/24
VPHCWG (w)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

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	24/00607/1	24/00607/2	24/00607/3	24/00607/4	24/00607/5	24/00607/6	24/00607/7	24/00607/8	24/00607/9	24/00607/10
Client Sample No										
Client Sample ID/Depth	RedP-BH-6 11.00m	RedP-BH-8 12.00m	R22-BH102 1.80m	R22-BH103 (s) 0.80m	R22-BH103 (d) 4.00m	R22-BH104 4.00m	R22-BH105 1.80m	R22-BH204 27.30m	R22-BH205 21.00m	R22-BH501 24.65m
Date Sampled	18/01/24	18/01/24	18/01/24	18/01/24	18/01/24	18/01/24	18/01/24	18/01/24	18/01/24	18/01/24
A-T-006w	29/01/2024	26/01/2024	26/01/2024	26/01/2024	26/01/2024	26/01/2024	26/01/2024	26/01/2024	26/01/2024	26/01/2024
A-T-019w	26/01/2024	26/01/2024	26/01/2024	26/01/2024	26/01/2024	26/01/2024	26/01/2024	26/01/2024	26/01/2024	26/01/2024
A-T-022w	05/02/2024	05/02/2024	05/02/2024	05/02/2024	05/02/2024	05/02/2024	05/02/2024	05/02/2024	05/02/2024	05/02/2024
A-T-025w	26/01/2024	26/01/2024	26/01/2024	30/01/2024	01/02/2024	01/02/2024	30/01/2024	30/01/2024	31/01/2024	29/01/2024
A-T-026w	02/02/2024	26/01/2024	26/01/2024	26/01/2024	26/01/2024	26/01/2024	02/02/2024	26/01/2024	26/01/2024	26/01/2024
A-T-026w (F)	26/01/2024	26/01/2024	26/01/2024	26/01/2024	26/01/2024	26/01/2024	26/01/2024	26/01/2024	26/01/2024	26/01/2024
A-T-026w (N)	26/01/2024	26/01/2024	26/01/2024	26/01/2024	26/01/2024	26/01/2024	26/01/2024	26/01/2024	26/01/2024	26/01/2024
A-T-031w	26/01/2024	29/01/2024	29/01/2024	29/01/2024	29/01/2024	29/01/2024	29/01/2024	29/01/2024	29/01/2024	29/01/2024
A-T-033w	03/02/2024	03/02/2024	03/02/2024	03/02/2024	03/02/2024	03/02/2024	03/02/2024	03/02/2024	03/02/2024	03/02/2024
A-T-035w	31/01/2024	31/01/2024	31/01/2024	31/01/2024	31/01/2024	31/01/2024	31/01/2024	31/01/2024	31/01/2024	31/01/2024
A-T-040w	26/01/2024	26/01/2024	26/01/2024	26/01/2024	26/01/2024	26/01/2024	26/01/2024	26/01/2024	26/01/2024	26/01/2024
A-T-042wFCN	29/01/2024	29/01/2024	29/01/2024	29/01/2024	29/01/2024	29/01/2024	29/01/2024	29/01/2024	29/01/2024	29/01/2024
A-T-042wTCN	29/01/2024	29/01/2024	29/01/2024	29/01/2024	29/01/2024	29/01/2024	29/01/2024	29/01/2024	29/01/2024	29/01/2024
A-T-049w	01/02/2024	01/02/2024	01/02/2024	01/02/2024	01/02/2024	01/02/2024	01/02/2024	01/02/2024	01/02/2024	01/02/2024
A-T-050w	02/02/2024	02/02/2024	02/02/2024	02/02/2024	02/02/2024	02/02/2024	02/02/2024	02/02/2024	02/02/2024	02/02/2024
A-T-055w	26/01/2024	26/01/2024	26/01/2024	26/01/2024	26/01/2024	26/01/2024	26/01/2024	26/01/2024	26/01/2024	26/01/2024
A-T-072w	29/01/2024	29/01/2024	29/01/2024	29/01/2024	29/01/2024	29/01/2024	29/01/2024	29/01/2024	29/01/2024	29/01/2024
Calc	26/01/2024	26/01/2024	26/01/2024	29/01/2024	03/02/2024	29/01/2024	29/01/2024	26/01/2024	29/01/2024	26/01/2024
Calc-As Recd	05/02/2024	05/02/2024	05/02/2024	05/02/2024	05/02/2024	05/02/2024	05/02/2024	05/02/2024	05/02/2024	05/02/2024
Titration w	29/01/2024	29/01/2024	29/01/2024	29/01/2024	29/01/2024	29/01/2024	29/01/2024	29/01/2024	29/01/2024	29/01/2024

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

APPENDIX F - MONITORING RECORDS

(i) Gas/Groundwater Monitoring Results

(ii) Groundwater Level Data Logger Measurements

IN-SITU GAS MONITORING RESULTS

Exploratory Position ID	Pipe ref	Pipe Diameter (mm)	Monitoring Round / Test Number	Reported Installation Depth (mbgl)	Measured Installation Depth (mbgl)	Response Zone (m)	Date & Time of Monitoring (elapsed time)	Borehole Pressure (mb)	Atmos Pressure (mb)	Gas Flow (l/hr)	Water Depth (mbgl)	CO_2 (% / vol)	CH_4 (% / vol)	O_2 (% / vol)	LEL (%)	PID (ppm)	CO (ppm)	H_2 (% / vol)	H_2S (ppm)	NH_3 (ppm)	N_2 (% / vol)
R22-BH102	1	50	1	3.00	---	0.80 to 3.00	29/11/2023 08:28:00	-	-	$0.0_{(I)}$	-	-	-	-	-	-	-	-	-	-	-
R22-BH102	1	50	1	---	---	0.80 to 3.00	30 secs	-	-	$0.9_{(SS)}$	-	-	-	-	-	-	-	-	-	-	-
R22-BH102	1	50	1/2	3.00	---	0.80 to 3.00	29/11/2023 08:32:00	-	-	-	-	0.4	0.0	16.3	0.0	-	2	-	0	-	-
R22-BH102	1	50	1/2	---	---	0.80 to 3.00	60 secs	-	-	-	-	0.4	0.0	16.4	0.0	-	2	-	0	-	-
R22-BH102	1	50	1/2	---	---	0.80 to 3.00	120 secs	-	-	-	-	0.4	0.0	16.5	0.0	-	2	-	0	-	-
R22-BH102	1	50	1/3	3.00	3.01	0.80 to 3.00	29/11/2023 08:38:00	-	-	-	0.10	-	-	-	PEAK AT 0.1 STEADY AT 0.0			-	-	-	-
		Remarks: R22-BH102/HAD TO STOP DUE TO WATER SUCTION																			
R22-BH102	1	50	2	3.00	---	0.80 to 3.00	13/12/2023 08:37:51	1024	27.36	-2.2	-	-	-	-	-	-	-	-	-	-	-
R22-BH102	1	50	2	---	---	0.80 to 3.00	5 secs	-	-	2.0	-	-	-	-	-	-	-	-	-	-	-
R22-BH102	1	50	2/2	3.00	---	0.80 to 3.00	13/12/2023 08:38:56	-	-	-	-	0.1	0.0	20.8	0.0	-	0	-	0	-	-
R22-BH102	1	50	2/2	---	---	0.80 to 3.00	15 secs	-	-	-	-	0.5	0.0	20.1	0.0	-	1	-	0	-	-
R22-BH102	1	50	2/2	---	---	0.80 to 3.00	30 secs	-	-	-	-	0.5	0.0	19.6	0.0	-	0	-	0	-	-
R22-BH102	1	50	2/2	---	---	0.80 to 3.00	60 secs	-	-	-	-	0.5	0.0	19.6	0.0	-	1	-	0	-	-
R22-BH102	1	50	2/2	---	---	0.80 to 3.00	90 secs	-	-	-	-	0.5	0.0	19.6	0.0	-	1	-	0	-	-
R22-BH102	1	50	2/2	---	---	0.80 to 3.00	120 secs	-	-	-	-	0.5	0.0	19.6	0.0	-	0	-	0	-	-
R22-BH102	1	50	2/3	3.00	3.04	0.80 to 3.00	13/12/2023 08:46:09	-	-	-	0.10	-	-	-	-	0.5	-	-	-	-	-
R22-BH102	1	50	3	3.00	---	0.80 to 3.00	03/01/2024 11:41:33	991	991	$0.0_{(I)}$	-	-	-	-	-	-	-	-	-	-	-
R22-BH102	1	50	3	---	---	0.80 to 3.00	30 secs	-	-	$0.1_{(SS)}$	-	-	-	-	-	-	-	-	-	-	-
R22-BH102	1	50	3/2	3.00	---	0.80 to 3.00	03/01/2024 11:44:41	-	-	-	-	0.1	0.0	20.8	0.0	-	0	-	0	-	-
R22-BH102	1	50	3/2	---	---	0.80 to 3.00	15 secs	-	-	-	-	0.1	0.0	20.7	0.0	-	1	-	0	-	-
R22-BH102	1	50	3/2	---	---	0.80 to 3.00	30 secs	-	-	-	-	0.1	0.0	20.7	0.0	-	0	-	0	-	-
R22-BH102	1	50	3/2	---	---	0.80 to 3.00	61 secs	-	-	-	-	0.1	0.0	20.7	0.0	-	0	-	0	-	-
R22-BH102	1	50	3/2	---	---	0.80 to 3.00	91 secs	-	-	-	-	0.1	0.0	20.6	0.0	-	0	-	1	-	-
R22-BH102	1	50	3/2	---	---	0.80 to 3.00	121 secs	-	-	-	-	0.1	0.0	20.6	0.0	-	0	-	1	-	-

Key: I = Initial, Min = Minimum, P = Peak, SS = Steady State. >>> = exceeds range.
Abbreviations: CO_2 = Carbon Dioxide, CH_4 = Methane, O_2 = Oxygen, LEL = Lower Explosive Limit, PID = Photo Ionisation Detector Reading, CO = Carbon Monoxide, H_2 = Hydrogen, H_2S = Hydrogen Sulphide, NH_3 = Ammonia, N_2 = Nitrogen.
Note: Lower Explosive Limit (LEL) = 5% v/v of Methane.

STRUCTURAL SOILS
18 Frogmore Road
Hemel Hempstead
Hertfordshire
HP3 9RT

Checked By [redacted]

Date: **25/01/2024**

Contract Ref: **563607**

Contract: **Sea Link - Richborough**

AGS

IN-SITU GAS MONITORING RESULTS

Exploratory Position ID	Pipe ref	Pipe Diameter (mm)	Monitoring Round / Test Number	Reported Installation Depth (mbgl)	Measured Installation Depth (mbgl)	Response Zone (m)	Date & Time of Monitoring (elapsed time)	Borehole Pressure (mb)	Atmos Pressure (mb)	Gas Flow (l/hr)	Water Depth (mbgl)	CO_2 (% / vol)	CH_4 (% / vol)	O_2 (% / vol)	LEL (%)	PID (ppm)	CO (ppm)	H_2 (% / vol)	H_2S (ppm)	NH_3 (ppm)	N_2 (% / vol)
R22-BH102	1	50	3/2	---	---	0.80 to 3.00	181 secs	-	-	-	-	0.1	0.0	20.5	0.0	-	0	-	1	-	-
R22-BH102	1	50	3/2	---	---	0.80 to 3.00	241 secs	-	-	-	-	0.1	0.0	20.5	0.0	-	0	-	1	-	-
R22-BH102	1	50	3/2	---	---	0.80 to 3.00	301 secs	-	-	-	-	0.1	0.0	20.4	0.0	-	0	-	1	-	-
R22-BH102	1	50	3/3	3.00	3.03	0.80 to 3.00	03/01/2024 11:54:18	-	-	-	0.08	-	-	-	-	0.2	-	-	-	-	-
R22-BH102	1	50	4	3.00	---	0.80 to 3.00	18/01/2024 08:01:08	1003	1003	$0.0_{(I)}$	-	-	-	-	-	-	-	-	-	-	-
R22-BH102	1	50	4	---	---	0.80 to 3.00	5 secs	-	-	$0.0_{(SS)}$	-	-	-	-	-	-	-	-	-	-	-
R22-BH102	1	50	4/2	3.00	---	0.80 to 3.00	18/01/2024 08:02:19	-	-	-	-	0.0	0.0	20.9	0.0	-	0	-	0	-	-
R22-BH102	1	50	4/2	---	---	0.80 to 3.00	14 secs	-	-	-	-	0.1	0.0	20.8	0.0	-	1	-	0	-	-
R22-BH102	1	50	4/2	---	---	0.80 to 3.00	29 secs	-	-	-	-	0.2	0.0	20.7	0.0	-	0	-	0	-	-
R22-BH102	1	50	4/2	---	---	0.80 to 3.00	59 secs	-	-	-	-	0.2	0.0	20.9	0.0	-	0	-	0	-	-
R22-BH102	1	50	4/2	---	---	0.80 to 3.00	89 secs	-	-	-	-	0.2	0.0	21.0	0.0	-	0	-	0	-	-
R22-BH102	1	50	4/2	---	---	0.80 to 3.00	119 secs	-	-	-	-	0.1	0.0	21.1	0.0	-	0	-	0	-	-
R22-BH102	1	50	4/2	---	---	0.80 to 3.00	180 secs	-	-	-	-	0.1	0.0	21.2	0.0	-	0	-	0	-	-
R22-BH102	1	50	4/2	---	---	0.80 to 3.00	240 secs	-	-	-	-	0.1	0.0	21.3	0.0	-	0	-	0	-	-
R22-BH102	1	50	4/2	---	---	0.80 to 3.00	301 secs	-	-	-	-	0.1	0.0	21.5	0.0	-	0	-	0	-	-
R22-BH102	1	50	4/3	3.00	3.03	0.80 to 3.00	18/01/2024 08:10:58	-	-	-	0.31	-	-	-	-	0.2	-	-	-	-	-
R22-BH103	1	50	1	1.00	---	0.50 to 1.00	29/11/2023 08:58:00	-	-	$0.0_{(I)}$	-	-	-	-	-	-	-	-	-	-	-
R22-BH103	1	50	1	---	---	0.50 to 1.00	30 secs	-	-	$0.0_{(SS)}$	-	-	-	-	-	-	-	-	-	-	-
R22-BH103	1	50	1/2	1.00	---	0.50 to 1.00	29/11/2023 09:00:00	1006	1006	-	-	0.1	0.0	20.8	0.0	-	0	-	0	-	-
R22-BH103	1	50	1/2	---	---	0.50 to 1.00	60 secs	-	-	-	-	0.4	0.0	20.7	0.0	-	0	-	0	-	-
R22-BH103	1	50	1/2	---	---	0.50 to 1.00	120 secs	-	-	-	-	0.3	0.0	20.7	0.0	-	0	-	0	-	-
R22-BH103	1	50	1/3	1.00	1.01	0.50 to 1.00	29/11/2023 09:08:00	-	-	-	0.01	-	-	-	PEAK AT 0.0 STEADY AT 0.0			-	-	-	-
		Remarks: R22-BH103S/HAD TO STOP DUE TO WATER SUCTION																			

Key: I = Initial, Min = Minimum, P = Peak, SS = Steady State. >>> = exceeds range.
Abbreviations: CO_2 = Carbon Dioxide, CH_4 = Methane, O_2 = Oxygen, LEL = Lower Explosive Limit, PID = Photo Ionisation Detector Reading, CO = Carbon Monoxide, H_2 = Hydrogen, H_2S = Hydrogen Sulphide, NH_3 = Ammonia, N_2 = Nitrogen.
Note: Lower Explosive Limit (LEL) = 5% v/v of Methane.

IN-SITU GAS MONITORING RESULTS

Exploratory Position ID	Pipe ref	Pipe Diameter (mm)	Monitoring Round / Test Number	Reported Installation Depth (mbgl)	Measured Installation Depth (mbgl)	Response Zone (m)	Date & Time of Monitoring (elapsed time)	Borehole Pressure (mb)	Atmos Pressure (mb)	Gas Flow (l/hr)	Water Depth (mbgl)	CO_2 (% / vol)	CH_4 (% / vol)	O_2 (% / vol)	LEL (%)	PID (ppm)	CO (ppm)	H_2 (% / vol)	H_2S (ppm)	NH_3 (ppm)	N_2 (% / vol)
R22-BH103	1	50	2	1.00	---	0.50 to 1.00	13/12/2023 08:55:44	998	998	$0.0_{(I)}$	-	-	-	-	-	-	-	-	-	-	-
R22-BH103	1	50	2	---	---	0.50 to 1.00	5 secs	-	-	$0.0_{(SS)}$	-	-	-	-	-	-	-	-	-	-	-
R22-BH103	1	50	2/2	1.00	---	0.50 to 1.00	13/12/2023 08:56:53	-	-	-	-	0.1	0.0	0.1	0.0	-	0	-	0	-	-
R22-BH103	1	50	2/2	---	---	0.50 to 1.00	15 secs	-	-	-	-	0.6	0.0	0.6	0.0	-	4	-	0	-	-
R22-BH103	1	50	2/2	---	---	0.50 to 1.00	30 secs	-	-	-	-	0.6	0.0	0.6	0.0	-	5	-	0	-	-
R22-BH103	1	50	2/3	1.00	1.02	0.50 to 1.00	13/12/2023 08:57:54	-	-	-	-0.03	-	-	-	-	0.0	-	-	-	-	-
R22-BH103	1	50	3/3	1.00	1.02	0.50 to 1.00	03/01/2024 08:52:38	-	-	-	0.02	-	-	-	-	0.1	-	-	-	-	-
		Remarks: Water Interference																			
R22-BH103	1	50	3	1.00	---	0.50 to 1.00	03/01/2024 08:55:17	992	992	$-0.4_{(I)}$	-	0.1	0.0	20.8	0.0	-	0	-	1	-	-
R22-BH103	1	50	3	---	---	0.50 to 1.00	15 secs	-	-	$-1.4_{(SS)}$	-	0.4	0.0	20.6	0.0	-	2	-	1	-	-
R22-BH103	1	50	3/2	1.00	---	0.50 to 1.00	03/01/2024 08:55:47	-	-	-	-	0.3	0.0	20.6	0.0	-	1	-	1	-	-
R22-BH103	1	50	3/2	---	---	0.50 to 1.00	31 secs	-	-	-	-	0.2	0.0	20.7	0.0	-	0	-	1	-	-
R22-BH103	1	50	3/2	---	---	0.50 to 1.00	60 secs	-	-	-	-	0.2	0.0	20.7	0.0	-	0	-	1	-	-
R22-BH103	1	50	3/2	---	---	0.50 to 1.00	90 secs	-	-	-	-	0.2	0.0	20.8	0.0	-	0	-	1	-	-
R22-BH103	1	50	3/2	---	---	0.50 to 1.00	150 secs	-	-	-	-	0.1	0.0	20.8	0.0	-	0	-	1	-	-
R22-BH103	1	50	3/2	---	---	0.50 to 1.00	210 secs	-	-	-	-	0.1	0.0	20.8	0.0	-	0	-	1	-	-
R22-BH103	1	50	4	1.00	---	0.50 to 1.00	18/01/2024 09:24:49	1003	1003	$0.0_{(I)}$	-	-	-	-	-	-	-	-	-	-	-
R22-BH103	1	50	4	---	---	0.50 to 1.00	5 secs	-	-	$0.0_{(SS)}$	-	-	-	-	-	-	-	-	-	-	-
R22-BH103	1	50	4/2	1.00	---	0.50 to 1.00	18/01/2024 09:26:06	-	-	-	-	0.1	0.0	20.8	0.0	-	0	-	0	-	-
R22-BH103	1	50	4/2	---	---	0.50 to 1.00	15 secs	-	-	-	-	0.2	0.0	20.8	0.0	-	0	-	0	-	-
R22-BH103	1	50	4/2	---	---	0.50 to 1.00	30 secs	-	-	-	-	0.3	0.0	20.8	0.0	-	0	-	0	-	-
R22-BH103	1	50	4/2	---	---	0.50 to 1.00	60 secs	-	-	-	-	0.2	0.0	20.8	0.0	-	0	-	0	-	-
R22-BH103	1	50	4/2	---	---	0.50 to 1.00	91 secs	-	-	-	-	0.2	0.0	20.8	0.0	-	0	-	0	-	-
R22-BH103	1	50	4/2	---	---	0.50 to 1.00	122 secs	-	-	-	-	0.2	0.0	20.8	0.0	-	0	-	0	-	-

Key: I = Initial, Min = Minimum, P = Peak, SS = Steady State. >>> = exceeds range.
Abbreviations: CO_2 = Carbon Dioxide, CH_4 = Methane, O_2 = Oxygen, LEL = Lower Explosive Limit, PID = Photo Ionisation Detector Reading, CO = Carbon Monoxide, H_2 = Hydrogen, H_2S = Hydrogen Sulphide, NH_3 = Ammonia, N_2 = Nitrogen.
Note: Lower Explosive Limit (LEL) = 5% v/v of Methane.

IN-SITU GAS MONITORING RESULTS

Exploratory Position ID	Pipe ref	Pipe Diameter (mm)	Monitoring Round / Test Number	Reported Installation Depth (mbgl)	Measured Installation Depth (mbgl)	Response Zone (m)	Date & Time of Monitoring (elapsed time)	Borehole Pressure (mb)	Atmos Pressure (mb)	Gas Flow (l/hr)	Water Depth (mbgl)	CO_2 (% / vol)	CH_4 (% / vol)	O_2 (% / vol)	LEL (%)	PID (ppm)	CO (ppm)	H_2 (% / vol)	H_2S (ppm)	NH_3 (ppm)	N_2 (% / vol)
R22-BH103	1	50	4/2	---	---	0.50 to 1.00	182 secs	-	-	-	-	0.1	0.0	20.8	0.0	-	0	-	0	-	-
R22-BH103	1	50	4/2	---	---	0.50 to 1.00	243 secs	-	-	-	-	0.1	0.0	20.8	0.0	-	0	-	0	-	-
R22-BH103	1	50	4/2	---	---	0.50 to 1.00	303 secs	-	-	-	-	0.1	0.0	20.9	0.0	-	0	-	0	-	-
R22-BH103	1	50	4/3	1.00	1.02	0.50 to 1.00	18/01/2024 09:34:08	-	-	-	0.08	-	-	-	-	0.0	-	-	-	-	-
R22-BH103	2	50	1	6.00	---	3.00 to 6.00	29/11/2023 08:45:00	-	-	$0.0_{(I)}$	-	-	-	-	-	-	-	-	-	-	-
R22-BH103	2	50	1	---	---	3.00 to 6.00	30 secs	-	-	$0.0_{(SS)}$	-	-	-	-	-	-	-	-	-	-	-
R22-BH103	2	50	1/2	6.00	---	3.00 to 6.00	29/11/2023 08:47:00	-	-	-	-	0.7	0.0	20.5	0.0	-	3	-	0	-	-
R22-BH103	2	50	1/2	---	---	3.00 to 6.00	60 secs	-	-	-	-	0.4	0.0	20.6	0.0	-	0	-	0	-	-
R22-BH103	2	50	1/2	---	---	3.00 to 6.00	120 secs	-	-	-	-	0.3	0.0	20.6	0.0	-	0	-	0	-	-
R22-BH103	2	50	1/2	---	---	3.00 to 6.00	180 secs	-	-	-	-	0.3	0.0	20.5	0.0	-	0	-	0	-	-
R22-BH103	2	50	1/2	---	---	3.00 to 6.00	240 secs	-	-	-	-	0.3	0.0	20.5	0.0	-	0	-	0	-	-
R22-BH103	2	50	1/2	---	---	3.00 to 6.00	300 secs	-	-	-	-	0.3	0.0	20.5	0.0	-	0	-	0	-	-
R22-BH103	2	50	1/3	6.00	5.80	3.00 to 6.00	29/11/2023 08:55:00	-	-	-	0.54	-	-	-	PEAK AT 0.1 STEADY AT 0.0			-	-	-	-
		Remarks: R22-BH103D																			
R22-BH103	2	50	2	6.00	---	3.00 to 6.00	13/12/2023 09:07:04	1003	998	$-0.2_{(I)}$	-	-	-	-	-	-	-	-	-	-	-
R22-BH103	2	50	2	---	---	3.00 to 6.00	5 secs	-	-	$-2.6_{(SS)}$	-	-	-	-	-	-	-	-	-	-	-
R22-BH103	2	50	2/2	6.00	---	3.00 to 6.00	13/12/2023 09:09:48	-	-	-	-	0.1	0.0	20.9	0.0	-	0	-	0	-	-
R22-BH103	2	50	2/2	---	---	3.00 to 6.00	15 secs	-	-	-	-	5.5	0.0	19.4	0.0	-	2	-	0	-	-
R22-BH103	2	50	2/2	---	---	3.00 to 6.00	30 secs	-	-	-	-	5.6	0.0	18.3	0.0	-	2	-	0	-	-
R22-BH103	2	50	2/2	---	---	3.00 to 6.00	60 secs	-	-	-	-	5.6	0.0	18.2	0.0	-	3	-	0	-	-
R22-BH103	2	50	2/2	---	---	3.00 to 6.00	91 secs	-	-	-	-	5.6	0.0	18.2	0.0	-	3	-	0	-	-
R22-BH103	2	50	2/2	---	---	3.00 to 6.00	120 secs	-	-	-	-	5.5	0.0	18.3	0.0	-	2	-	0	-	-
R22-BH103	2	50	2/3	6.00	5.97	3.00 to 6.00	13/12/2023 09:15:59	-	-	-	0.33	-	-	-	-	-	-	-	-	-	-
R22-BH103	2	50	3	6.00	---	3.00 to 6.00	03/01/2024 08:45:04	992	992	$0.0_{(I)}$	-	-	-	-	-	-	-	-	-	-	-

Key: I = Initial, Min = Minimum, P = Peak, SS = Steady State. >>> = exceeds range.
Abbreviations: CO_2 = Carbon Dioxide, CH_4 = Methane, O_2 = Oxygen, LEL = Lower Explosive Limit, PID = Photo Ionisation Detector Reading, CO = Carbon Monoxide, H_2 = Hydrogen, H_2S = Hydrogen Sulphide, NH_3 = Ammonia, N_2 = Nitrogen.
Note: Lower Explosive Limit (LEL) = 5% v/v of Methane.

IN-SITU GAS MONITORING RESULTS

Exploratory Position ID	Pipe ref	Pipe Diameter (mm)	Monitoring Round / Test Number	Reported Installation Depth (mbgl)	Measured Installation Depth (mbgl)	Response Zone (m)	Date & Time of Monitoring (elapsed time)	Borehole Pressure (mb)	Atmos Pressure (mb)	Gas Flow (l/hr)	Water Depth (mbgl)	CO_2 (% / vol)	CH_4 (% / vol)	O_2 (% / vol)	LEL (%)	PID (ppm)	CO (ppm)	H_2 (% / vol)	H_2S (ppm)	NH_3 (ppm)	N_2 (% / vol)
R22-BH103	2	50	3	---	---	3.00 to 6.00	30 secs	-	-	$0.0_{(SS)}$	-	-	-	-	-	-	-	-	-	-	-
R22-BH103	2	50	3/2	6.00	---	3.00 to 6.00	03/01/2024 08:47:40	-	-	-	-	0.1	0.0	20.9	0.0	-	0	-	0	-	-
R22-BH103	2	50	3/2	---	---	3.00 to 6.00	15 secs	-	-	-	-	0.5	0.0	20.6	0.0	-	4	-	0	-	-
R22-BH103	2	50	3/2	---	---	3.00 to 6.00	30 secs	-	-	-	-	0.5	0.0	20.3	0.0	-	5	-	0	-	-
R22-BH103	2	50	3/2	---	---	3.00 to 6.00	60 secs	-	-	-	-	0.5	0.0	20.1	0.0	-	5	-	1	-	-
R22-BH103	2	50	3/3	6.00	5.98	3.00 to 6.00	03/01/2024 09:03:23	-	-	-	0.33	-	-	-	-	0.2	-	-	-	-	-
		Remarks: Water interference before final reading.																			
R22-BH103	2	50	4	6.00	---	3.00 to 6.00	18/01/2024 10:16:14	1004	1004	$0.0_{(I)}$	-	-	-	-	-	-	-	-	-	-	-
R22-BH103	2	50	4	---	---	3.00 to 6.00	5 secs	-	-	$0.0_{(SS)}$	-	-	-	-	-	-	-	-	-	-	-
R22-BH103	2	50	4/2	6.00	---	3.00 to 6.00	18/01/2024 10:18:12	-	-	-	-	0.1	0.0	20.9	0.0	-	0	-	0	-	-
R22-BH103	2	50	4/2	---	---	3.00 to 6.00	16 secs	-	-	-	-	1.9	0.0	20.7	0.0	-	1	-	0	-	-
R22-BH103	2	50	4/2	---	---	3.00 to 6.00	31 secs	-	-	-	-	1.6	0.0	20.5	0.0	-	0	-	0	-	-
R22-BH103	2	50	4/2	---	---	3.00 to 6.00	61 secs	-	-	-	-	1.3	0.0	20.5	0.0	-	0	-	0	-	-
R22-BH103	2	50	4/2	---	---	3.00 to 6.00	91 secs	-	-	-	-	1.2	0.0	20.6	0.0	-	0	-	0	-	-
R22-BH103	2	50	4/2	---	---	3.00 to 6.00	121 secs	-	-	-	-	1.0	0.0	20.6	0.0	-	0	-	0	-	-
R22-BH103	2	50	4/2	---	---	3.00 to 6.00	181 secs	-	-	-	-	0.8	0.0	20.6	0.0	-	0	-	0	-	-
R22-BH103	2	50	4/2	---	---	3.00 to 6.00	241 secs	-	-	-	-	0.6	0.0	20.6	0.0	-	0	-	0	-	-
R22-BH103	2	50	4/2	---	---	3.00 to 6.00	301 secs	-	-	-	-	0.5	0.0	20.5	0.0	-	0	-	0	-	-
R22-BH103	2	50	4/3	6.00	5.99	3.00 to 6.00	18/01/2024 10:26:16	-	-	-	0.28	-	-	-	-	0.2	-	-	-	-	-
R22-BH104	1	50	1	6.00	---	3.00 to 6.00	29/11/2023 09:45:00	-	-	$0.0_{(I)}$	-	-	-	-	-	-	-	-	-	-	-
R22-BH104	1	50	1	---	---	3.00 to 6.00	30 secs	-	-	$0.2_{(SS)}$	-	-	-	-	-	-	-	-	-	-	-
R22-BH104	1	50	1/2	6.00	---	3.00 to 6.00	29/11/2023 09:48:00	-	-	-	-	0.0	0.5	19.8	10.0	-	3	-	0	-	-
R22-BH104	1	50	1/2	---	---	3.00 to 6.00	60 secs	-	-	-	-	0.0	0.6	19.8	12.0	-	3	-	0	-	-

Key: I = Initial, Min = Minimum, P = Peak, SS = Steady State. >>> = exceeds range.
Abbreviations: CO_2 = Carbon Dioxide, CH_4 = Methane, O_2 = Oxygen, LEL = Lower Explosive Limit, PID = Photo Ionisation Detector Reading, CO = Carbon Monoxide, H_2 = Hydrogen, H_2S = Hydrogen Sulphide, NH_3 = Ammonia, N_2 = Nitrogen.
Note: Lower Explosive Limit (LEL) = 5% v/v of Methane.

IN-SITU GAS MONITORING RESULTS

Exploratory Position ID	Pipe ref	Pipe Diameter (mm)	Monitoring Round / Test Number	Reported Installation Depth (mbgl)	Measured Installation Depth (mbgl)	Response Zone (m)	Date & Time of Monitoring (elapsed time)	Borehole Pressure (mb)	Atmos Pressure (mb)	Gas Flow (l/hr)	Water Depth (mbgl)	CO_2 (% / vol)	CH_4 (% / vol)	O_2 (% / vol)	LEL (%)	PID (ppm)	CO (ppm)	H_2 (% / vol)	H_2S (ppm)	NH_3 (ppm)	N_2 (% / vol)
R22-BH104	1	50	1/2	---	---	3.00 to 6.00	120 secs	-	-	-	-	0.0	0.6	19.8	12.0	-	3	-	0	-	-
R22-BH104	1	50	1/2	---	---	3.00 to 6.00	180 secs	-	-	-	-	0.0	0.6	19.8	12.0	-	2	-	0	-	-
R22-BH104	1	50	1/3	6.00	6.08	3.00 to 6.00	29/11/2023 09:54:00	-	-	-	0.44	-	-	-	PEAK AT 0.0 STEADY AT 0.0			-	-	-	-
		Remarks: R22-BH104/HAD TO STOP DUE TO WATER SUCTION																			
R22-BH105	1	50	1	3.00	---	0.80 to 3.00	29/11/2023 09:23:00	-	-	$0.0_{(I)}$	-	-	-	-	-	-	-	-	-	-	-
R22-BH105	1	50	1	---	---	0.80 to 3.00	30 secs	-	-	$0.1_{(SS)}$	-	-	-	-	-	-	-	-	-	-	-
R22-BH105	1	50	1/2	3.00	---	0.80 to 3.00	29/11/2023 09:25:00	1005	1005	-	-	0.1	0.0	20.9	0.0	-	0	-	0	-	-
R22-BH105	1	50	1/2	---	---	0.80 to 3.00	60 secs	-	-	-	-	0.1	0.0	20.7	0.0	-	0	-	0	-	-
R22-BH105	1	50	1/2	---	---	0.80 to 3.00	120 secs	-	-	-	-	0.1	0.0	21.0	0.0	-	0	-	0	-	-
R22-BH105	1	50	1/2	---	---	0.80 to 3.00	180 secs	-	-	-	-	0.1	0.0	21.0	0.0	-	0	-	0	-	-
R22-BH105	1	50	1/2	---	---	0.80 to 3.00	240 secs	-	-	-	-	0.1	0.0	21.0	0.0	-	0	-	0	-	-
R22-BH105	1	50	1/2	---	---	0.80 to 3.00	300 secs	-	-	-	-	0.1	0.0	21.0	0.0	-	0	-	0	-	-
R22-BH105	1	50	1/3	3.00	2.83	0.80 to 3.00	29/11/2023 09:33:00	-	-	-	-0.02	-	-	-	PEAK AT 0.0 STEADY AT 0.0			-	-	-	-
		Remarks: R22-BH105																			
R22-BH105	1	50	2	3.00	---	0.80 to 3.00	13/12/2023 11:19:58	1001	999	$0.1_{(I)}$	-	-	-	-	-	-	-	-	-	-	-
R22-BH105	1	50	2	---	---	0.80 to 3.00	5 secs	-	-	$0.4_{(SS)}$	-	-	-	-	-	-	-	-	-	-	-
R22-BH105	1	50	2/2	3.00	---	0.80 to 3.00	13/12/2023 11:20:08	-	-	-	-	0.1	0.0	20.9	0.0	-	0	-	0	-	-
R22-BH105	1	50	2/2	---	---	0.80 to 3.00	65 secs	-	-	-	-	0.1	0.0	20.8	0.0	-	0	-	0	-	-
R22-BH105	1	50	2/2	---	---	0.80 to 3.00	80 secs	-	-	-	-	0.1	0.0	20.8	0.0	-	0	-	0	-	-
R22-BH105	1	50	2/2	---	2.61	0.80 to 3.00	95 secs	-	-	-	-0.01	-	-	-	-	0.0	-	-	-	-	-
R22-BH105	1	50	3	3.00	---	0.80 to 3.00	03/01/2024 12:03:53	991	991	$0.0_{(I)}$	-	-	-	-	-	-	-	-	-	-	-
R22-BH105	1	50	3	---	---	0.80 to 3.00	30 secs	-	-	$0.0_{(SS)}$	-	-	-	-	-	-	-	-	-	-	-
R22-BH105	1	50	3/2	3.00	---	0.80 to 3.00	03/01/2024 12:06:43	-	-	-	-	0.1	0.0	20.9	0.0	-	0	-	0	-	-
R22-BH105	1	50	3/2	---	---	0.80 to 3.00	15 secs	-	-	-	-	0.2	0.0	20.8	0.0	-	0	-	0	-	-

Key: I = Initial, Min = Minimum, P = Peak, SS = Steady State. >>> = exceeds range.
Abbreviations: CO_2 = Carbon Dioxide, CH_4 = Methane, O_2 = Oxygen, LEL = Lower Explosive Limit, PID = Photo Ionisation Detector Reading, CO = Carbon Monoxide, H_2 = Hydrogen, H_2S = Hydrogen Sulphide, NH_3 = Ammonia, N_2 = Nitrogen.
Note: Lower Explosive Limit (LEL) = 5% v/v of Methane.

IN-SITU GAS MONITORING RESULTS

Exploratory Position ID	Pipe ref	Pipe Diameter (mm)	Monitoring Round / Test Number	Reported Installation Depth (mbgl)	Measured Installation Depth (mbgl)	Response Zone (m)	Date & Time of Monitoring (elapsed time)	Borehole Pressure (mb)	Atmos Pressure (mb)	Gas Flow (l/hr)	Water Depth (mbgl)	CO_2 (% / vol)	CH_4 (% / vol)	O_2 (% / vol)	LEL (%)	PID (ppm)	CO (ppm)	H_2 (% / vol)	H_2S (ppm)	NH_3 (ppm)	N_2 (% / vol)
R22-BH105	1	50	3/2	---	---	0.80 to 3.00	31 secs	-	-	-	-	0.1	0.0	20.9	0.0	-	0	-	0	-	-
R22-BH105	1	50	3/2	---	---	0.80 to 3.00	61 secs	-	-	-	-	0.1	0.0	20.9	0.0	-	0	-	0	-	-
R22-BH105	1	50	3/2	---	---	0.80 to 3.00	91 secs	-	-	-	-	0.1	0.0	20.9	0.0	-	0	-	0	-	-
R22-BH105	1	50	3/3	3.00	2.58	0.80 to 3.00	03/01/2024 12:11:04	-	-	-	0.01	-	-	-	-	0.0	-	-	-	-	-
		Remarks: Water interference																			
R22-BH105	1	50	4	3.00	---	0.80 to 3.00	18/01/2024 12:01:33	1006	1006	$0.0_{(I)}$	-	-	-	-	-	-	-	-	-	-	-
R22-BH105	1	50	4	---	---	0.80 to 3.00	5 secs	-	-	$0.0_{(SS)}$	-	-	-	-	-	-	-	-	-	-	-
R22-BH105	1	50	4/2	3.00	---	0.80 to 3.00	18/01/2024 12:03:09	-	-	-	-	0.1	0.0	20.9	0.0	-	0	-	0	-	-
R22-BH105	1	50	4/2	---	---	0.80 to 3.00	15 secs	-	-	-	-	1.8	0.3	20.8	0.0	-	6	-	0	-	-
R22-BH105	1	50	4/2	---	---	0.80 to 3.00	31 secs	-	-	-	-	1.7	0.3	20.5	0.0	-	6	-	0	-	-
R22-BH105	1	50	4/2	---	---	0.80 to 3.00	62 secs	-	-	-	-	1.2	0.2	20.6	0.0	-	4	-	0	-	-
R22-BH105	1	50	4/2	---	---	0.80 to 3.00	93 secs	-	-	-	-	0.9	0.1	20.7	0.0	-	2	-	0	-	-
R22-BH105	1	50	4/2	---	---	0.80 to 3.00	123 secs	-	-	-	-	0.6	0.1	20.8	0.0	-	2	-	0	-	-
R22-BH105	1	50	4/2	---	---	0.80 to 3.00	183 secs	-	-	-	-	0.4	0.0	20.9	0.0	-	0	-	0	-	-
R22-BH105	1	50	4/2	---	---	0.80 to 3.00	243 secs	-	-	-	-	0.3	0.0	20.9	0.0	-	0	-	0	-	-
R22-BH105	1	50	4/2	---	---	0.80 to 3.00	303 secs	-	-	-	-	0.3	0.0	20.9	-	-	0	-	0	-	-
R22-BH105	1	50	4/3	3.00	2.56	0.80 to 3.00	18/01/2024 12:10:45	-	-	-	0.48	-	-	-	-	0.0	-	-	-	-	-
R22-BH204	1	50	1	29.00	---	27.00 to 29.00	29/11/2023 14:08:00	-	-	$0.0_{(I)}$	-	-	-	-	-	-	-	-	-	-	-
R22-BH204	1	50	1	---	---	27.00 to 29.00	30 secs	-	-	$0.0_{(SS)}$	-	-	-	-	-	-	-	-	-	-	-
R22-BH204	1	50	1/2	29.00	---	27.00 to 29.00	29/11/2023 14:10:00	-	-	-	-	0.5	0.0	20.3	0.0	-	4	-	0	-	-
R22-BH204	1	50	1/2	---	---	27.00 to 29.00	60 secs	-	-	-	-	0.4	0.0	20.4	0.0	-	3	-	0	-	-
R22-BH204	1	50	1/2	---	---	27.00 to 29.00	120 secs	-	-	-	-	0.3	0.0	20.5	0.0	-	3	-	0	-	-
R22-BH204	1	50	1/2	---	---	27.00 to 29.00	180 secs	-	-	-	-	0.3	0.0	20.5	0.0	-	2	-	0	-	-

Key: I = Initial, Min = Minimum, P = Peak, SS = Steady State. >>> = exceeds range.
Abbreviations: CO_2 = Carbon Dioxide, CH_4 = Methane, O_2 = Oxygen, LEL = Lower Explosive Limit, PID = Photo Ionisation Detector Reading, CO = Carbon Monoxide, H_2 = Hydrogen, H_2S = Hydrogen Sulphide, NH_3 = Ammonia, N_2 = Nitrogen.
Note: Lower Explosive Limit (LEL) = 5% v/v of Methane.

IN-SITU GAS MONITORING RESULTS

Exploratory Position ID	Pipe ref	Pipe Diameter (mm)	Monitoring Round / Test Number	Reported Installation Depth (mbgl)	Measured Installation Depth (mbgl)	Response Zone (m)	Date & Time of Monitoring (elapsed time)	Borehole Pressure (mb)	Atmos Pressure (mb)	Gas Flow (l/hr)	Water Depth (mbgl)	CO_2 (% / vol)	CH_4 (% / vol)	O_2 (% / vol)	LEL (%)	PID (ppm)	CO (ppm)	H_2 (% / vol)	H_2S (ppm)	NH_3 (ppm)	N_2 (% / vol)
R22-BH204	1	50	1/2	---	---	27.00 to 29.00	240 secs	-	-	-	-	0.3	0.0	20.6	0.0	-	2	-	0	-	-
R22-BH204	1	50	1/2	---	---	27.00 to 29.00	300 secs	-	-	-	-	0.3	0.0	20.6	0.0	-	2	-	0	-	-
R22-BH204	1	50	1/3	29.00	27.58	27.00 to 29.00	29/11/2023 14:20:00	-	-	-	4.36	-	-	-	PEAK AT 0.0 STEADY AT 0.0			-	-	-	-
		Remarks: R22-BH204																			
R22-BH205	1	50	1	25.00	---	20.00 to 25.00	29/11/2023 15:09:00	-	-	$0.0_{(I)}$	-	-	-	-	-	-	-	-	-	-	-
R22-BH205	1	50	1	---	---	20.00 to 25.00	30 secs	-	-	$0.0_{(SS)}$	-	-	-	-	-	-	-	-	-	-	-
R22-BH205	1	50	1/2	25.00	---	20.00 to 25.00	29/11/2023 15:12:00	-	-	-	-	0.2	0.0	20.0	0.0	-	4	-	0	-	-
R22-BH205	1	50	1/2	---	---	20.00 to 25.00	60 secs	-	-	-	-	0.2	0.0	20.1	0.0	-	3	-	0	-	-
R22-BH205	1	50	1/2	---	---	20.00 to 25.00	120 secs	-	-	-	-	0.2	0.0	20.1	0.0	-	3	-	0	-	-
R22-BH205	1	50	1/2	---	---	20.00 to 25.00	180 secs	-	-	-	-	0.2	0.0	20.2	0.0	-	3	-	0	-	-
R22-BH205	1	50	1/2	---	---	20.00 to 25.00	240 secs	-	-	-	-	0.2	0.0	20.2	0.0	-	3	-	0	-	-
R22-BH205	1	50	1/3	25.00	24.70	20.00 to 25.00	29/11/2023 15:21:00	-	-	-	0.21	-	-	-	PEAK AT 0.0 STEADY AT 0.0			-	-	-	-
		Remarks: R22-BH205/HAD TO STOP DUE TO WATER SUCTION																			
R22-BH501	1	50	1	26.50	---	24.50 to 26.50	29/11/2023 08:06:00	-	-	$0.0_{(I)}$	-	-	-	-	-	-	-	-	-	-	-
R22-BH501	1	50	1	---	---	24.50 to 26.50	30 secs	-	-	$0.2_{(SS)}$	-	-	-	-	-	-	-	-	-	-	-
R22-BH501	1	50	1/2	26.50	---	24.50 to 26.50	29/11/2023 08:08:00	-	-	-	-	0.1	0.0	20.9	0.0	-	0	-	0	-	-
R22-BH501	1	50	1/2	---	---	24.50 to 26.50	60 secs	-	-	-	-	0.1	0.0	20.9	0.0	-	0	-	0	-	-
R22-BH501	1	50	1/3	26.50	24.06	24.50 to 26.50	29/11/2023 08:10:00	-	-	-	-0.10	-	-	-	PEAK AT 0.3 STEADY AT 0.0			-	-	-	-
		Remarks: R22-BH501/HAD TO STOP DUE TO WATER SUCTION																			
RedP-BH-6	1	50	1	15.00	---	10.00 to 15.00	29/11/2023 13:11:00	-	-	$0.0_{(I)}$	-	-	-	-	-	-	-	-	-	-	-
RedP-BH-6	1	50	1	---	---	10.00 to 15.00	30 secs	-	-	$0.0_{(SS)}$	-	-	-	-	-	-	-	-	-	-	-
RedP-BH-6	1	50	1/2	15.00	---	10.00 to 15.00	29/11/2023 13:13:00	-	-	-	-	1.6	0.2	18.2	4.0	-	1	-	0	-	-
RedP-BH-6	1	50	1/2	---	---	10.00 to 15.00	60 secs	-	-	-	-	1.6	0.2	14.9	4.0	-	1	-	0	-	-
RedP-BH-6	1	50	1/2	---	---	10.00 to 15.00	120 secs	-	-	-	-	1.6	0.2	15.0	4.0	-	1	-	0	-	-

Key: I = Initial, Min = Minimum, P = Peak, SS = Steady State. >>> = exceeds range.
Abbreviations: CO_2 = Carbon Dioxide, CH_4 = Methane, O_2 = Oxygen, LEL = Lower Explosive Limit, PID = Photo Ionisation Detector Reading, CO = Carbon Monoxide, H_2 = Hydrogen, H_2S = Hydrogen Sulphide, NH_3 = Ammonia, N_2 = Nitrogen.
Note: Lower Explosive Limit (LEL) = 5% v/v of Methane.

IN-SITU GAS MONITORING RESULTS

Exploratory Position ID	Pipe ref	Pipe Diameter (mm)	Monitoring Round / Test Number	Reported Installation Depth (mbgl)	Measured Installation Depth (mbgl)	Response Zone (m)	Date & Time of Monitoring (elapsed time)	Borehole Pressure (mb)	Atmos Pressure (mb)	Gas Flow (l/hr)	Water Depth (mbgl)	CO_2 (% / vol)	CH_4 (% / vol)	O_2 (% / vol)	LEL (%)	PID (ppm)	CO (ppm)	H_2 (% / vol)	H_2S (ppm)	NH_3 (ppm)	N_2 (% / vol)
RedP-BH-6	1	50	1/2	---	---	10.00 to 15.00	180 secs	-	-	-	-	1.4	0.2	15.5	4.0	-	1	-	0	-	-
RedP-BH-6	1	50	1/2	---	---	10.00 to 15.00	240 secs	-	-	-	-	1.2	0.2	16.6	4.0	-	1	-	0	-	-
RedP-BH-6	1	50	1/2	---	---	10.00 to 15.00	300 secs	-	-	-	-	1.0	0.1	17.4	2.0	-	1	-	0	-	-
RedP-BH-6	1	50	1/3	15.00	14.78	10.00 to 15.00	29/11/2023 13:21:00	-	-	-	1.66	-	-	-	PEAK AT 0.0 STEADY AT 0.0			-	-	-	-
		Remarks: RedP-BH-6																			
RedP-BH-8	1	50	1	16.00	---	11.00 to 16.00	29/11/2023 12:15:00	-	-	$0.0_{(I)}$	-	-	-	-	-	-	-	-	-	-	-
RedP-BH-8	1	50	1	---	---	11.00 to 16.00	30 secs	-	-	$0.1_{(SS)}$	-	-	-	-	-	-	-	-	-	-	-
RedP-BH-8	1	50	1/2	16.00	---	11.00 to 16.00	29/11/2023 12:17:00	-	-	-	-	0.2	0.0	20.7	0.0	-	1	-	0	-	-
RedP-BH-8	1	50	1/2	---	---	11.00 to 16.00	60 secs	-	-	-	-	0.3	0.0	20.5	0.0	-	1	-	0	-	-
RedP-BH-8	1	50	1/2	---	---	11.00 to 16.00	120 secs	-	-	-	-	0.3	0.0	20.5	0.0	-	1	-	0	-	-
RedP-BH-8	1	50	1/3	16.00	15.88	11.00 to 16.00	29/11/2023 12:23:00	-	-	-	0.43	-	-	-	PEAK AT 0.1 STEADY AT 0.0			-	-	-	-
		Remarks: RedP-BH-8/HAD TO STOP DUE TO WATER SUCTION																			

Key: I = Initial, Min = Minimum, P = Peak, SS = Steady State. >>> = exceeds range.
Abbreviations: CO_2 = Carbon Dioxide, CH_4 = Methane, O_2 = Oxygen, LEL = Lower Explosive Limit, PID = Photo Ionisation Detector Reading, CO = Carbon Monoxide, H_2 = Hydrogen, H_2S = Hydrogen Sulphide, NH_3 = Ammonia, N_2 = Nitrogen.
Note: Lower Explosive Limit (LEL) = 5% v/v of Methane.

IN-SITU MONITORING ROUNDS SUMMARY

Monitoring Round Reference	Round Description	Start Date	End Date	Atmospheric Pressure Prior to Monitoring (mb)	Atmospheric Pressure During Monitoring (mb)	Atmospheric Pressure at Start of Round (mb)	Atmospheric Pressure at End of Round (mb)	Equipment Used	Weather Conditions	Ground Conditions	Wind Conditions	Air Temp (°C)
F1	Water	30/10/2023	31/10/2023	---	---	---	---	Dipmeter	Rain	Wet	Light	---
1	Gas & Water	29/11/2023	30/11/2023	---	---	1005	1003	GA5000 + Dipmeter	Overcast	Wet	Light	3
2	Gas & Water	13/12/2023	14/12/2023	---	---	997	999	GA5000 + Dipmeter	Rain	Flooded	Medium	8
3	Gas & Water	03/01/2024	04/01/2024	---	---	992	991	GA5000 + Dipmeter	Clear	Flooded	Light	11
4	Gas & Water	18/01/2024	19/01/2024	---	---	1003	1006	GA5000 + Dipmeter	Clear,dry	Frost	Light	-1

Key: Dates in parenthesis after the equipment name refer to the calibration date

STRUCTURAL SOILS
18 Frogmore Road
Hemel Hempstead
Hertfordshire
HP3 9RT

Checked By: [redacted]

Date: **25/01/24**

Contract Ref: **563607**

Contract: **Sea Link - Richborough**

AGS

IN-SITU WATER MONITORING RESULTS

Exploratory Position ID	Ground Level (m AOD)	Pipe Ref	Pipe Diameter (mm)	Monitoring Round / Test Number	Reported Installation Depth (mbgl)	Measured Installation Depth (mbgl)	Response Zone (m)	Date & Time of Monitoring	Water Depth (mbgl)	Water Elevation (m AOD)	pH	ORP (mV)	Eh (mV)	Conduc-tivity (uS/cm)	Temp-erature (°C)	Dissolved Oxygen (mg/l)	Total Dissolved Solids (Multiple)
R22-BH102	1.586	1	50	F1 / 1	3.00	3.03	0.80 to 3.00	31/10/2023 10:33	0.55	1.04	---	---	---	---	---	---	---
R22-BH102	1.586	1	50	1 / 1	3.00	3.01	0.80 to 3.00	29/11/2023 14:27	0.10	1.49	---	---	---	---	---	---	---
R22-BH102	1.586	1	50	1 / 1	---	3.01	---	29/11/2023 14:42	0.10	1.49	7.95	197	394	7443	8.5	2.2	---
R22-BH102	1.586	1	50	2 / 1	3.00	3.04	0.80 to 3.00	13/12/2023 12:50	0.10	1.49	---	---	---	---	---	---	---
R22-BH102	1.586	1	50	2 / 2	3.00	3.04	0.80 to 3.00	13/12/2023 12:53	0.10	1.49	7.66	67	316	2980	9.3	0.7	---
R22-BH102	1.586	1	50	2 / 2	---	3.04	---	13/12/2023 12:56	0.10	1.49	7.61	41	290	2445	9.2	0.8	---
R22-BH102	1.586	1	50	2 / 2	---	3.04	---	13/12/2023 12:59	0.10	1.49	7.60	33	282	2319	8.9	0.8	---
R22-BH102	1.586	1	50	2 / 2	---	3.04	---	13/12/2023 13:02	0.10	1.49	7.59	25	274	2322	8.8	0.7	---
R22-BH102	1.586	1	50	2 / 2	---	3.04	---	13/12/2023 13:05	0.10	1.49	7.59	22	271	2324	8.8	0.7	---
R22-BH102	1.586	1	50	2 / 2	---	3.04	---	13/12/2023 13:08	0.10	1.49	7.59	19	268	2343	8.9	0.7	---
R22-BH102	1.586	1	50	2 / 2	---	3.04	---	13/12/2023 13:11	0.10	1.49	7.57	16	265	2362	8.9	0.7	---
	General Remarks: Water Sample Taken, 1.80m sample 1EW																
R22-BH102	1.586	1	50	3 / 1	3.00	3.03	0.80 to 3.00	03/01/2024 11:54	0.08	1.51	---	---	---	---	---	---	---
R22-BH102	1.586	1	50	3 / 2	3.00	3.03	0.80 to 3.00	03/01/2024 13:13	0.09	1.50	7.94	4	252	6105	9.6	4.3	---
R22-BH102	1.586	1	50	3 / 2	---	3.03	---	03/01/2024 13:16	0.11	1.48	7.86	-14	234	4544	9.6	2.4	---
R22-BH102	1.586	1	50	3 / 2	---	3.03	---	03/01/2024 13:19	0.13	1.46	7.77	-27	221	3230	9.6	1.3	---
R22-BH102	1.586	1	50	3 / 2	---	3.03	---	03/01/2024 13:22	0.15	1.44	7.74	-35	213	2842	9.6	1.1	---
R22-BH102	1.586	1	50	3 / 2	---	3.03	---	03/01/2024 13:25	0.16	1.43	7.72	-39	209	2697	9.7	1.1	---
R22-BH102	1.586	1	50	3 / 2	---	3.03	---	03/01/2024 13:28	0.17	1.42	7.71	-43	205	2601	9.7	1.0	---
R22-BH102	1.586	1	50	3 / 2	---	3.03	---	03/01/2024 13:31	0.20	1.39	7.70	-45	203	2544	9.7	1.0	---
R22-BH102	1.586	1	50	3 / 2	---	3.03	---	03/01/2024 13:34	0.23	1.36	7.70	-48	200	2483	9.8	1.1	---
R22-BH102	1.586	1	50	3 / 2	---	3.03	---	03/01/2024 13:37	0.26	1.33	7.70	-51	197	2447	9.8	1.0	---
R22-BH102	1.586	1	50	3 / 2	---	3.03	---	03/01/2024 13:40	0.29	1.30	7.70	-55	193	2414	9.8	1.0	---
R22-BH102	1.586	1	50	3 / 2	---	3.03	---	03/01/2024 13:43	0.32	1.27	7.69	-65	183	2383	9.8	1.0	---

Key: NDA denotes 'no data available'.

IN-SITU WATER MONITORING RESULTS

Exploratory Position ID	Ground Level (m AOD)	Pipe Ref	Pipe Diameter (mm)	Monitoring Round / Test Number	Reported Installation Depth (mbgl)	Measured Installation Depth (mbgl)	Response Zone (m)	Date & Time of Monitoring	Water Depth (mbgl)	Water Elevation (m AOD)	pH	ORP (mV)	Eh (mV)	Conduc-tivity (uS/cm)	Temp-erature (°C)	Dissolved Oxygen (mg/l)	Total Dissolved Solids (Multiple)
R22-BH102	1.586	1	50	3 / 2	---	3.03	---	03/01/2024 13:46	0.35	1.24	7.69	-64	184	2370	9.8	1.0	---
	General Remarks: Water Sample Taken, 1.50m sample 2EW																
R22-BH102	1.586	1	50	4 / 1	3.00	3.03	0.80 to 3.00	18/01/2024 08:10	0.31	1.28	---	---	---	---	---	---	---
R22-BH102	1.586	1	50	4 / 2	3.00	3.03	0.80 to 3.00	18/01/2024 08:23	0.31	1.28	8.08	-69	186	2541	4.0	5.8	---
R22-BH102	1.586	1	50	4 / 2	---	3.03	---	18/01/2024 08:26	0.37	1.22	7.89	-73	182	2527	4.0	2.3	---
R22-BH102	1.586	1	50	4 / 2	---	3.03	---	18/01/2024 08:29	0.45	1.14	7.80	-74	181	2472	3.8	1.7	---
R22-BH102	1.586	1	50	4 / 2	---	3.03	---	18/01/2024 08:32	0.54	1.05	7.75	-75	181	2452	3.7	1.5	---
R22-BH102	1.586	1	50	4 / 2	---	3.03	---	18/01/2024 08:35	0.63	0.96	7.72	-76	180	2442	3.6	1.4	---
	General Remarks: Water Sample Taken, 1.80m sample 3EW																
R22-BH103	1.322	1	50	F1 / 1	1.00	1.00	0.50 to 1.00	31/10/2023 10:21	0.08	1.24	---	---	---	---	---	---	---
R22-BH103	1.322	1	50	1 / 1	1.00	1.00	0.50 to 1.00	29/11/2023 14:20	0.00	1.32	---	---	---	---	---	---	---
	General Remarks: Purge completed between 14:21 and 14:27. Total purge taken 6 litres.																
R22-BH103	1.322	1	50	1 / 2	1.00	1.00	0.50 to 1.00	29/11/2023 14:26	0.00	1.32	7.13	245	492	24040	10.1	5.8	---
R22-BH103	1.322	1	50	2 / 1	1.00	1.02	0.50 to 1.00	14/12/2023 09:29	0.03	1.29	---	---	---	---	---	---	---
R22-BH103	1.322	1	50	2 / 2	1.00	1.02	0.50 to 1.00	14/12/2023 09:31	0.03	1.29	7.05	-23	228	2907	7.2	3.7	---
R22-BH103	1.322	1	50	2 / 2	---	1.02	---	14/12/2023 09:34	0.11	1.21	7.07	-31	219	2601	7.9	1.4	---
R22-BH103	1.322	1	50	2 / 2	---	1.02	---	14/12/2023 09:37	0.19	1.13	7.07	-38	212	2486	8.2	0.9	---
R22-BH103	1.322	1	50	2 / 2	---	1.02	---	14/12/2023 09:40	0.27	1.05	7.08	-41	209	2412	8.2	0.8	---
R22-BH103	1.322	1	50	2 / 2	---	1.02	---	14/12/2023 09:43	0.35	0.97	7.09	-43	207	2364	8.2	0.7	---
R22-BH103	1.322	1	50	2 / 2	---	1.02	---	14/12/2023 09:46	0.43	0.89	7.09	-45	205	2408	8.3	0.7	---
R22-BH103	1.322	1	50	2 / 2	---	1.02	---	14/12/2023 09:49	0.51	0.81	7.07	-47	202	2490	8.4	0.6	---
R22-BH103	1.322	1	50	2 / 2	---	1.02	---	14/12/2023 09:52	0.59	0.73	7.07	-48	201	2477	8.4	0.6	---
	General Remarks: Water Sample Taken, 0.80m sample 1EW																
R22-BH103	1.322	1	50	3 / 1	1.00	1.02	0.50 to 1.00	03/01/2024 08:52	0.02	1.30	---	---	---	---	---	---	---

Key: NDA denotes 'no data available'.

IN-SITU WATER MONITORING RESULTS

Exploratory Position ID	Ground Level (m AOD)	Pipe Ref	Pipe Diameter (mm)	Monitoring Round / Test Number	Reported Installation Depth (mbgl)	Measured Installation Depth (mbgl)	Response Zone (m)	Date & Time of Monitoring	Water Depth (mbgl)	Water Elevation (m AOD)	pH	ORP (mV)	Eh (mV)	Conduc-tivity (uS/cm)	Temp-erature (°C)	Dissolved Oxygen (mg/l)	Total Dissolved Solids (Multiple)
R22-BH103	1.322	1	50	3 / 1	1.00	0.99	0.50 to 1.00	03/01/2024 09:50	-0.02	1.34	---	---	---	---	---	---	---
R22-BH103	1.322	1	50	3 / 2	1.00	0.99	0.50 to 1.00	03/01/2024 09:57	-0.01	1.33	7.22	-60	187	2195	10.1	2.3	---
R22-BH103	1.322	1	50	3 / 2	---	0.99	---	03/01/2024 10:00	0.07	1.26	7.26	-64	184	2158	9.9	1.5	---
R22-BH103	1.322	1	50	3 / 2	---	0.99	---	03/01/2024 10:03	0.14	1.19	7.29	-66	182	2110	9.8	1.3	---
R22-BH103	1.322	1	50	3 / 2	---	0.99	---	03/01/2024 10:06	0.20	1.13	7.29	-66	181	2089	9.8	1.2	---
R22-BH103	1.322	1	50	3 / 2	---	0.99	---	03/01/2024 10:09	0.26	1.07	7.29	-67	181	2079	9.8	1.3	---
R22-BH103	1.322	1	50	3 / 2	---	0.99	---	03/01/2024 10:12	0.32	1.01	7.29	-67	181	2060	9.8	1.3	---
	General Remarks: Water Sample Taken, 0.80m sample 2EW																
R22-BH103	1.322	1	50	4 / 1	1.00	1.02	0.50 to 1.00	18/01/2024 09:34	0.08	1.24	---	---	---	---	---	---	---
R22-BH103	1.322	1	50	4 / 2	1.00	1.02	0.50 to 1.00	18/01/2024 09:56	0.08	1.24	7.76	-48	209	1425	3.0	10.2	---
R22-BH103	1.322	1	50	4 / 2	---	1.02	---	18/01/2024 09:59	0.13	1.19	7.69	-54	202	1409	3.3	8.0	---
R22-BH103	1.322	1	50	4 / 2	---	1.02	---	18/01/2024 10:02	0.18	1.14	7.68	-56	200	1407	3.5	7.6	---
R22-BH103	1.322	1	50	4 / 2	---	1.02	---	18/01/2024 10:05	0.23	1.09	7.69	-56	200	1425	3.5	7.0	---
R22-BH103	1.322	1	50	4 / 2	---	1.02	---	18/01/2024 10:08	0.28	1.04	7.68	-58	198	1437	3.5	7.0	---
R22-BH103	1.322	1	50	4 / 2	---	1.02	---	18/01/2024 10:11	0.33	0.99	7.68	-57	199	1444	3.6	6.8	---
	General Remarks: Water Sample Taken, 0.80m sample 3EW																
R22-BH103	1.322	2	50	F1 / 1	6.00	6.01	3.00 to 6.00	31/10/2023 10:22	0.84	0.48	---	---	---	---	---	---	---
R22-BH103	1.322	2	50	1 / 1	6.00	5.80	3.00 to 6.00	29/11/2023 13:40	0.54	0.78	---	---	---	---	---	---	---
R22-BH103	1.322	2	50	1 / 2	6.00	5.80	3.00 to 6.00	29/11/2023 14:18	0.54	0.78	6.66	271	517	23815	11.1	3.3	---
R22-BH103	1.322	2	50	2 / 1	6.00	5.97	3.00 to 6.00	14/12/2023 08:30	0.35	0.97	---	---	---	---	---	---	---
R22-BH103	1.322	2	50	2 / 2	6.00	5.97	3.00 to 6.00	14/12/2023 08:33	0.35	0.97	6.70	71	319	3841	9.1	6.5	---
R22-BH103	1.322	2	50	2 / 2	---	5.97	---	14/12/2023 08:36	0.41	0.91	6.75	8	256	3919	9.5	1.2	---
R22-BH103	1.322	2	50	2 / 2	---	5.97	---	14/12/2023 08:39	0.47	0.85	6.76	-17	231	3934	9.6	1.0	---
R22-BH103	1.322	2	50	2 / 2	---	5.97	---	14/12/2023 08:42	0.53	0.79	6.77	-41	207	3946	9.8	0.8	---

Key: NDA denotes 'no data available'.

IN-SITU WATER MONITORING RESULTS

Exploratory Position ID	Ground Level (m AOD)	Pipe Ref	Pipe Diameter (mm)	Monitoring Round / Test Number	Reported Installation Depth (mbgl)	Measured Installation Depth (mbgl)	Response Zone (m)	Date & Time of Monitoring	Water Depth (mbgl)	Water Elevation (m AOD)	pH	ORP (mV)	Eh (mV)	Conduc-tivity (uS/cm)	Temp-erature (°C)	Dissolved Oxygen (mg/l)	Total Dissolved Solids (Multiple)
R22-BH103	1.322	2	50	2 / 2	---	5.97	---	14/12/2023 08:45	0.59	0.73	6.78	-50	198	3958	9.8	0.8	---
R22-BH103	1.322	2	50	2 / 2	---	5.97	---	14/12/2023 08:48	0.65	0.67	6.78	-52	196	3960	9.9	0.7	---
R22-BH103	1.322	2	50	2 / 2	---	5.97	---	14/12/2023 08:51	0.71	0.61	6.79	-53	194	3963	9.9	0.7	---
R22-BH103	1.322	2	50	2 / 2	---	5.97	---	14/12/2023 08:54	0.77	0.55	6.78	-55	192	3964	9.9	0.7	---
	General Remarks: Water Sample Taken, 4.00m sample 1EW																
R22-BH103	1.322	2	50	3 / 2	6.00	5.98	3.00 to 6.00	03/01/2024 09:03	0.33	0.99	---	---	---	---	---	---	---
R22-BH103	1.322	2	50	3 / 1	6.00	6.01	3.00 to 6.00	03/01/2024 10:58	0.36	0.96	---	---	---	---	---	---	---
R22-BH103	1.322	2	50	3 / 2	6.00	6.01	3.00 to 6.00	03/01/2024 10:59	0.37	0.95	7.03	13	262	3747	9.1	6.6	---
R22-BH103	1.322	2	50	3 / 2	---	6.01	---	03/01/2024 11:02	0.44	0.88	6.94	-28	220	3804	9.3	2.3	---
R22-BH103	1.322	2	50	3 / 2	---	6.01	---	03/01/2024 11:05	0.52	0.80	6.93	-40	208	3833	9.4	1.3	---
R22-BH103	1.322	2	50	3 / 2	---	6.01	---	03/01/2024 11:08	0.59	0.73	6.93	-40	208	3841	9.5	1.1	---
R22-BH103	1.322	2	50	3 / 2	---	6.01	---	03/01/2024 11:11	0.73	0.59	6.93	-40	208	3582	9.5	1.0	---
	General Remarks: Water Sample Taken, 4.00m sample 2EW																
R22-BH103	1.322	2	50	4 / 1	6.00	5.98	3.00 to 6.00	18/01/2024 10:26	0.28	1.04	---	---	---	---	---	---	---
R22-BH103	1.322	2	50	4 / 2	6.00	5.98	3.00 to 6.00	18/01/2024 10:49	0.28	1.04	7.07	-65	164	3942	4.8	4.0	---
R22-BH103	1.322	2	50	4 / 2	---	5.98	---	18/01/2024 10:52	0.31	1.01	6.99	-91	160	3990	4.4	2.6	---
R22-BH103	1.322	2	50	4 / 2	---	5.98	---	18/01/2024 10:55	0.34	0.98	6.97	-95	162	4002	4.3	2.6	---
R22-BH103	1.322	2	50	4 / 2	---	5.98	---	18/01/2024 10:58	0.37	0.95	6.96	-93	163	4010	4.2	2.5	---
R22-BH103	1.322	2	50	4 / 2	---	5.98	---	18/01/2024 11:01	0.40	0.92	6.96	-92	164	4006	4.3	2.1	---
R22-BH103	1.322	2	50	4 / 2	---	5.98	---	18/01/2024 11:04	0.43	0.89	6.96	-91	165	4002	4.4	1.9	---
R22-BH103	1.322	2	50	4 / 2	---	5.98	---	18/01/2024 11:07	0.46	0.86	6.96	-90	261	3999	4.4	1.8	---
	General Remarks: Water Sample Taken, 4.00m sample 3EW																
R22-BH104	1.360	1	50	F1 / 1	6.00	6.10	3.00 to 6.00	31/10/2023 10:03	0.84	0.52	---	---	---	---	---	---	---
R22-BH104	1.360	1	50	1 / 1	6.00	6.08	3.00 to 6.00	29/11/2023 14:47	0.44	0.93	---	---	---	---	---	---	---

Key: NDA denotes 'no data available'.

IN-SITU WATER MONITORING RESULTS

Exploratory Position ID	Ground Level (m AOD)	Pipe Ref	Pipe Diameter (mm)	Monitoring Round / Test Number	Reported Installation Depth (mbgl)	Measured Installation Depth (mbgl)	Response Zone (m)	Date & Time of Monitoring	Water Depth (mbgl)	Water Elevation (m AOD)	pH	ORP (mV)	Eh (mV)	Conduc-tivity (uS/cm)	Temp-erature (°C)	Dissolved Oxygen (mg/l)	Total Dissolved Solids (Multiple)
R22-BH104	1.360	1	50	1 / 1	---	6.08	---	29/11/2023 15:07	0.44	0.93	7.66	206	412	5437	6.5	9.3	---
R22-BH104	1.360	1	50	2 / 1	6.00	6.13	3.00 to 6.00	13/12/2023 09:51	0.49	0.87	---	---	---	---	---	---	---
R22-BH104	1.360	1	50	2 / 2	6.00	6.13	3.00 to 6.00	13/12/2023 10:12	0.50	0.86	7.04	-98	147	1965	11.5	1.3	---
R22-BH104	1.360	1	50	2 / 2	---	6.13	---	13/12/2023 10:15	0.55	0.81	7.06	-96	149	1972	11.6	1.1	---
R22-BH104	1.360	1	50	2 / 2	---	6.13	---	13/12/2023 10:18	0.60	0.76	7.05	-90	155	1854	11.7	1.0	---
R22-BH104	1.360	1	50	2 / 2	---	6.13	---	13/12/2023 10:21	0.65	0.71	7.00	-85	160	2105	11.8	0.9	---
R22-BH104	1.360	1	50	2 / 2	---	6.13	---	13/12/2023 10:24	0.70	0.66	7.00	-85	160	2118	11.9	0.9	---
R22-BH104	1.360	1	50	2 / 2	---	6.13	---	13/12/2023 10:27	0.75	0.61	6.90	-86	159	2419	12.0	0.9	---
R22-BH104	1.360	1	50	2 / 2	---	6.13	---	13/12/2023 10:30	0.80	0.56	6.90	-83	162	2424	12.0	0.9	---
R22-BH104	1.360	1	50	2 / 2	---	6.13	---	13/12/2023 10:33	0.85	0.51	6.88	-78	167	2488	12.0	0.8	---
R22-BH104	1.360	1	50	2 / 2	---	6.13	---	13/12/2023 10:36	0.90	0.46	6.99	-82	163	2257	11.9	0.8	---
R22-BH104	1.360	1	50	2 / 2	---	6.13	---	13/12/2023 10:39	0.95	0.41	6.89	-76	169	2495	12.0	0.8	---
R22-BH104	1.360	1	50	2 / 2	---	6.13	---	13/12/2023 10:42	1.00	0.36	6.91	-76	169	2442	12.0	0.8	---
R22-BH104	1.360	1	50	2 / 2	---	6.13	---	13/12/2023 10:45	1.05	0.31	6.89	-75	170	2485	12.0	0.8	---
R22-BH104	1.360	1	50	2 / 2	---	6.13	---	13/12/2023 10:48	1.10	0.26	6.89	-73	172	2563	12.0	0.7	---
R22-BH104	1.360	1	50	2 / 2	---	6.13	---	13/12/2023 10:51	1.15	0.21	6.85	-72	173	2600	12.0	0.7	---
	General Remarks: Water Sample Taken, 4.00m sample 1EW																
R22-BH104	1.360	1	50	3 / 1	6.00	6.27	3.00 to 6.00	03/01/2024 08:14	0.63	0.73	---	---	---	---	---	---	---
R22-BH104	1.360	1	50	3 / 2	6.00	6.27	3.00 to 6.00	03/01/2024 08:15	0.64	0.72	7.08	-67	181	2391	10.0	2.7	---
R22-BH104	1.360	1	50	3 / 2	---	6.27	---	03/01/2024 08:18	0.64	0.72	7.07	-62	185	2416	10.0	1.7	---
R22-BH104	1.360	1	50	3 / 2	---	6.27	---	03/01/2024 08:21	0.65	0.71	7.06	-59	188	2430	10.1	1.4	---
R22-BH104	1.360	1	50	3 / 2	---	6.27	---	03/01/2024 08:24	0.65	0.71	7.06	-57	191	2441	10.1	1.1	---
R22-BH104	1.360	1	50	3 / 2	---	6.27	---	03/01/2024 08:27	0.66	0.70	7.05	-53	195	2445	10.1	1.0	---
R22-BH104	1.360	1	50	3 / 2	---	6.27	---	03/01/2024 08:30	0.67	0.69	7.04	-47	200	2472	10.1	0.8	---

Key: NDA denotes 'no data available'.

IN-SITU WATER MONITORING RESULTS

Exploratory Position ID	Ground Level (m AOD)	Pipe Ref	Pipe Diameter (mm)	Monitoring Round / Test Number	Reported Installation Depth (mbgl)	Measured Installation Depth (mbgl)	Response Zone (m)	Date & Time of Monitoring	Water Depth (mbgl)	Water Elevation (m AOD)	pH	ORP (mV)	Eh (mV)	Conduc-tivity (uS/cm)	Temp-erature (°C)	Dissolved Oxygen (mg/l)	Total Dissolved Solids (Multiple)
R22-BH104	1.360	1	50	3 / 2	---	6.27	---	03/01/2024 08:33	0.69	0.67	7.03	-44	203	2529	10.2	0.7	---
R22-BH104	1.360	1	50	3 / 2	---	6.27	---	03/01/2024 08:36	0.71	0.65	7.00	-43	205	2606	10.3	0.7	---
R22-BH104	1.360	1	50	3 / 2	---	6.27	---	03/01/2024 08:39	0.71	0.65	7.00	-42	205	2601	10.3	0.7	---
	General Remarks: Water Sample Taken, 4.00m sample 2EW																
R22-BH104	1.360	1	50	4 / 1	6.00	6.26	3.00 to 6.00	18/01/2024 14:00	0.55	0.81	---	---	---	---	---	---	---
R22-BH104	1.360	1	50	4 / 2	6.00	6.26	3.00 to 6.00	18/01/2024 14:01	0.55	0.81	7.81	-56	199	1787	4.4	6.8	---
R22-BH104	1.360	1	50	4 / 2	---	6.26	---	18/01/2024 14:04	0.58	0.78	7.63	-65	190	1775	4.6	3.0	---
R22-BH104	1.360	1	50	4 / 2	---	6.26	---	18/01/2024 14:07	0.61	0.75	7.58	-68	187	1784	4.0	1.9	---
R22-BH104	1.360	1	50	4 / 2	---	6.26	---	18/01/2024 14:10	0.64	0.72	7.56	-69	187	1782	3.6	1.6	---
R22-BH104	1.360	1	50	4 / 2	---	6.26	---	18/01/2024 14:13	0.67	0.69	7.54	-69	187	1779	3.6	1.5	---
R22-BH104	1.360	1	50	4 / 2	---	6.26	---	18/01/2024 14:16	0.70	0.66	7.53	-69	187	1777	3.6	1.4	---
	General Remarks: Water Sample Taken, 4.00m sample 3EW																
R22-BH105	1.426	1	50	F1 / 1	3.00	2.91	0.80 to 3.00	31/10/2023 09:56	0.14	1.29	---	---	---	---	---	---	---
	General Remarks: Purge completed between 15:16 and 15:29, total purge volume taken 17 litres.																
R22-BH105	1.426	1	50	1 / 1	3.00	2.83	0.80 to 3.00	29/11/2023 15:14	-0.02	1.45	7.21	237	438	16042	6.3	3.2	---
R22-BH105	1.426	1	50	2 / 1	3.00	2.66	0.80 to 3.00	13/12/2023 09:55	0.00	1.43	---	---	---	---	---	---	---
R22-BH105	1.426	1	50	2 / 2	3.00	2.66	0.80 to 3.00	13/12/2023 11:30	0.00	1.43	7.16	-132	117	1381	9.2	7.5	---
R22-BH105	1.426	1	50	2 / 2	---	2.66	---	13/12/2023 11:33	0.04	1.39	6.86	-138	110	1355	9.8	3.3	---
R22-BH105	1.426	1	50	2 / 2	---	2.66	---	13/12/2023 11:36	0.08	1.35	6.87	-143	105	1343	9.7	1.3	---
R22-BH105	1.426	1	50	2 / 2	---	2.66	---	13/12/2023 11:39	0.12	1.31	6.89	-147	101	1313	9.5	0.9	---
R22-BH105	1.426	1	50	2 / 2	---	2.66	---	13/12/2023 11:42	0.16	1.27	6.91	-148	101	1726	9.4	0.8	---
R22-BH105	1.426	1	50	2 / 2	---	2.66	---	13/12/2023 11:45	0.20	1.23	6.92	-147	102	1223	9.3	0.7	---
R22-BH105	1.426	1	50	2 / 2	---	2.66	---	13/12/2023 11:48	0.24	1.19	6.93	-145	104	1181	9.2	0.6	---
R22-BH105	1.426	1	50	2 / 2	---	2.66	---	13/12/2023 11:51	0.28	1.15	6.93	-143	105	1151	9.2	0.6	---

Key: NDA denotes 'no data available'.

IN-SITU WATER MONITORING RESULTS

Exploratory Position ID	Ground Level (m AOD)	Pipe Ref	Pipe Diameter (mm)	Monitoring Round / Test Number	Reported Installation Depth (mbgl)	Measured Installation Depth (mbgl)	Response Zone (m)	Date & Time of Monitoring	Water Depth (mbgl)	Water Elevation (m AOD)	pH	ORP (mV)	Eh (mV)	Conduc-tivity (uS/cm)	Temp-erature (°C)	Dissolved Oxygen (mg/l)	Total Dissolved Solids (Multiple)
R22-BH105	1.426	1	50	2 / 2	---	2.66	---	13/12/2023 11:54	0.31	1.12	6.94	-142	107	1124	9.1	0.6	---
R22-BH105	1.426	1	50	2 / 2	---	2.66	---	13/12/2023 11:57	0.28	1.15	6.94	-141	108	1092	9.0	0.5	---
R22-BH105	1.426	1	50	2 / 2	---	2.66	---	13/12/2023 12:00	0.37	1.06	6.95	-141	108	1065	9.0	0.5	---
R22-BH105	1.426	1	50	2 / 2	---	2.66	---	13/12/2023 12:03	0.40	1.02	6.95	-141	108	1059	9.0	0.5	---
	General Remarks: Water Sample Taken, 1.80m sample 1EW																
R22-BH105	1.426	1	50	3 / 1	3.00	2.58	0.80 to 3.00	03/01/2024 12:11	0.01	1.42	---	---	---	---	---	---	---
R22-BH105	1.426	1	50	3 / 2	3.00	2.58	0.80 to 3.00	03/01/2024 14:15	0.02	1.41	6.96	-81	167	1297	9.9	8.4	---
R22-BH105	1.426	1	50	3 / 2	---	2.58	---	03/01/2024 14:18	0.07	1.36	6.97	-103	145	1376	9.9	2.5	---
R22-BH105	1.426	1	50	3 / 2	---	2.58	---	03/01/2024 14:21	0.11	1.32	7.06	-118	130	1181	9.8	1.3	---
R22-BH105	1.426	1	50	3 / 2	---	2.58	---	03/01/2024 14:24	0.14	1.29	7.08	-123	125	1102	9.8	1.0	---
R22-BH105	1.426	1	50	3 / 2	---	2.58	---	03/01/2024 14:27	0.18	1.25	7.09	-125	122	1069	9.8	0.9	---
R22-BH105	1.426	1	50	3 / 2	---	2.58	---	03/01/2024 14:30	0.23	1.20	7.09	-127	121	1044	9.8	0.8	---
R22-BH105	1.426	1	50	3 / 2	---	2.58	---	03/01/2024 14:33	0.29	1.14	7.09	-127	120	1031	9.8	0.7	---
R22-BH105	1.426	1	50	3 / 2	---	2.58	---	03/01/2024 14:36	0.37	1.06	7.09	-128	120	1021	9.8	0.7	---
	General Remarks: Water Sample Taken, 1.50m sample 2EW																
R22-BH105	1.426	1	50	4 / 1	3.00	2.58	0.80 to 3.00	18/01/2024 12:10	0.48	0.95	---	---	---	---	---	---	---
R22-BH105	1.426	1	50	4 / 2	3.00	2.58	0.80 to 3.00	18/01/2024 12:44	0.49	0.94	6.95	-137	116	1804	5.8	0.5	---
R22-BH105	1.426	1	50	4 / 2	---	2.58	---	18/01/2024 12:47	0.55	0.88	7.03	-134	119	1808	5.6	0.6	---
R22-BH105	1.426	1	50	4 / 2	---	2.58	---	18/01/2024 12:50	0.60	0.83	7.05	-133	121	1809	5.3	0.6	---
R22-BH105	1.426	1	50	4 / 2	---	2.58	---	18/01/2024 12:53	0.67	0.76	7.05	-132	122	1778	5.4	0.7	---
R22-BH105	1.426	1	50	4 / 2	---	2.58	---	18/01/2024 12:56	0.70	0.73	7.04	-132	122	1778	5.4	0.7	---
	General Remarks: Water Sample Taken, 1.80m sample 3EW																
R22-BH204	7.288	1	50	F1 / 1	29.00	27.89	27.00 to 29.00	30/10/2023 11:21	5.04	2.25	---	---	---	---	---	---	---
R22-BH204	7.288	1	50	1 / 1	29.00	27.58	27.00 to 29.00	30/11/2023 09:45	4.36	2.93	---	---	---	---	---	---	---

Key: NDA denotes 'no data available'.

IN-SITU WATER MONITORING RESULTS

Exploratory Position ID	Ground Level (m AOD)	Pipe Ref	Pipe Diameter (mm)	Monitoring Round / Test Number	Reported Installation Depth (mbgl)	Measured Installation Depth (mbgl)	Response Zone (m)	Date & Time of Monitoring	Water Depth (mbgl)	Water Elevation (m AOD)	pH	ORP (mV)	Eh (mV)	Conduc-tivity (uS/cm)	Temp-erature (°C)	Dissolved Oxygen (mg/l)	Total Dissolved Solids (Multiple)
	General Remarks: Purging completed between 09:50 and 11:15. Total volume taken 140 litres.																
R22-BH204	7.288	1	50	1 / 2	29.00	27.58	27.00 to 29.00	30/11/2023 10:13	4.36	2.93	8.21	-9	-19	2432	9.2	2.6	---
R22-BH204	7.288	1	50	1 / 2	---	27.58	---	30/11/2023 10:38	4.36	2.93	7.87	4	8	1597	9.5	0.9	---
R22-BH204	7.288	1	50	1 / 2	---	27.58	---	30/11/2023 11:12	4.36	2.93	7.46	18	36	1517	9.2	0.7	---
R22-BH204	7.288	1	50	2 / 1	29.00	27.58	27.00 to 29.00	13/12/2023 09:00	4.43	2.86	---	---	---	---	---	---	---
R22-BH204	7.288	1	50	2 / 2	29.00	27.58	27.00 to 29.00	13/12/2023 09:23	4.56	2.73	7.28	192	440	1432	10.1	1.0	---
R22-BH204	7.288	1	50	2 / 2	---	27.58	---	13/12/2023 09:26	4.57	2.72	7.28	188	435	1376	10.2	1.0	---
R22-BH204	7.288	1	50	2 / 2	---	27.58	---	13/12/2023 09:29	4.57	2.72	7.25	182	429	1345	10.2	0.9	---
R22-BH204	7.288	1	50	2 / 2	---	27.58	---	13/12/2023 09:32	4.57	2.72	7.24	178	426	1349	10.2	0.9	---
R22-BH204	7.288	1	50	2 / 2	---	27.58	---	13/12/2023 09:35	4.57	2.72	7.23	173	420	1325	10.1	0.8	---
	General Remarks: Water Sample Taken, 27.30m sample 1EW																
R22-BH204	7.288	1	50	3 / 1	29.00	27.58	27.00 to 29.00	03/01/2024 13:42	4.35	2.94	---	---	---	---	---	---	---
R22-BH204	7.288	1	50	3 / 2	29.00	27.58	27.00 to 29.00	03/01/2024 13:56	4.46	2.83	7.66	116	362	1331	11.1	0.6	---
R22-BH204	7.288	1	50	3 / 2	---	27.58	---	03/01/2024 13:59	4.46	2.83	7.64	115	361	1326	11.2	0.6	---
R22-BH204	7.288	1	50	3 / 2	---	27.58	---	03/01/2024 14:02	4.47	2.82	7.58	112	357	1293	11.5	0.5	---
R22-BH204	7.288	1	50	3 / 2	---	27.58	---	03/01/2024 14:05	4.48	2.81	7.54	108	353	1283	11.8	0.4	---
R22-BH204	7.288	1	50	3 / 2	---	27.58	---	03/01/2024 14:08	4.48	2.81	7.52	103	348	1270	11.9	0.4	---
	General Remarks: Water Sample Taken, 27.30m sample 2EW																
R22-BH204	7.288	1	50	4 / 1	29.00	27.58	27.00 to 29.00	18/01/2024 12:40	4.23	3.06	---	---	---	---	---	---	---
R22-BH204	7.288	1	50	4 / 2	29.00	27.58	27.00 to 29.00	18/01/2024 12:56	4.41	2.88	7.68	131	383	1330	6.2	0.8	---
R22-BH204	7.288	1	50	4 / 2	---	27.58	---	18/01/2024 12:59	4.41	2.88	7.64	131	382	1325	6.8	0.7	---
R22-BH204	7.288	1	50	4 / 2	---	27.58	---	18/01/2024 13:02	4.41	2.88	7.54	130	380	1292	8.0	0.6	---
R22-BH204	7.288	1	50	4 / 2	---	27.58	---	18/01/2024 13:05	4.41	2.88	7.50	128	378	1263	7.8	0.6	---
R22-BH204	7.288	1	50	4 / 2	---	27.58	---	18/01/2024 13:08	4.41	2.88	7.47	126	377	1231	7.5	0.6	---

Key: NDA denotes 'no data available'.

IN-SITU WATER MONITORING RESULTS

Exploratory Position ID	Ground Level (m AOD)	Pipe Ref	Pipe Diameter (mm)	Monitoring Round / Test Number	Reported Installation Depth (mbgl)	Measured Installation Depth (mbgl)	Response Zone (m)	Date & Time of Monitoring	Water Depth (mbgl)	Water Elevation (m AOD)	pH	ORP (mV)	Eh (mV)	Conduc-tivity (uS/cm)	Temp-erature (°C)	Dissolved Oxygen (mg/l)	Total Dissolved Solids (Multiple)
R22-BH204	7.288	1	50	4 / 2	---	27.58	---	18/01/2024 13:11	4.41	2.88	7.46	125	375	1217	7.5	0.6	---
R22-BH204	7.288	1	50	4 / 2	---	27.58	---	18/01/2024 13:14	4.41	2.88	7.44	124	374	1211	7.8	0.5	---
	General Remarks: Water Sample Taken, 27.30m sample 3EW																
R22-BH205	1.578	1	50	F1 / 1	25.00	24.77	20.00 to 25.00	30/10/2023 12:03	0.81	0.77	---	---	---	---	---	---	---
R22-BH205	1.578	1	50	1 / 1	25.00	24.70	20.00 to 25.00	30/11/2023 08:30	0.23	1.35	---	---	---	---	---	---	---
	General Remarks: Purge completed between 08:35 and 09:25. Total purge taken, volume 147 litres.																
R22-BH205	1.578	1	50	1 / 2	25.00	24.70	20.00 to 25.00	30/11/2023 08:57	0.23	1.35	6.97	90	180	28739	8.4	3.0	---
R22-BH205	1.578	1	50	1 / 2	---	24.70	---	30/11/2023 09:04	0.23	1.35	6.93	76	153	28912	8.1	3.0	---
R22-BH205	1.578	1	50	1 / 2	---	24.70	---	30/11/2023 09:08	0.23	1.35	6.91	74	147	29834	9.2	1.6	---
R22-BH205	1.578	1	50	1 / 2	---	24.70	---	30/11/2023 09:24	0.23	1.35	7.06	57	113	25985	9.1	1.5	---
R22-BH205	1.578	1	50	2 / 1	25.00	24.70	20.00 to 25.00	14/12/2023 09:30	0.49	1.09	---	---	---	---	---	---	---
R22-BH205	1.578	1	50	2 / 2	25.00	24.70	20.00 to 25.00	14/12/2023 09:42	0.57	1.01	6.78	218	467	19495	8.5	1.5	---
R22-BH205	1.578	1	50	2 / 2	---	24.70	---	14/12/2023 09:45	0.57	1.01	6.86	213	463	20229	8.4	1.5	---
R22-BH205	1.578	1	50	2 / 2	---	24.70	---	14/12/2023 09:48	0.58	1.00	6.89	209	459	20735	8.4	1.4	---
R22-BH205	1.578	1	50	2 / 2	---	24.70	---	14/12/2023 09:51	-0.06	1.64	6.91	206	456	21133	8.4	1.4	---
R22-BH205	1.578	1	50	2 / 2	---	24.70	---	14/12/2023 09:54	0.59	0.99	6.92	204	453	21501	8.5	1.4	---
R22-BH205	1.578	1	50	2 / 2	---	24.70	---	14/12/2023 09:57	0.59	0.99	6.92	201	451	21713	8.5	1.5	---
	General Remarks: Water Sample Taken, 21.00m sample 1EW																
R22-BH205	1.578	1	50	3 / 1	25.00	24.70	20.00 to 25.00	03/01/2024 11:50	0.40	1.18	---	---	---	---	---	---	---
R22-BH205	1.578	1	50	3 / 2	25.00	24.70	20.00 to 25.00	03/01/2024 12:12	0.59	0.99	6.39	252	498	16008	11.4	0.5	---
R22-BH205	1.578	1	50	3 / 2	---	24.70	---	03/01/2024 12:15	0.53	1.05	6.46	249	494	16452	11.4	0.7	---
R22-BH205	1.578	1	50	3 / 2	---	24.70	---	03/01/2024 12:18	0.50	1.08	6.48	245	491	16861	11.5	0.7	---
R22-BH205	1.578	1	50	3 / 2	---	24.70	---	03/01/2024 12:21	0.49	1.09	6.49	243	488	17089	11.5	0.7	---
R22-BH205	1.578	1	50	3 / 2	---	24.70	---	03/01/2024 12:24	0.48	1.10	6.50	240	486	17328	11.4	0.7	---

Key: NDA denotes 'no data available'.

IN-SITU WATER MONITORING RESULTS

Exploratory Position ID	Ground Level (m AOD)	Pipe Ref	Pipe Diameter (mm)	Monitoring Round / Test Number	Reported Installation Depth (mbgl)	Measured Installation Depth (mbgl)	Response Zone (m)	Date & Time of Monitoring	Water Depth (mbgl)	Water Elevation (m AOD)	pH	ORP (mV)	Eh (mV)	Conduc-tivity (uS/cm)	Temp-erature (°C)	Dissolved Oxygen (mg/l)	Total Dissolved Solids (Multiple)
	General Remarks: Water Sample Taken, 21.00m sample 2EW																
R22-BH205	1.578	1	50	4 / 1	25.00	24.70	20.00 to 25.00	18/01/2024 11:05	0.26	1.32	---	---	---	---	---	---	---
R22-BH205	1.578	1	50	4 / 2	25.00	24.70	20.00 to 25.00	18/01/2024 11:07	0.43	1.15	6.06	275	525	9900	7.9	3.4	---
R22-BH205	1.578	1	50	4 / 2	---	24.70	---	18/01/2024 11:10	0.45	1.13	6.22	265	515	11488	8.1	1.2	---
R22-BH205	1.578	1	50	4 / 2	---	24.70	---	18/01/2024 11:13	0.45	1.13	6.28	259	510	12294	7.8	1.2	---
R22-BH205	1.578	1	50	4 / 2	---	24.70	---	18/01/2024 11:16	0.45	1.13	6.31	254	505	12862	7.9	1.0	---
R22-BH205	1.578	1	50	4 / 2	---	24.70	---	18/01/2024 11:19	0.45	1.13	6.33	250	500	13306	8.0	0.9	---
R22-BH205	1.578	1	50	4 / 2	---	24.70	---	18/01/2024 11:22	0.45	1.13	6.35	247	497	13642	8.0	0.7	---
R22-BH205	1.578	1	50	4 / 2	---	24.70	---	18/01/2024 11:25	0.45	1.13	6.36	243	493	13938	8.2	0.8	---
R22-BH205	1.578	1	50	4 / 2	---	24.70	---	18/01/2024 11:28	0.45	1.13	6.37	240	490	14186	8.2	0.7	---
R22-BH205	1.578	1	50	4 / 2	---	24.70	---	18/01/2024 11:31	0.45	1.13	6.37	238	487	14450	8.4	0.6	---
R22-BH205	1.578	1	50	4 / 2	---	24.70	---	18/01/2024 11:34	0.45	1.13	6.38	235	484	14676	8.5	0.7	---
R22-BH205	1.578	1	50	4 / 2	---	24.70	---	18/01/2024 11:37	0.45	1.13	6.38	232	482	14915	8.6	0.5	---
R22-BH205	1.578	1	50	4 / 2	---	24.70	---	18/01/2024 11:40	0.45	1.13	6.40	230	480	15021	8.5	0.5	---
	General Remarks: Water Sample Taken, 21.00m sample 3EW																
R22-BH501	1.491	1	50	F1 / 1	26.50	24.49	24.50 to 26.50	31/10/2023 10:46	0.14	1.35	---	---	---	---	---	---	---
R22-BH501	1.491	1	50	1 / 1	26.50	24.06	24.50 to 26.50	29/11/2023 08:15	-0.10	1.59	---	---	---	---	---	---	---
R22-BH501	1.491	1	50	1 / 2	26.50	24.39	24.50 to 26.50	29/11/2023 08:21	-0.10	1.59	6.91	280	531	2897	7.7	3.2	---
R22-BH501	1.491	1	50	1 / 3	26.50	24.39	24.50 to 26.50	30/11/2023 07:52	-0.10	1.59	7.26	61	309	10462	10.1	1.4	---
R22-BH501	1.491	1	50	1 / 3	---	24.39	---	30/11/2023 07:53	-0.10	1.59	7.26	61	308	10462	10.4	1.1	---
R22-BH501	1.491	1	50	2 / 1	26.50	24.85	24.50 to 26.50	13/12/2023 14:15	-0.10	1.59	---	---	---	---	---	---	---
R22-BH501	1.491	1	50	2 / 2	26.50	24.85	24.50 to 26.50	13/12/2023 14:22	-0.10	1.59	7.01	-84	162	2427	10.6	1.8	---
R22-BH501	1.491	1	50	2 / 2	---	24.85	---	13/12/2023 14:25	-0.10	1.59	7.01	-89	158	2425	10.4	1.1	---
R22-BH501	1.491	1	50	2 / 2	---	24.85	---	13/12/2023 14:28	-0.10	1.59	7.01	-91	156	2423	10.4	0.8	---

Key: NDA denotes 'no data available'.

IN-SITU WATER MONITORING RESULTS

Exploratory Position ID	Ground Level (m AOD)	Pipe Ref	Pipe Diameter (mm)	Monitoring Round / Test Number	Reported Installation Depth (mbgl)	Measured Installation Depth (mbgl)	Response Zone (m)	Date & Time of Monitoring	Water Depth (mbgl)	Water Elevation (m AOD)	pH	ORP (mV)	Eh (mV)	Conduc-tivity (uS/cm)	Temp-erature (°C)	Dissolved Oxygen (mg/l)	Total Dissolved Solids (Multiple)
R22-BH501	1.491	1	50	2 / 2	---	24.85	---	13/12/2023 14:31	-0.10	1.59	7.01	-92	155	2424	10.2	0.7	---
R22-BH501	1.491	1	50	2 / 1	26.50	24.85	24.50 to 26.50	13/12/2023 14:34	-0.10	1.59	7.01	-93	154	2423	10.3	0.6	---
	General Remarks: Water Sample Taken, 24.50m sample 1EW																
R22-BH501	1.491	1	50	3 / 1	26.50	24.85	24.50 to 26.50	03/01/2024 08:00	-0.10	1.59	---	---	---	---	---	---	---
R22-BH501	1.491	1	50	3 / 2	26.50	24.85	24.50 to 26.50	03/01/2024 08:20	-0.10	1.59	7.12	200	446	2175	10.9	0.4	---
R22-BH501	1.491	1	50	3 / 2	---	24.85	---	03/01/2024 08:23	-0.10	1.59	7.12	201	447	2167	10.9	0.3	---
R22-BH501	1.491	1	50	3 / 2	---	24.85	---	03/01/2024 08:26	-0.10	1.59	7.08	200	447	2165	11.0	0.2	---
R22-BH501	1.491	1	50	3 / 2	---	24.85	---	03/01/2024 08:29	-0.10	1.59	7.07	200	446	2161	11.0	0.2	---
R22-BH501	1.491	1	50	3 / 2	---	24.85	---	03/01/2024 08:32	-0.10	1.59	7.07	199	446	2158	11.0	0.2	---
	General Remarks: Water Sample Taken, 24.65m sample 2EW																
R22-BH501	1.491	1	50	4 / 1	26.50	24.85	24.50 to 26.50	18/01/2024 14:10	-0.10	1.59	---	---	---	---	---	---	---
R22-BH501	1.491	1	50	4 / 2	26.50	24.85	24.50 to 26.50	18/01/2024 14:21	-0.10	1.59	7.09	141	389	2221	9.5	0.5	---
R22-BH501	1.491	1	50	4 / 2	---	24.85	---	18/01/2024 14:24	-0.10	1.59	7.11	142	390	2212	9.5	0.4	---
R22-BH501	1.491	1	50	4 / 2	---	24.85	---	18/01/2024 14:27	-0.10	1.59	7.09	142	390	2203	9.6	0.3	---
R22-BH501	1.491	1	50	4 / 2	---	24.85	---	18/01/2024 14:30	-0.10	1.59	7.08	141	389	2193	9.6	0.3	---
R22-BH501	1.491	1	50	4 / 2	---	24.85	---	18/01/2024 14:33	-0.10	1.59	7.08	140	388	2186	9.5	0.2	---
	General Remarks: Water Sample Taken, 24.65m sample 3EW																
RedP-BH-6	4.101	1	50	F1 / 1	15.00	14.74	10.00 to 15.00	30/10/2023 14:19	1.98	2.12	---	---	---	---	---	---	---
RedP-BH-6	4.101	1	50	1 / 1	15.00	14.78	10.00 to 15.00	30/11/2023 13:58	1.66	2.45	---	---	---	---	---	---	---
RedP-BH-6	4.101	1	50	1 / 2	15.00	14.78	10.00 to 15.00	30/11/2023 14:02	1.66	2.45	7.44	51	103	1205	8.7	2.8	---
RedP-BH-6	4.101	1	50	1 / 2	---	14.78	---	30/11/2023 14:18	1.66	2.45	7.30	58	115	1198	10.2	5.1	---
RedP-BH-6	4.101	1	50	1 / 2	---	14.78	---	30/11/2023 14:35	1.66	2.45	7.29	58	115	1154	9.8	3.4	---
RedP-BH-6	4.101	1	50	2 / 1	15.00	14.78	10.00 to 15.00	13/12/2023 14:00	1.65	2.46	---	---	---	---	---	---	---
RedP-BH-6	4.101	1	50	2 / 2	15.00	14.78	10.00 to 15.00	13/12/2023 14:07	1.65	2.46	7.16	132	377	1137	11.8	2.6	---

Key: NDA denotes 'no data available'.

IN-SITU WATER MONITORING RESULTS

Exploratory Position ID	Ground Level (m AOD)	Pipe Ref	Pipe Diameter (mm)	Monitoring Round / Test Number	Reported Installation Depth (mbgl)	Measured Installation Depth (mbgl)	Response Zone (m)	Date & Time of Monitoring	Water Depth (mbgl)	Water Elevation (m AOD)	pH	ORP (mV)	Eh (mV)	Conduc-tivity (uS/cm)	Temp-erature (°C)	Dissolved Oxygen (mg/l)	Total Dissolved Solids (Multiple)
RedP-BH-6	4.101	1	50	2 / 2	---	14.78	---	13/12/2023 14:10	1.65	2.46	7.15	133	378	1130	11.8	2.5	---
RedP-BH-6	4.101	1	50	2 / 2	---	14.78	---	13/12/2023 14:13	1.65	2.46	7.13	133	378	1127	11.8	2.5	---
RedP-BH-6	4.101	1	50	2 / 2	---	14.78	---	13/12/2023 14:16	1.65	2.46	7.11	133	378	1125	12.0	2.5	---
RedP-BH-6	4.101	1	50	2 / 2	---	14.78	---	13/12/2023 14:19	1.65	2.46	7.10	133	378	1123	11.9	2.2	---
	General Remarks: Water Sample Taken, 11.00m sample 1EW																
RedP-BH-6	4.101	1	50	3 / 1	15.00	14.78	10.00 to 15.00	03/01/2024 10:12	1.66	2.45	---	---	---	---	---	---	---
RedP-BH-6	4.101	1	50	3 / 2	15.00	14.78	10.00 to 15.00	03/01/2024 10:25	1.66	2.45	7.14	197	441	1129	12.1	2.5	---
RedP-BH-6	4.101	1	50	3 / 2	---	14.78	---	03/01/2024 10:28	1.66	2.45	7.15	199	444	1115	12.3	2.4	---
RedP-BH-6	4.101	1	50	3 / 2	---	14.78	---	03/01/2024 10:31	1.66	2.45	7.12	200	444	1106	12.3	2.3	---
RedP-BH-6	4.101	1	50	3 / 2	---	14.78	---	03/01/2024 10:34	1.66	2.45	7.12	200	444	1099	12.4	2.3	---
RedP-BH-6	4.101	1	50	3 / 2	---	14.78	---	03/01/2024 10:37	1.66	2.45	7.11	200	445	1092	12.3	2.3	---
	General Remarks: Water Sample Taken, 11.00m sample 2EW																
RedP-BH-6	4.101	1	50	4 / 1	15.00	14.78	10.00 to 15.00	18/01/2024 09:15	1.63	2.48	---	---	---	---	---	---	---
RedP-BH-6	4.101	1	50	4 / 2	15.00	14.78	10.00 to 15.00	18/01/2024 09:27	1.63	2.48	7.06	196	443	1103	10.5	2.6	---
RedP-BH-6	4.101	1	50	4 / 2	---	14.78	---	18/01/2024 09:30	1.63	2.48	7.06	197	443	1099	10.7	2.5	---
RedP-BH-6	4.101	1	50	4 / 2	---	14.78	---	18/01/2024 09:33	1.63	2.48	7.04	197	443	1095	10.8	2.5	---
RedP-BH-6	4.101	1	50	4 / 2	---	14.78	---	18/01/2024 09:36	1.63	2.48	7.03	197	443	1090	10.8	2.5	---
RedP-BH-6	4.101	1	50	4 / 2	---	14.78	---	18/01/2024 09:39	1.63	2.48	7.02	197	443	1087	11.1	2.4	---
	General Remarks: Water Sample Taken, 11.00m sample 3EW																
RedP-BH-8	3.010	1	50	F1 / 1	16.00	15.81	11.00 to 16.00	30/10/2023 15:01	0.85	2.16	---	---	---	---	---	---	---
RedP-BH-8	3.010	1	50	1 / 1	16.00	15.88	11.00 to 16.00	30/11/2023 11:45	0.43	2.59	---	---	---	---	---	---	---
	General Remarks: Purging completed between 11:50 and 12:45. Total ppurge volume taken 93 litres.																
RedP-BH-8	3.010	1	50	1 / 2	16.00	15.88	11.00 to 16.00	30/11/2023 12:09	0.43	2.59	7.68	10	20	1386	11.1	2.8	---
RedP-BH-8	3.010	1	50	1 / 2	---	15.88	---	30/11/2023 12:44	0.43	2.59	7.37	29	58	1339	11.6	3.7	---

Key: NDA denotes 'no data available'.

IN-SITU WATER MONITORING RESULTS

Exploratory Position ID	Ground Level (m AOD)	Pipe Ref	Pipe Diameter (mm)	Monitoring Round / Test Number	Reported Installation Depth (mbgl)	Measured Installation Depth (mbgl)	Response Zone (m)	Date & Time of Monitoring	Water Depth (mbgl)	Water Elevation (m AOD)	pH	ORP (mV)	Eh (mV)	Conduc-tivity (uS/cm)	Temp-erature (°C)	Dissolved Oxygen (mg/l)	Total Dissolved Solids (Multiple)
RedP-BH-8	3.010	1	50	1 / 2	---	15.88	---	30/11/2023 13:36	0.43	2.59	7.52	22	44	1390	10.0	3.6	---
RedP-BH-8	3.010	1	50	2 / 1	16.00	15.88	11.00 to 16.00	13/12/2023 11:15	0.34	2.68	---	---	---	---	---	---	---
RedP-BH-8	3.010	1	50	2 / 1	---	15.88	---	13/12/2023 11:23	0.34	2.68	7.23	84	331	1283	10.8	3.1	---
RedP-BH-8	3.010	1	50	2 / 1	---	15.88	---	13/12/2023 11:26	0.34	2.68	7.18	87	333	1276	10.8	3.0	---
RedP-BH-8	3.010	1	50	2 / 1	---	15.88	---	13/12/2023 11:29	0.34	2.68	7.15	88	334	1267	10.8	2.9	---
RedP-BH-8	3.010	1	50	2 / 1	---	15.88	---	13/12/2023 11:32	0.34	2.68	7.12	89	335	1260	10.9	2.9	---
	General Remarks: Water Sample Taken, 12.00m sample 1EW																
RedP-BH-8	3.010	1	50	3 / 1	16.00	15.88	11.00 to 16.00	03/01/2024 08:44	0.39	2.62	---	---	---	---	---	---	---
RedP-BH-8	3.010	1	50	3 / 2	16.00	15.88	11.00 to 16.00	03/01/2024 08:57	0.40	2.62	7.21	204	451	1349	10.7	3.1	---
RedP-BH-8	3.010	1	50	3 / 2	---	15.88	---	03/01/2024 09:00	0.40	2.62	7.20	205	451	1324	10.8	3.1	---
RedP-BH-8	3.010	1	50	3 / 2	---	15.88	---	03/01/2024 09:03	0.40	2.62	7.16	205	451	1305	10.8	3.0	---
RedP-BH-8	3.010	1	50	3 / 2	---	15.88	---	03/01/2024 09:06	0.40	2.62	7.14	205	452	1289	10.8	3.0	---
RedP-BH-8	3.010	1	50	3 / 2	---	15.88	---	03/01/2024 09:09	0.40	2.62	7.13	205	452	1273	10.9	3.0	---
	General Remarks: Water Sample Taken, 12.00m sample 2EW																
RedP-BH-8	3.010	1	50	4 / 1	16.00	15.88	11.00 to 16.00	18/01/2024 07:35	0.35	2.67	---	---	---	---	---	---	---
RedP-BH-8	3.010	1	50	4 / 2	16.00	15.88	11.00 to 16.00	18/01/2024 08:02	0.35	2.67	7.30	198	447	1256	8.8	3.3	---
RedP-BH-8	3.010	1	50	4 / 2	---	15.88	---	18/01/2024 08:05	0.35	2.67	7.21	200	449	1237	9.1	3.1	---
RedP-BH-8	3.010	1	50	4 / 2	---	15.88	---	18/01/2024 08:08	0.35	2.67	7.15	201	450	1222	8.7	3.1	---
RedP-BH-8	3.010	1	50	4 / 2	---	15.88	---	18/01/2024 08:11	0.35	2.67	7.11	201	450	1213	8.9	3.1	---
RedP-BH-8	3.010	1	50	4 / 2	---	15.88	---	18/01/2024 08:14	0.35	2.67	7.09	201	450	1203	8.9	3.0	---
	General Remarks: Water Sample Taken, 12.00m sample 3EW																

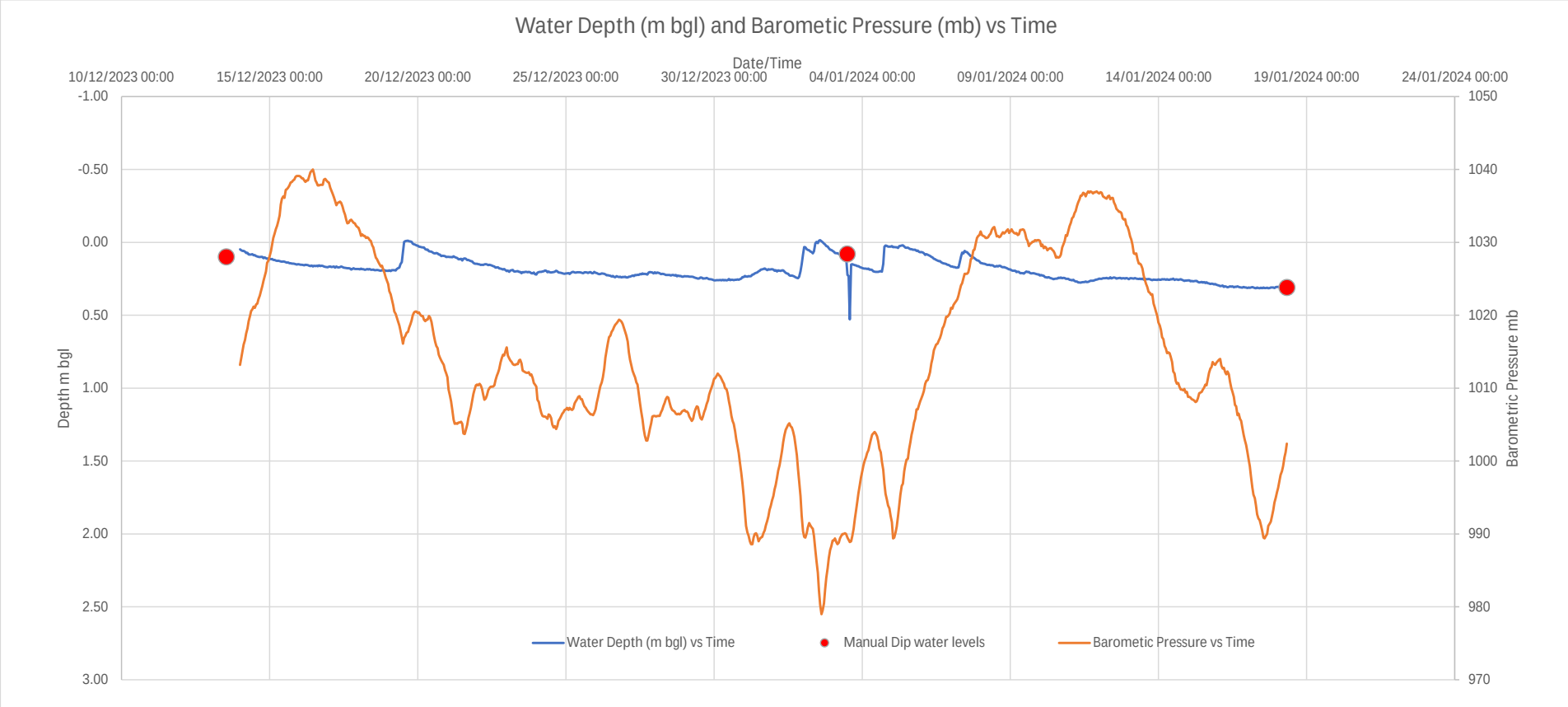
Key: NDA denotes 'no data available'.

'DIVER' WATER LEVEL DATA LOGGER MEASUREMENTS

Plots of Water Depth (m below ground level) and Barometric Pressure vs Time

Borehole No.: R22-BH102 **Pipe No.:** 1 **Pipe Response Zone (m bgl):** 0.80 to 3.00 **Diver Installed Depth (m bgl):** 3.00 **Diver Serial No:** 810117

Ground Level (m AOD): 1.59 National Grid Coordinates: E: 632218.5 N: 163163.0 **Monitoring Period. Start:** 14/12/2023 00:00 **End:** 18/01/2024 08:00



Notes	
	1. Downwards spike in water level represents where data logger has been removed from hole for manual water level measurements and/or standpipe micro-purged for sampling.
	2. Standpipe micropurged and water samples taken on 13/12/2023, 03/01/2024 and 18/01/2024.
	3
	4

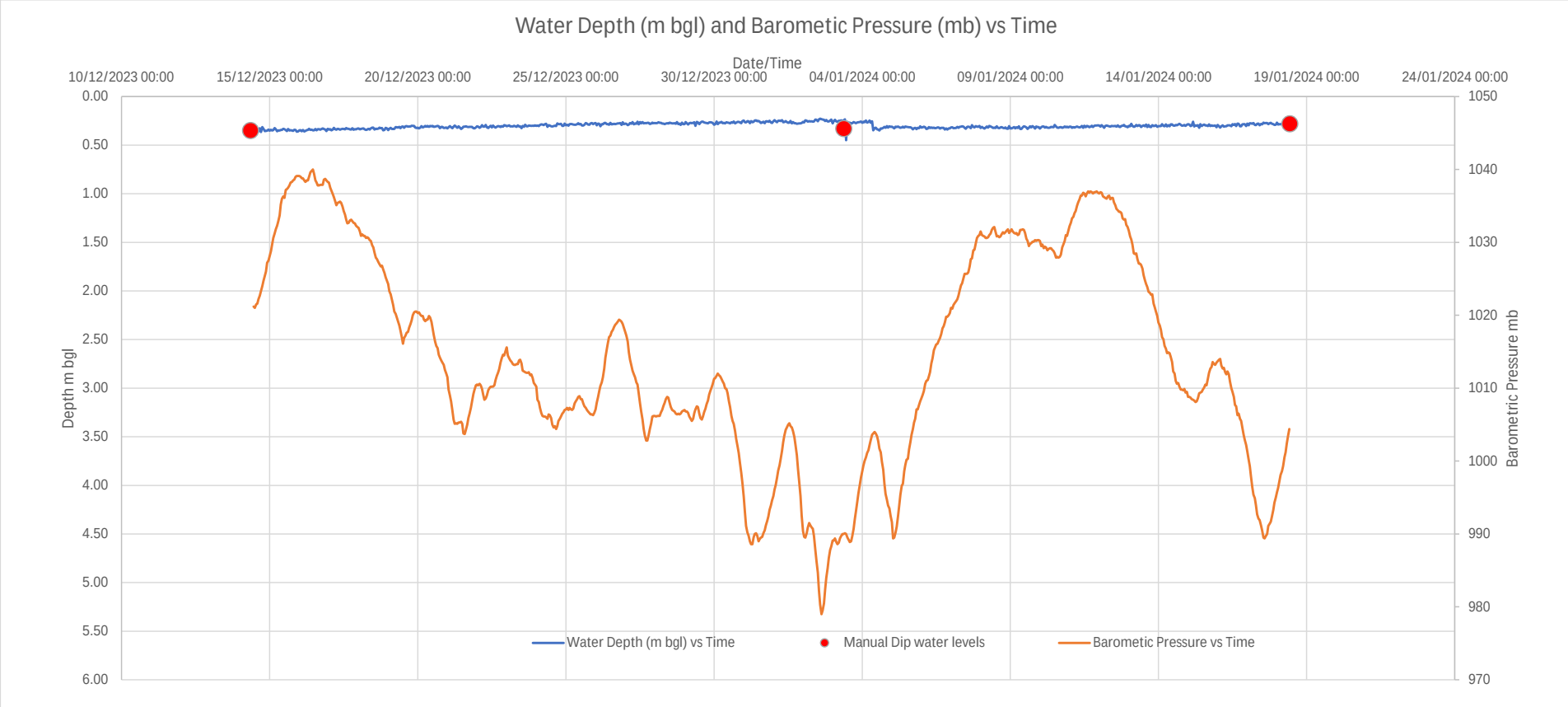
STRUCTURAL SOILS LTD **18 Frogmore Road,** **HEMEL HEMPSTEAD,** **Hertfordshire,** **HP3 9RT**	Diver Installed By	[redacted] 14/12/2023	Data Processed By:	[redacted] 26/01/2024	Checked by (the Responsible Expert)	[redacted]	Date 11/03/2024	**Contract Ref:**	**563607**
	Contract:		**SEA Link FEED – Richborough On-Shore Cable Link**		**Client**	**National Grid**		**Page**	**1 of 1**

'DIVER' WATER LEVEL DATA LOGGER MEASUREMENTS

Plots of Water Depth (m below ground level) and Barometric Pressure vs Time

Borehole No.: R22-BH103 **Pipe No.:** 2 **Pipe Response Zone (m bgl):** 3.00 to 6.00 **Diver Installed Depth (m bgl):** 6.00 **Diver Serial No:** 749816

Ground Level (m AOD): 1.32 National Grid Coordinates: E: 632166.5 N: 162914.2 **Monitoring Period. Start:** 14/12/2023 11:00 **End:** 18/01/2024 10:00



Notes	
	1. Downwards spike in water level represents where data logger has been removed from hole for manual water level measurements and/or standpipe micro-purged for sampling.
	2. Standpipe micropurged and water samples taken on 14/12/2023, 03/01/2024 and 18/01/2024.
	3
	4

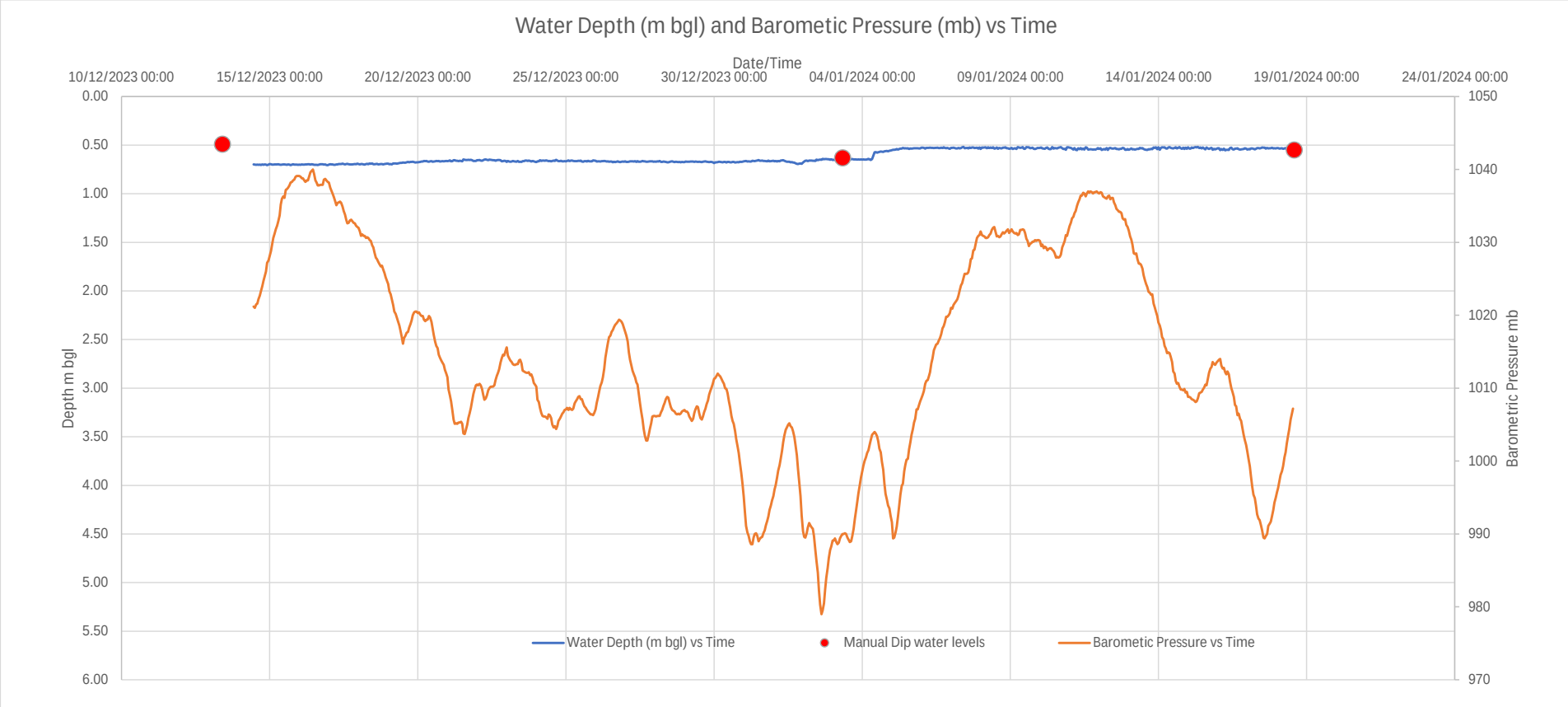
STRUCTURAL SOILS LTD **18 Frogmore Road,** **HEMEL HEMPSTEAD,** **Hertfordshire,** **HP3 9RT**	Diver Installed By	[redacted] 14/12/2023	Data Processed By:	[redacted] 29/01/2024	Checked by (the Responsible Expert) [redacted]	Date 11/03/2024	**Contract Ref:** **563607**
	Contract:		**SEA Link FEED – Richborough On-Shore Cable Link**		**Client**	**National Grid**	**Page** **1 of 1**

'DIVER' WATER LEVEL DATA LOGGER MEASUREMENTS

Plots of Water Depth (m below ground level) and Barometric Pressure vs Time

Borehole No.: R22-BH104 **Pipe No.:** 1 **Pipe Response Zone (m bgl):** 3.00 to 6.00 **Diver Installed Depth (m bgl):** 6.00 **Diver Serial No:** 811034

Ground Level (m AOD): 1.36 National Grid Coordinates: E: 632516.8 N: 162966.1 **Monitoring Period. Start:** 14/12/2023 11:00 **End:** 18/01/2024 13:00



Notes	
	1. Downwards spike in water level represents where data logger has been removed from hole for manual water level measurements and/or standpipe micro-purged for sampling.
	2. Standpipe micropurged and water samples taken on 13/12/2023, 03/01/2024 and 18/01/2024.
	3
	4

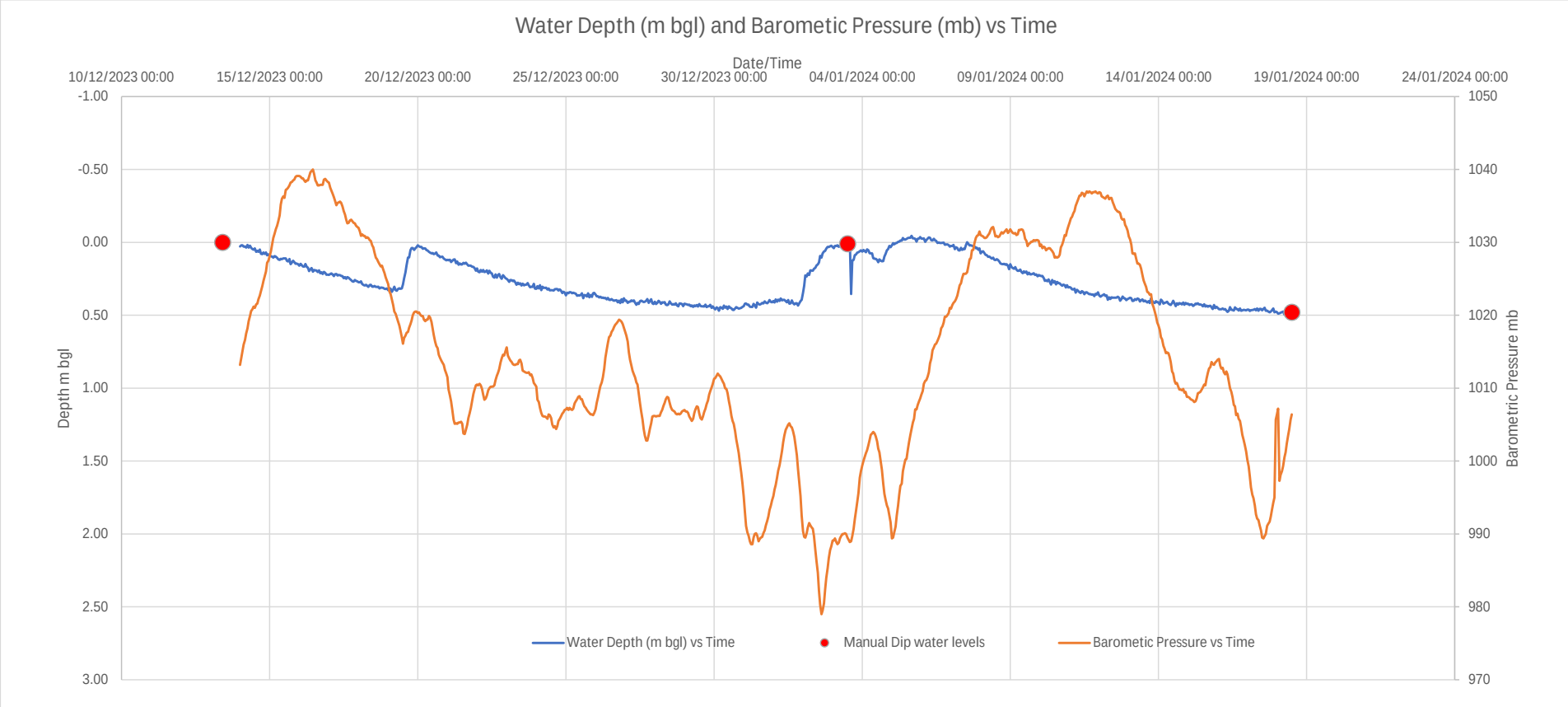
STRUCTURAL SOILS LTD **18 Frogmore Road,** **HEMEL HEMPSTEAD,** **Hertfordshire,** **HP3 9RT**	Diver Installed By	[redacted] 14/12/2023	Data Processed By:	[redacted] 29/01/2024	Checked by (the Responsible Expert) [redacted]	Date 11/03/2024	**Contract Ref:** **563607**
	Contract:		**SEA Link FEED – Richborough On-Shore Cable Link**		**Client**	**National Grid**	**Page** **1 of 1**

'DIVER' WATER LEVEL DATA LOGGER MEASUREMENTS

Plots of Water Depth (m below ground level) and Barometric Pressure vs Time

Borehole No.: R22-BH105 **Pipe No.:** 1 **Pipe Response Zone (m bgl):** 0.80 to 3.00 **Diver Installed Depth (m bgl):** 2.40 **Diver Serial No:** 798323

Ground Level (m AOD): 1.43 National Grid Coordinates: E: 632525.7 N: 163166.7 **Monitoring Period. Start:** 14/12/2023 00:00 **End:** 18/01/2024 12:00



Notes	
	1. Downwards spike in water level represents where data logger has been removed from hole for manual water level measurements and/or standpipe micro-purged for sampling.
	2. Standpipe micropurged and water samples taken on 13/12/2023, 03/01/2024 and 18/01/2024.
	3. Water level almost overtopping standpipe between c. 03/01/2024 and 08/01/2024 (pipe projects slightly above ground level).
	4

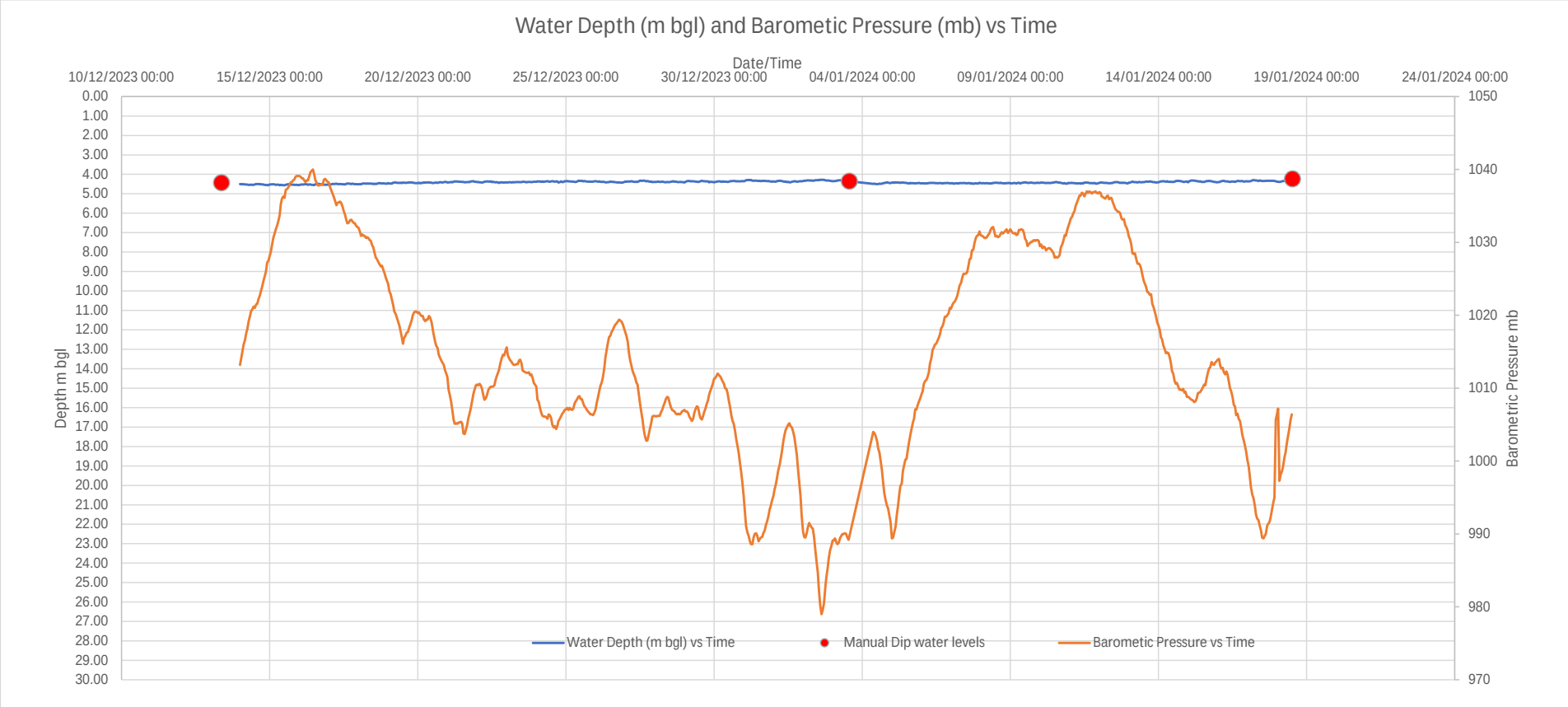
STRUCTURAL SOILS LTD **18 Frogmore Road,** **HEMEL HEMPSTEAD,** **Hertfordshire,** **HP3 9RT**	Diver Installed By	[redacted] 14/12/2023	Data Processed By:	[redacted] 29/01/2024	Checked by (the Responsible Expert) [redacted]	Date 18/01/2024	**Contract Ref:** **563607**
	Contract:		**SEA Link FEED – Richborough On-Shore Cable Link**		**Client**	**National Grid**	**Page** **1 of 1**

'DIVER' WATER LEVEL DATA LOGGER MEASUREMENTS

Plots of Water Depth (m below ground level) and Barometric Pressure vs Time

Borehole No.: R22-BH204 **Pipe No.:** 1 **Pipe Response Zone (m bgl):** 27.00 to 29.00 **Diver Installed Depth (m bgl):** 4.46 **Diver Serial No:** 798329

Ground Level (m AOD): 7.29 National Grid Coordinates: E: 633299.1 N: 163507.7 **Monitoring Period. Start:** 14/12/2023 00:00 **End:** 18/01/2024 12:00



Notes	
	1. Standpipe micropurged and water samples taken on 13/12/2023, 03/01/2024 and 18/01/2024.
	2
	3
	4

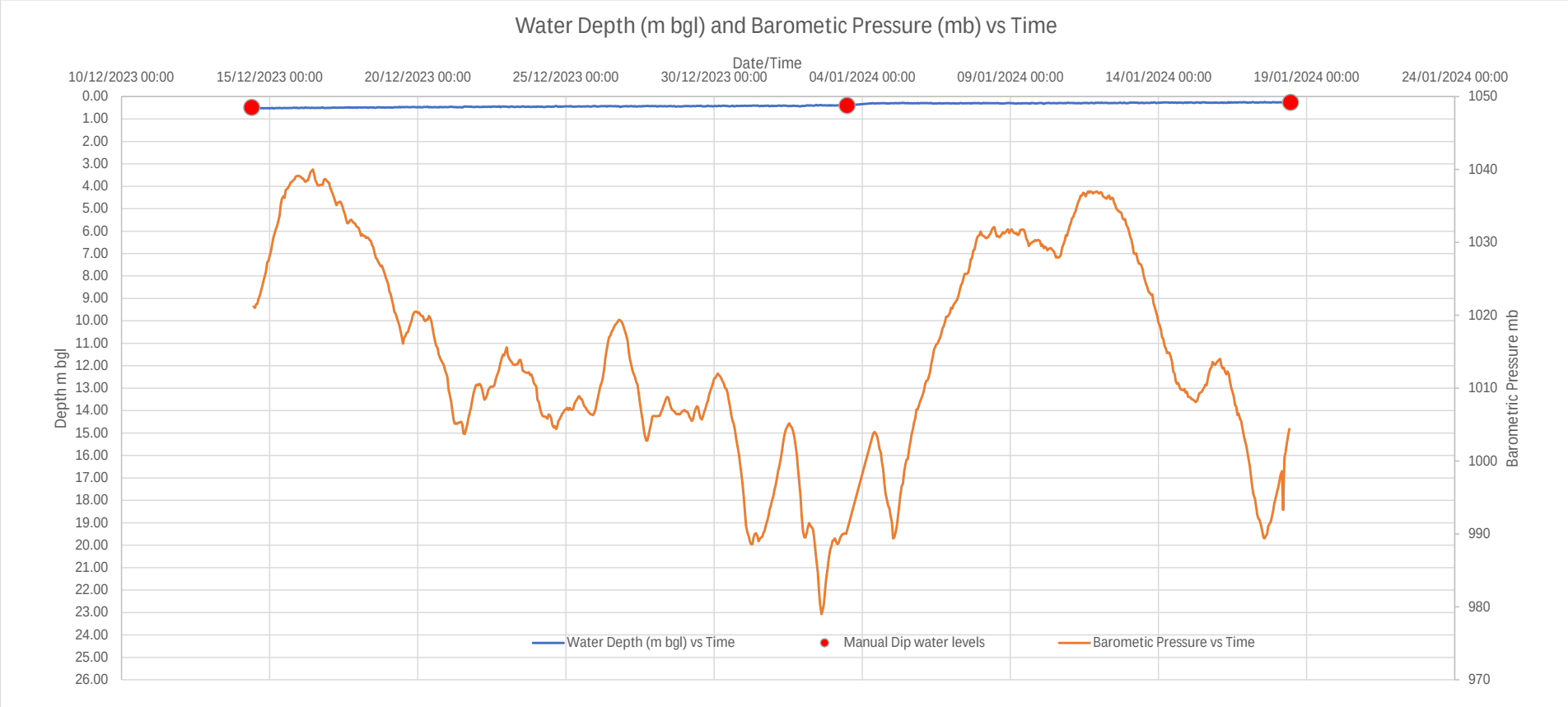
STRUCTURAL SOILS LTD **18 Frogmore Road,** **HEMEL HEMPSTEAD,** **Hertfordshire,** **HP3 9RT**	Diver Installed By	[redacted] 14/12/2023	Data Processed By:	[redacted] 29/01/2024	Checked by (the Responsible Expert) [redacted]	Date 11/03/2024	**Contract Ref:** **563607**
	Contract:		**SEA Link FEED – Richborough On-Shore Cable Link**		**Client**	**National Grid**	**Page** **1 of 1**

'DIVER' WATER LEVEL DATA LOGGER MEASUREMENTS

Plots of Water Depth (m below ground level) and Barometric Pressure vs Time

Borehole No.: R22-BH205 **Pipe No.:** 1 **Pipe Response Zone (m bgl):** 20.00 to 25.00 **Diver Installed Depth (m bgl):** 24.55 **Diver Serial No:** 798319

Ground Level (m AOD): 1.58 National Grid Coordinates: E: 631975.5 N: 162897.7 **Monitoring Period. Start:** 14/12/2023 11:00 **End:** 18/01/2024 10:00



Notes	
	1. Standpipe micropurged and water samples taken on 14/12/2023, 03/01/2024 and 18/01/2024.
	2
	3
	4

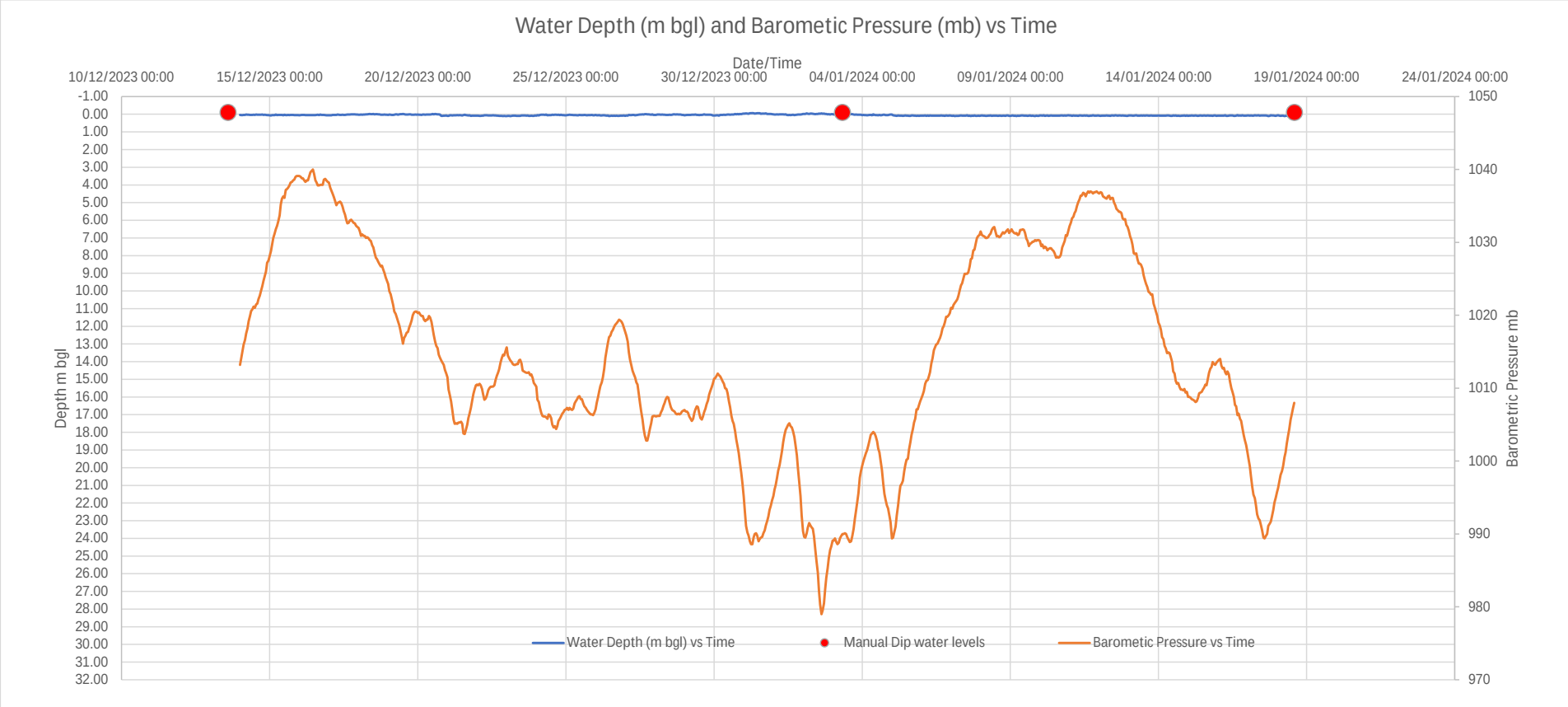
STRUCTURAL SOILS LTD **18 Frogmore Road,** **HEMEL HEMPSTEAD,** **Hertfordshire,** **HP3 9RT**	Diver Installed By	[redacted] 14/12/2023	Data Processed By:	[redacted] 29/01/2024	Checked by (the Responsible Expert) [redacted]	Date 11/03/2024	**Contract Ref:** **563607**
	Contract:		**SEA Link FEED – Richborough On-Shore Cable Link**		**Client**	**National Grid**	**Page** **1 of 1**

'DIVER' WATER LEVEL DATA LOGGER MEASUREMENTS

Plots of Water Depth (m below ground level) and Barometric Pressure vs Time

Borehole No.: R22-BH501 **Pipe No.:** 1 **Pipe Response Zone (m bgl):** 24.50 to 26.50 **Diver Installed Depth (m bgl):** 24.65 **Diver Serial No:** 845494

Ground Level (m AOD): 1.49 National Grid Coordinates: E: 632650.4 N: 163138.8 **Monitoring Period. Start:** 14/12/2023 00:00 **End:** 18/01/2024 14:00



Notes	
	1. Standpipe micropurged and water samples taken on 14/12/2023, 03/01/2024 and 18/01/2024.
	2. Water level standing at top of standpipe (100 mm above ground level) throughout monitoring period covered above. True standing water level may therefore be higher.
	3
	4

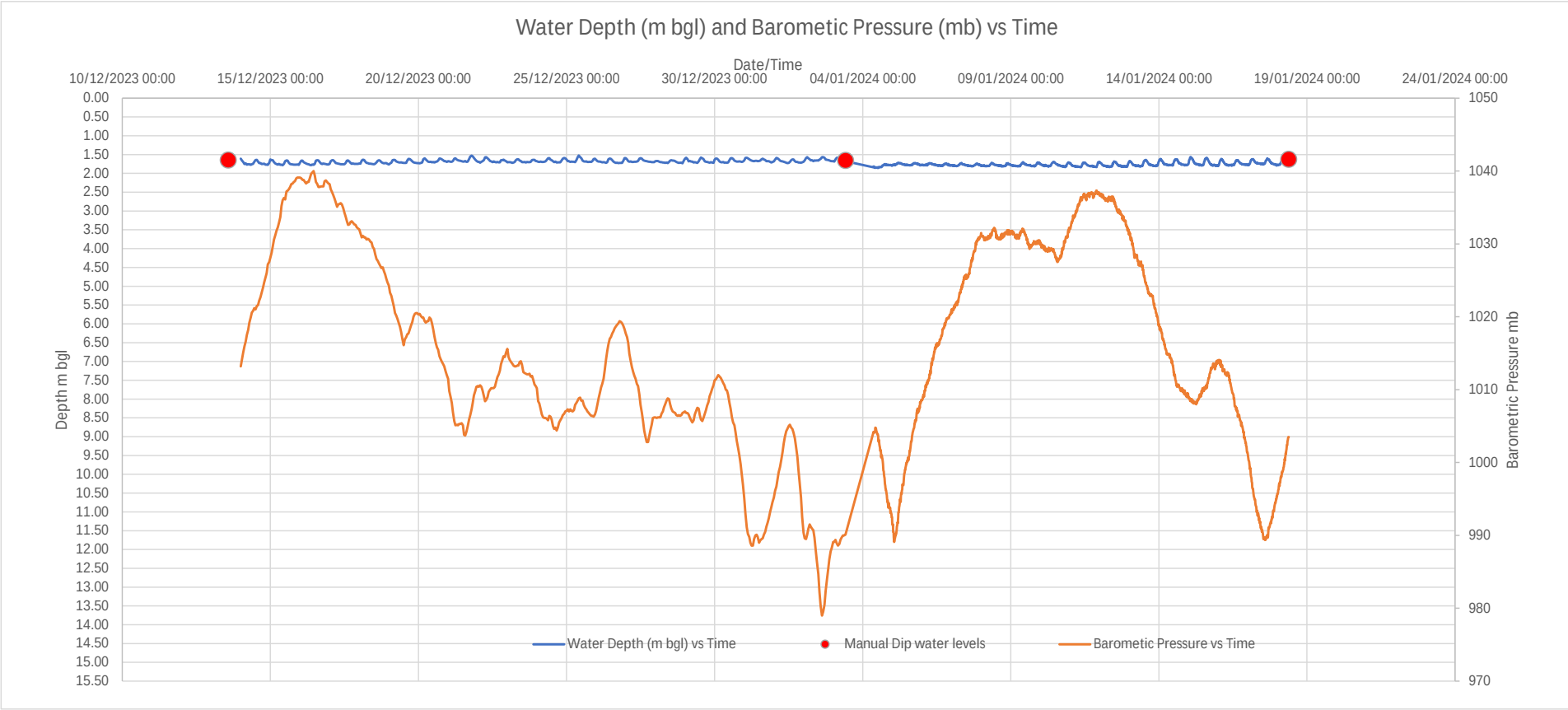
STRUCTURAL SOILS LTD **18 Frogmore Road,** **HEMEL HEMPSTEAD,** **Hertfordshire,** **HP3 9RT**	Diver Installed By	[redacted] 14/12/2023	Data Processed By:	[redacted] 29/01/2024	Checked by (the Responsible Expert) [redacted]	Date 11/03/2024	**Contract Ref:** **563607**
	Contract:		**SEA Link FEED – Richborough On-Shore Cable Link**		**Client**	**National Grid**	**Page** **1 of 1**

'DIVER' WATER LEVEL DATA LOGGER MEASUREMENTS

Plots of Water Depth (m below ground level) and Barometric Pressure vs Time

Borehole No.: RedP-BH-6 **Pipe No.:** 1 **Pipe Response Zone (m bgl):** 10.00 to 15.00 **Diver Installed Depth (m bgl):** 14.34 **Diver Serial No:** 808973

Ground Level (m AOD): 4.10 National Grid Coordinates: E: 634113.8 N: 163655.1 **Monitoring Period. Start:** 14/12/2023 00:00 **End:** 18/01/2024 09:15



Notes	
	1. Fluctuating water level suggests that groundwater level here is tidally influenced.
	2. Standpipe micropurged and water samples taken on 13/12/2023, 03/01/2024 and 18/01/2024.
	3
	4

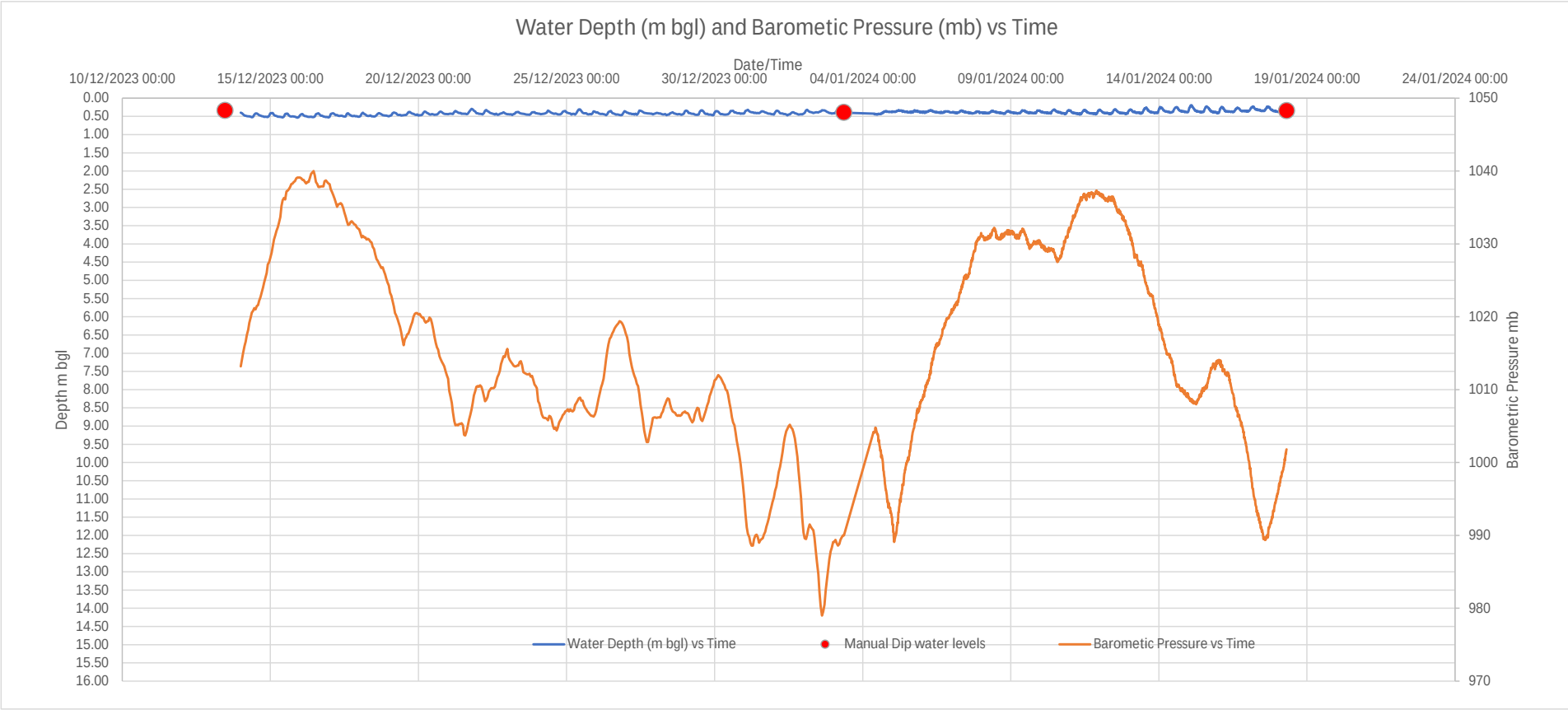
STRUCTURAL SOILS LTD **18 Frogmore Road,** **HEMEL HEMPSTEAD,** **Hertfordshire,** **HP3 9RT**	Diver Installed By	[redacted] 14/12/2023	Data Processed By:	[redacted] 29/01/2024	Checked by (the Responsible Expert) [redacted]	Date 11/03/2024	**Contract Ref:** **563607**
	Contract:		**SEA Link FEED – Richborough On-Shore Cable Link**		**Client**	**National Grid**	**Page** **1 of 1**

'DIVER' WATER LEVEL DATA LOGGER MEASUREMENTS

Plots of Water Depth (m below ground level) and Barometric Pressure vs Time

Borehole No.: RedP-BH-8 **Pipe No.:** 1 **Pipe Response Zone (m bgl):** 11.00 to 16.00 **Diver Installed Depth (m bgl):** 15.57 **Diver Serial No:** 772844

Ground Level (m AOD): 3.01 National Grid Coordinates: E: 633889.3 N: 163701.1 **Monitoring Period. Start:** 14/12/2023 00:00 **End:** 18/01/2024 07:30



Notes	
	1. Fluctuating water level suggests that groundwater level here is tidally influenced.
	2. Standpipe micropurged and water samples taken on 13/12/2023, 03/01/2024 and 18/01/2024.
	3
	4

STRUCTURAL SOILS LTD **18 Frogmore Road,** **HEMEL HEMPSTEAD,** **Hertfordshire,** **HP3 9RT**	Diver Installed By	[redacted] 14/12/2023	Data Processed By:	[redacted] 29/01/2024	Checked by (the Responsible Expert) [redacted]	Date 11/03/2024	**Contract Ref:** **563607**
	Contract:		**SEA Link FEED – Richborough On-Shore Cable Link**		**Client**	**National Grid**	**Page** **1 of 1**

APPENDIX G - CALIBRATION CERTIFICATES

(i) SPT Calibration Records

(ii) Hand Vane Calibration Records

(iii) Gas Analyser Calibration Records

(iv) Photo ionisation Detector (PID) Calibration Records

SPT Hammer Energy Test Report

in accordance with BSEN ISO 22476-3:2005

ARCHWAY ENGINEERING UK LTD
AINLEYS INDUSTRIAL ESTATE
ELLAND
WEST YORKSHIRE
HX5 9JP

SPT Hammer Ref:	AR1321
Test Date:	13/12/2022
Report Date:	13/12/2022
File Name:	AR1321.spt
Test Operator:	JL

Instrumented Rod Data

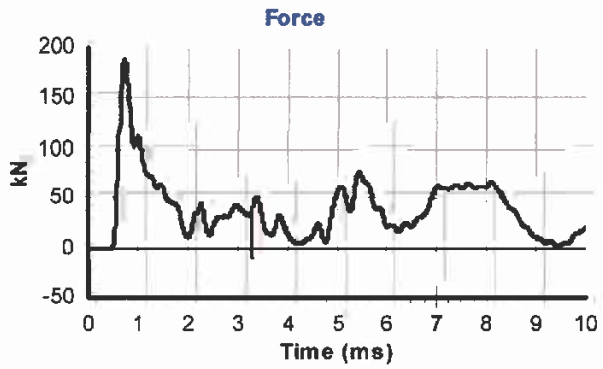
Diameter d_r (mm):	54
Wall Thickness t_r (mm):	6.5
Assumed Modulus E_a (GPa):	208
Accelerometer No.1:	72572
Accelerometer No.2:	72757

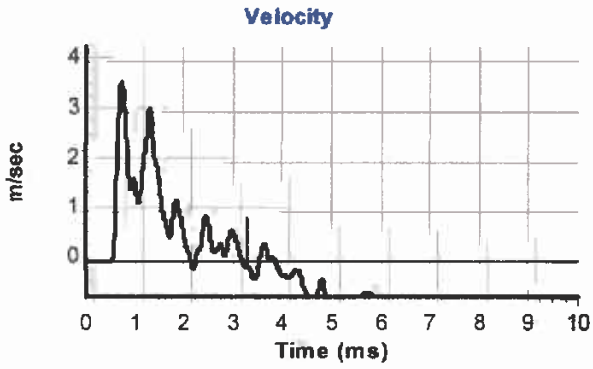
SPT Hammer Information

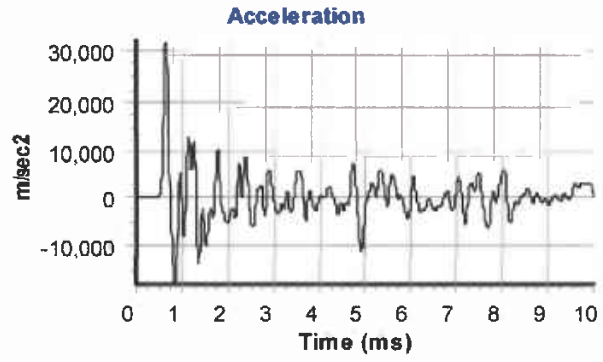
Hammer Mass m (kg):	63.5
Falling Height h (mm):	760
SPT String Length L (m):	10.0

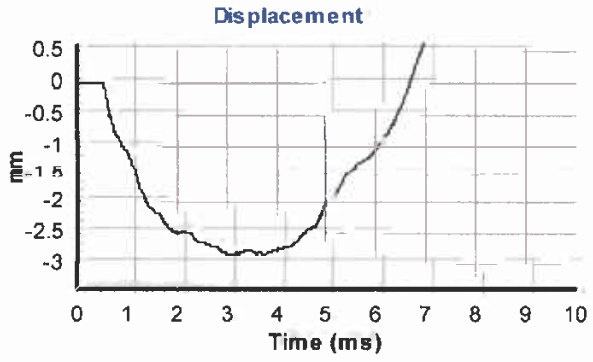
Comments / Location

STRUCTURAL SOILS - 83065









Calculations

Area of Rod A (mm2):	970
Theoretical Energy E_{theor} (J):	473
Measured Energy E_{meas} (J):	291

Energy Ratio E_r (%): **62**

[redacted]

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ARCHWAY ENGINEERING (U.K) LTD

SPT Hammer Energy Test Report

in accordance with BSEN ISO 22476-3:2005

ARCHWAY ENGINEERING
AINLEYS INDUSTRIAL ESTATE
ELLAND
WEST YORKSHIRE
HX5 9JP

SPT Hammer Ref:	AR1862
Test Date:	10/03/2023
Report Date:	10/03/2023
File Name:	AR1862.spt
Test Operator:	KM

Instrumented Rod Data

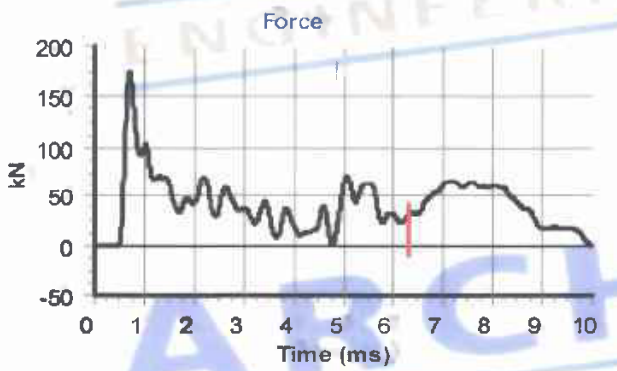
Diameter d_r (mm):	54
Wall Thickness t_r (mm):	6.5
Assumed Modulus E_a (GPa):	208
Accelerometer No.1:	72572
Accelerometer No.2:	72757

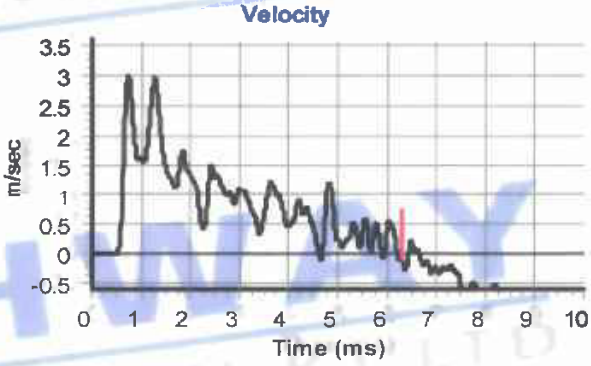
SPT Hammer Information

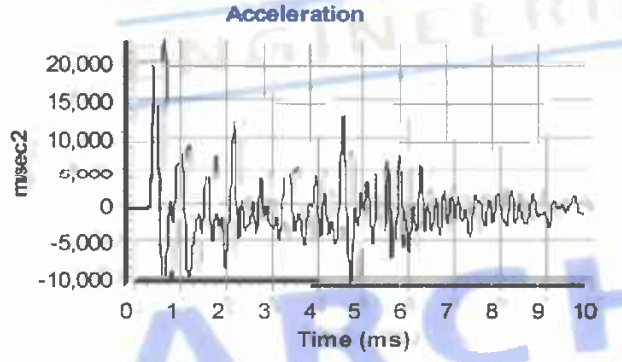
Hammer Mass m (kg):	63.5
Falling Height h (mm):	760
SPT String Length L (m):	10.0

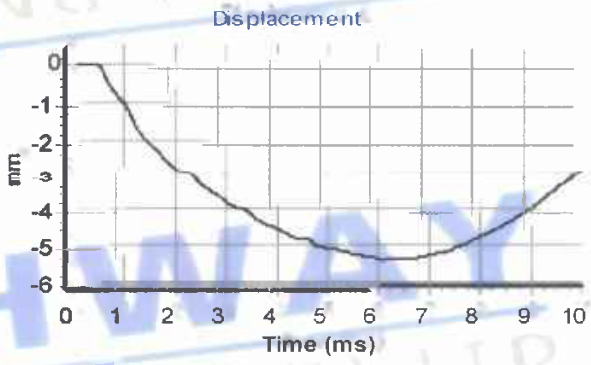
Comments / Location

STRUCTURAL ORDER 84060









Calculations

Area of Rod A (mm2):	970
Theoretical Energy E_{theor} (J):	473
Measured Energy E_{meas} (J):	356

Energy Ratio E_r (%): **75**

[redacted]

The recommended calibration interval is 12 months

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SPT Hammer Energy Test Report

in accordance with BSEN ISO 22476-3:2005

Southern Testing
Unit 11
Charlwoods Road
East Grinstead
West Sussex
RH19 2HU

SPT Hammer Ref:	AR2670
Test Date:	27/03/2023
Report Date:	27/03/2023
File Name:	AR2670.spt
Test Operator:	BOB

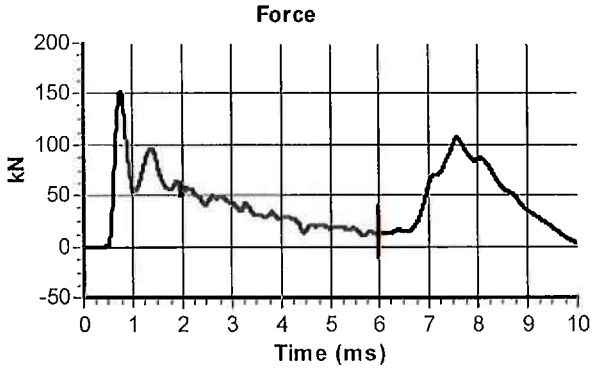
Instrumented Rod Data

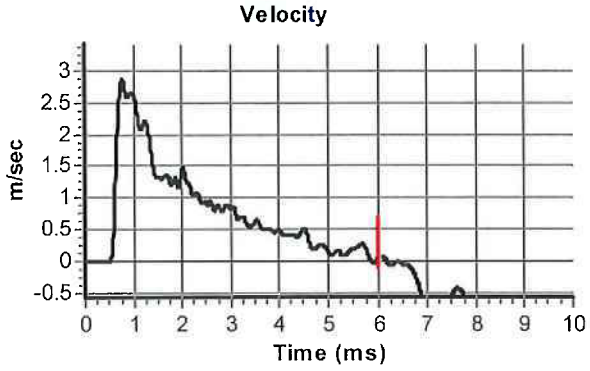
Diameter d_r (mm):	54
Wall Thickness t_r (mm):	6.7
Assumed Modulus E_a (GPa):	208
Accelerometer No.1:	64786
Accelerometer No.2:	64789

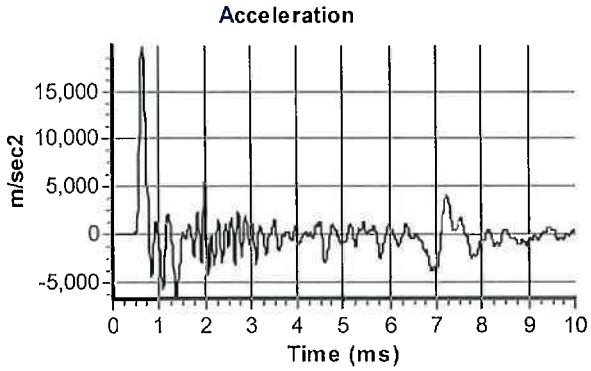
SPT Hammer Information

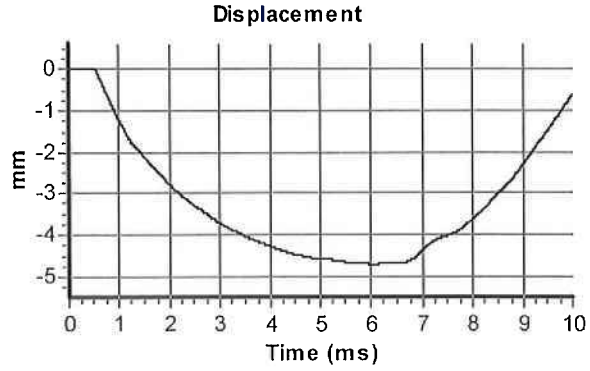
Hammer Mass m (kg):	63.5
Falling Height h (mm):	760
SPT String Length L (m):	14.7

Comments / Location
CHARLSWOOD









Calculations

Area of Rod A (mm2):	996
Theoretical Energy E_{theor} (J):	473
Measured Energy E_{meas} (J):	300

Energy Ratio E_r (%): **64**

[redacted]

The recommended calibration interval is 12 months

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SPT Hammer Energy Test Report

in accordance with BSEN ISO 22476-3:2005

Southern Testing
Unit 11
Charlwoods Road
East Grinstead
West Sussex
RH19 2HU

SPT Hammer Ref:	AR3508
Test Date:	06/04/2023
Report Date:	11/04/2023
File Name:	AR3508.spt
Test Operator:	BOB

Instrumented Rod Data

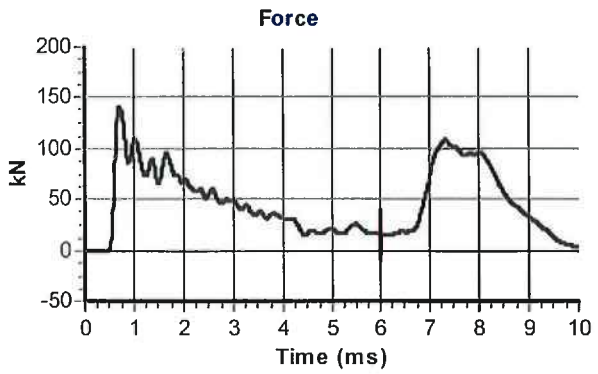
Diameter d_r (mm):	54
Wall Thickness t_r (mm):	6.7
Assumed Modulus E_a (GPa):	208
Accelerometer No.1:	64786
Accelerometer No.2:	64789

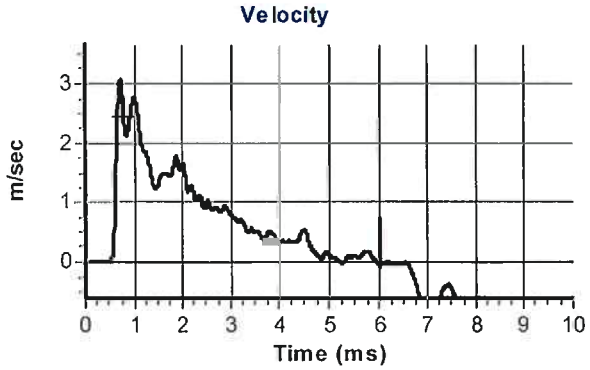
SPT Hammer Information

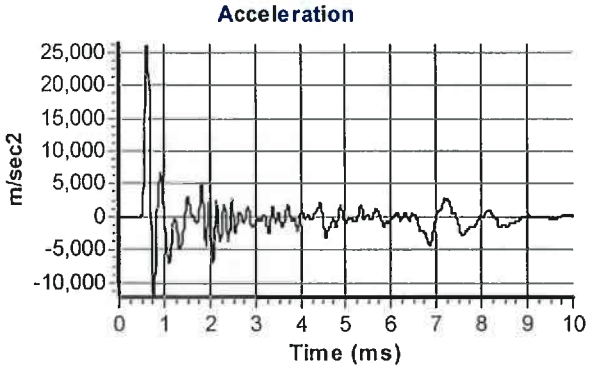
Hammer Mass m (kg):	63.5
Falling Height h (mm):	760
SPT String Length L (m):	14.7

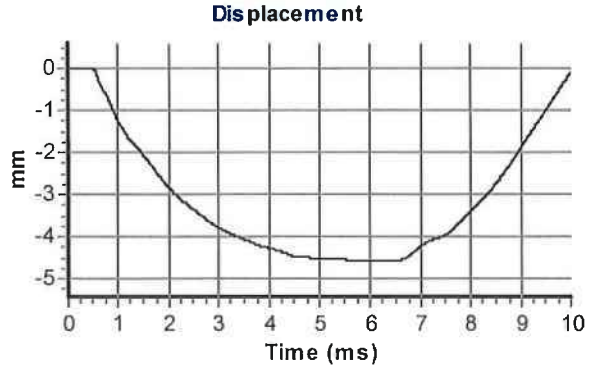
Comments / Location

CHARLWOODS









Calculations

Area of Rod A (mm2):	996
Theoretical Energy E_{theor} (J):	473
Measured Energy E_{meas} (J):	347

Energy Ratio E_r (%): **73**

[redacted]

The recommended calibration interval is 12 months

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SPT Hammer Energy Test Report

in accordance with BSEN ISO 22476-3:2005

Southern Testing
Unit 11
Charlwoods Road
East Grinstead
West Sussex
RH19 2HU

SPT Hammer Ref:	BHDS03
Test Date:	12/08/2023
Report Date:	12/08/2023
File Name:	BHDS03.spt
Test Operator:	RS

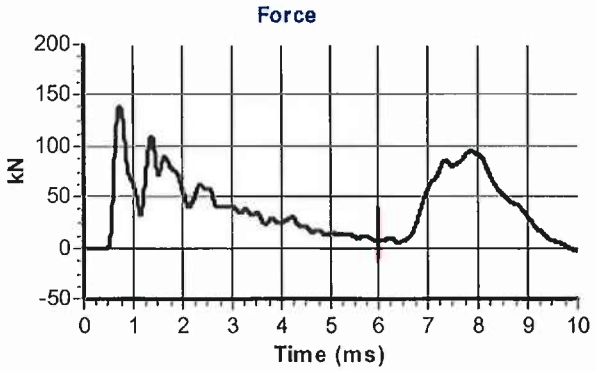
Instrumented Rod Data

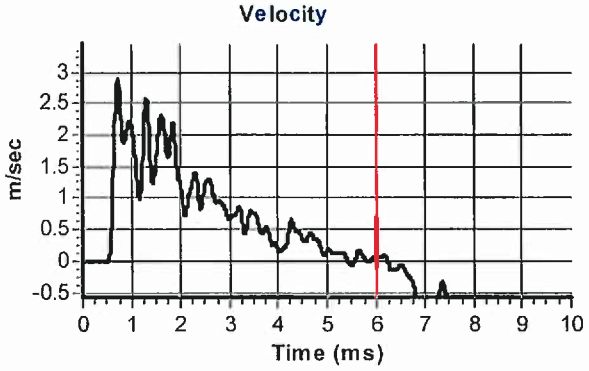
Diameter d_r (mm):	54
Wall Thickness t_r (mm):	6.6
Assumed Modulus E_a (GPa):	208
Accelerometer No.1:	64786
Accelerometer No.2:	64789

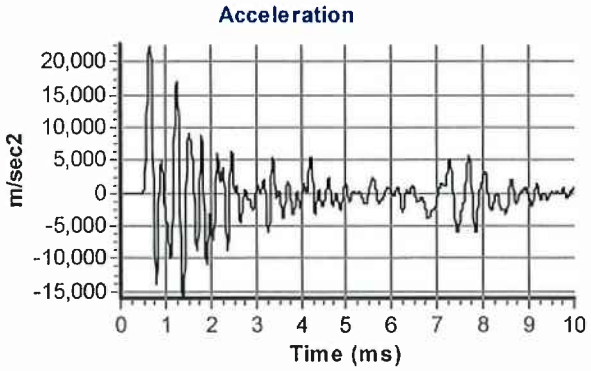
SPT Hammer Information

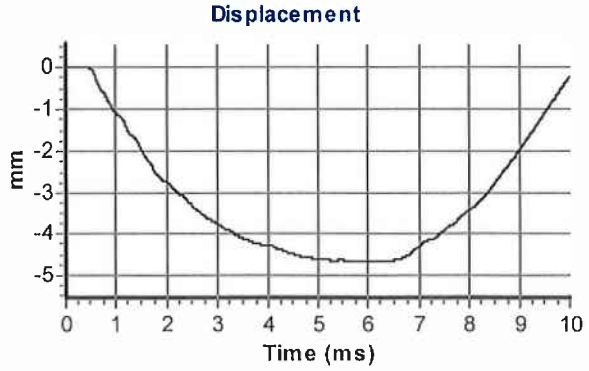
Hammer Mass m (kg):	63.5
Falling Height h (mm):	760
SPT String Length L (m):	14.7

Comments / Location
CHARLSWOOD









Calculations

Area of Rod A (mm2):	983
Theoretical Energy E_{theor} (J):	473
Measured Energy E_{meas} (J):	321

Energy Ratio E_r (%): **68**

[redacted]

The recommended calibration interval is 12 months

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SPT Hammer Energy Test Report

in accordance with BSEN ISO 22476-3:2005

Southern Testing
Unit 11
Charlwoods Road
East Grinstead
West Sussex
RH19 2HU

SPT Hammer Ref:	BHDS04
Test Date:	12/08/2023
Report Date:	12/08/2023
File Name:	BHDS04.spt
Test Operator:	RS

Instrumented Rod Data

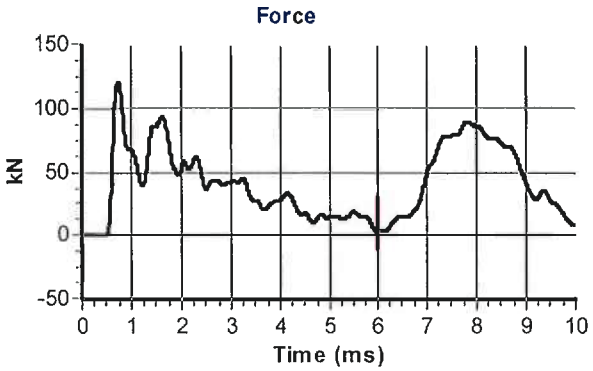
Diameter d_r (mm):	54
Wall Thickness t_r (mm):	6.6
Assumed Modulus E_a (GPa):	208
Accelerometer No.1:	64786
Accelerometer No.2:	64789

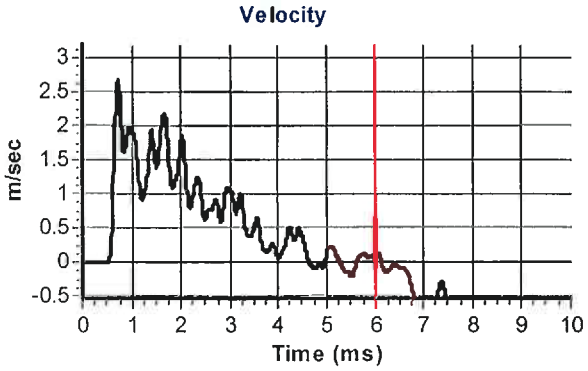
SPT Hammer Information

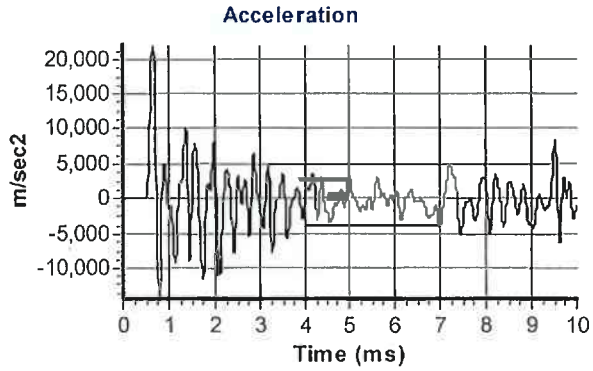
Hammer Mass m (kg):	63.5
Falling Height h (mm):	760
SPT String Length L (m):	14.7

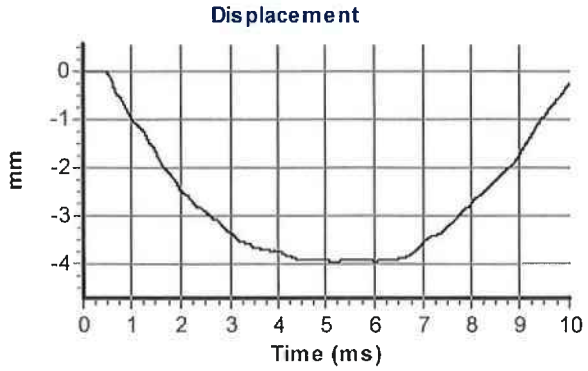
Comments / Location

CHARLSWOOD









Calculations

Area of Rod A (mm2):	983
Theoretical Energy E_{theor} (J):	473
Measured Energy E_{meas} (J):	270

Energy Ratio E_r (%): 57

[redacted]

The recommended calibration interval is 12 months

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SPT Hammer Energy Test Report

in accordance with BSEN ISO 22476-3:2005

ARCHWAY ENGINEERING
AINLEYS INDUSTRIAL ESTATE
ELLAND
WEST YORKSHIRE
HX5 9JP

SPT Hammer Ref:	BHDS07
Test Date:	21/02/2023
Report Date:	21/02/2023
File Name:	BHDS07.spt
Test Operator:	CM

Instrumented Rod Data

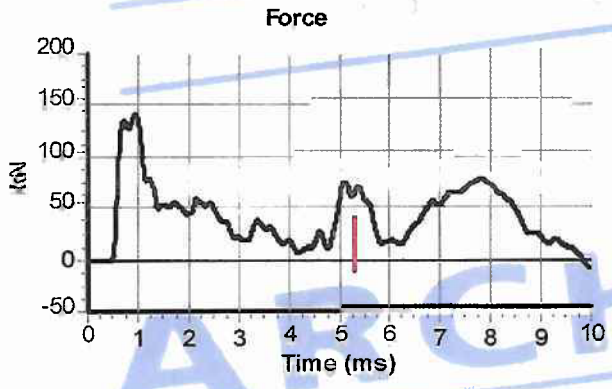
Diameter d_r (mm):	54
Wall Thickness t_r (mm):	6.5
Assumed Modulus E_a (GPa):	208
Accelerometer No.1:	72572
Accelerometer No.2:	72757

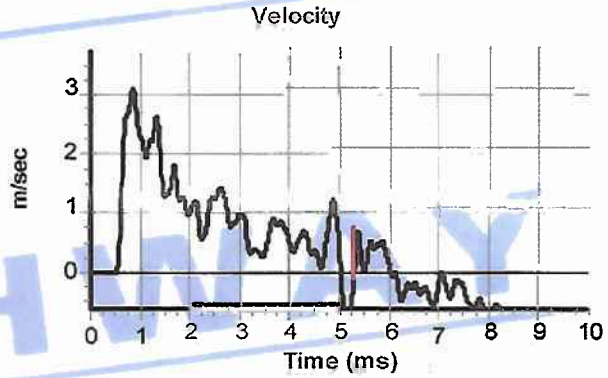
SPT Hammer Information

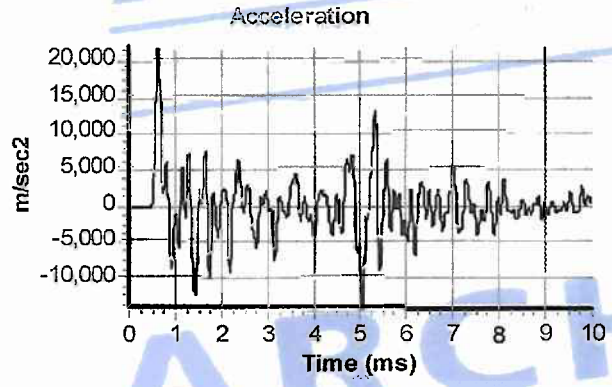
Hammer Mass m (kg):	63.5
Falling Height h (mm):	760
SPT String Length L (m):	10.0

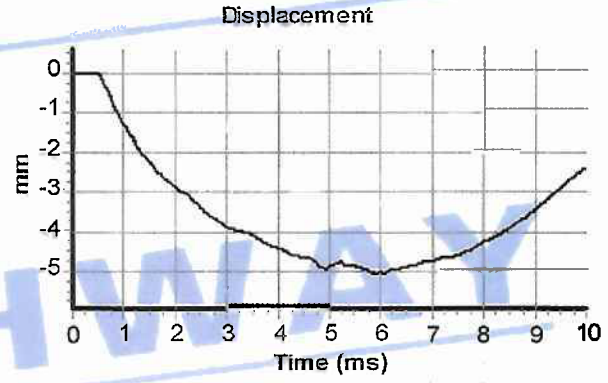
Comments / Location

BHDS - 83803









Calculations

Area of Rod A (mm2):	970
Theoretical Energy E_{theor} (J):	473
Measured Energy E_{meas} (J):	320

Energy Ratio E_r (%): 68

[redacted]

Title: FITTER

The recommended calibration interval is 12 months

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CERTIFICATE OF CALIBRATION

ISSUED BY: LAMBDA CALIBRATION LTD

DATE OF ISSUE: 08-Dec-22 CERTIFICATE No: 747421

Lambda CALIBRATION LTD

11-13 Chorley Central
Business Park
Stump Lane
Chorley
PR6 0BL
Tel: 0845 241 1533

APPROVED SIGNATORY [redacted]

Customer: Structural Soils Ltd, Bedminster, BS3 4EB

Item No: 265118 (73061)

Manufacturer: Geonor

Description: Hand Held Shear Vane

Date of Cal: 07-Dec-22

Basis & Method: The unit under test (UUT) was calibrated by comparison with a digital torque analyser, According to the methodology outlined in BS EN ISO 6789: 2003, at approximately 20%, 60% & 95% of its full scale deflection.
Shear strength was then calculated in accordance with BS 1377: 1990 and is reported in the table at the foot of this certificate.

Equipment Used: LTQA-03, LMB-2A-23

Temperature & RH: Start: 20 degC Finish: 20 degC RH: <90%

Axis of Torque: Vertical Axis of Tool Handle: Vertical

Visual Examination: Tip of vane 1 found to be damaged. Vane 2 found to be twisted.

Adjustments: None

Measured Vane Sizes (mm):

Vane 1 (H)	31.9	Vane 1 (D)	16.0
Vane 2 (H)	40.0	Vane 2 (D)	20.0
Vane 3 (H)	50.6	Vane 3 (D)	25.3

UUT Dial Readings v Torque Analyser Readings:

						Mean Readings	U (+/-) Nm	*k*
Actual Torque (N·m)	0.850	0.876	0.868	0.853	0.898	0.869	0.06	2.87
UUT Readings 20%	26.0	26.0	26.0	26.0	26.0	26.00		
Actual Torque (N·m)	2.365	2.337	2.393	2.309	2.342	2.349	0.09	2.65
UUT Readings 60%	78.0	78.0	78.0	78.0	78.0	78.00		
Actual Torque (N·m)	3.579	3.559	3.665	3.651	3.655	3.622	0.14	2.65
UUT Readings 95%	124.0	124.0	124.0	124.0	124.0	124.00		

Calculated Shear Strength Values:

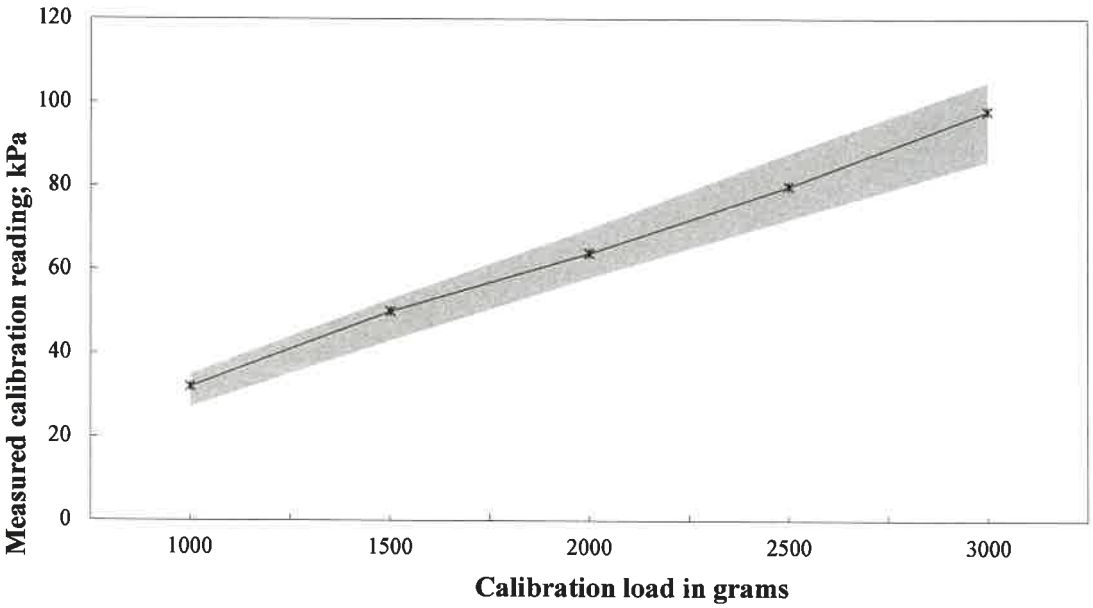
UUT Mean Dial Readings	Mean Torque (N·m)		Vane 1 Shear Strength (kPa)		Vane 2 Shear Strength (kPa)		Vane 3 Shear Strength (kPa)
26.00	0.869		58		30		15
78.00	2.349		157		80		40
124.00	3.622		242		124		61

1 kPa = 1kN/m² = 0.101972 tonne/m² (1 tonne/m² = 9.80665 kPa)

The reported expanded uncertainty for torque U, is based on a standard uncertainty multiplied by a coverage factor *k*, providing a level of confidence of approximately 95%.

This certificate provides traceability of measurement to recognised national standards, and to the units of measurement realised at the National Physical Laboratory or other recognised national standards laboratories. This certificate may not be reproduced other than in full, without the prior written approval of the issuing laboratory.

Calibration Certificate; Geonor H-60 Vane borer



Calibration load in grams	Calculated shear strenght kPa	Minimum inst. reading	Maximum inst.reading	Measured reading, kPa
1000	32	27	35	32
1500	48	43	53	50
2000	64	58	70	64
2500	80	72	88	80
3000	95	86	105	98

Instrument No:	73233
Calibration tolerance, ±	10%
Calibrated by:	L.H
Date:	8-mar-23
Order.no	36408

GEONOR AS

[redacted]

GEONOR AS
Grini Næringspark 10
N-1361 Østerås

Tel: +[redacted]
Mail: [redacted]no
Enterprise NO.: 911954567

CERTIFICATION OF CALIBRATION

PJLA Calibration
No. 66916

Date Of Calibration: 09-Feb-2024

Certificate Number: G503221_10/34592

Issued by: QED Environmental Systems Inc.

Customer: **STRUCTURAL SOILS LIMITED**
SPRING LODGE 172 CHESTER ROAD HELSBY FRODSHAM, CHESHIRE WA6 0AR
GB

Description:

Model: GA5000

Serial Number: G503221

Accredited Results:

Methane (CH4)		
Certified Gas (%)	**Instrument Reading (%)**	**Uncertainty (%)**
5.1	5.0	0.42
15.0	15.0	0.66
60.0	59.9	1.03

Carbon Dioxide (CO2)		
Certified Gas (%)	**Instrument Reading (%)**	**Uncertainty (%)**
5.0	5.0	0.43
15.2	15.2	0.71
40.0	40.1	1.19

Oxygen (O2)		
Certified Gas (%)	**Instrument Reading (%)**	**Uncertainty (%)**
21.5	21.6	0.25

Gas cylinders are traceable and details can be provided if requested.

CH4, CO2 readings recorded at: 32.2 °C/89.9 °F Barometric Pressure: 0974 mbar/28.77 "Hg

O2 readings recorded at: 22.6 °C/72.6 °F

Method of Test : The analyzer is calibrated in a temperature controlled chamber using a series of reference gases, in compliance with procedure ISP17.

Instrument has passed calibration as the measurement result is within the specification limit. The specification limit takes into account the measurement uncertainty.

The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95%. The uncertainty evaluation has been carried out in accordance with NIST requirements.

The calibration results published in this certificate were obtained using equipment capable of producing results that are traceable through NIST to the International System of Units (SI). Certification only applies to results shown. This certificate may not be reproduced other than in full, except with the prior written approval of the issuing laboratory.

[redacted] info@qedenv.com

QED Environmental Systems Inc. 2355 Bishop Circle West, Dexter, MI 48130

CERTIFICATION OF CALIBRATION

PJLA Calibration
No. 66916

QED

Date Of Calibration: 09-Feb-2024

Certificate Number: G503221_10/34592

Issued by: QED Environmental Systems Inc.

Non Accredited results:

Pressure Transducers (inches of water column)					
Transducer	**Certified (Low)**	**Reading (Low)**	**Certified (High)**	**Reading (High)**	**Accuracy**
Relative	0"	0"	40"	40.64"	2.0"

Barometer (mbar)	
Reference	**Instrument Reading**
0974 mbar / 28.77 "Hg	0974 mbar / 28.77 "Hg

As received gas check readings are only recorded if the instrument is received in a working condition.
Where the instrument is received damaged no reading can be taken.

[redacted]

Date of Issue : 12 Feb 2024

Approved By Signatory

[redacted]

Laboratory Inspection

The calibration results published in this certificate were obtained using equipment capable of producing results that are traceable through NIST to the International System of Units (SI). Certification only applies to results shown. This certificate may not be reproduced other than in full, except with the prior written approval of the issuing laboratory.

www.qedenv.com (800) 624-2026 info@qedenv.com

QED Environmental Systems Inc. 2355 Bishop Circle West, Dexter, MI 48130

GA5K G503221 CALIBRATION

Instrument Run No. 57611
Position: 3
Operator: [redacted]
Instance: 118

Started: 2/9/2024 8:19:22 AM
Finished: 2/9/2024 8:37:55 AM

Chemical Cell series: 4
Channel: CO
Range: 500 ppm

Cell Age 0 Years and 11 months

PASS

Channel: CO, Cert Gas ppm : 500.00, Min tol. : 460.00, Max tol. : 540.00, Max - Min tol. : 10
Zero gas tolerance: -5 to 5 ppm

	ZERO				GAS					
	Reading	Min	Max	Max-Min	Reading	Min	Max	Max-Min	Offset	Slope
Factory	-1	-1	-1	0	496	496	497	1	*33071*	48.895
User	0	0	0	0	496	496	497	1	*33071*	48.895
Actual	0	0	0	0	500	500	500	0	*33010*	48.641
Filtered	33010	33005	33018	13	57341	57309	57351	42		

Chemical Cell series: 7
Channel: H2S
Range: 200 ppm

Cell Age 0 Years and 4 months

FAIL

Channel: H2S, Cert Gas ppm : 49.80, Min tol. : 45.82, Max tol. : 53.78, Max - Min tol. : 10
Zero gas tolerance: -5 to 5 ppm

	ZERO				GAS					
	Reading	Min	Max	Max-Min	Reading	Min	Max	Max-Min	Offset	Slope
Factory	0	0	0	0	49	49	49	0	*33135*	111.894
User	0	0	0	0	49	49	49	0	*33135*	111.894
Actual	0	0	0	0	50	50	50	0	*33095*	111.062
Filtered	33095	33092	33098	6	38628	38620	38634	14		

OK by [redacted]

END OF DOCUMENT

CERTIFICATION OF CALIBRATION

4533

Date Of Calibration: 08-Nov-2023

Certificate Number: G503628_2/33902

Issued by: QED Environmental Systems Ltd.

Customer: **Structural Soils Limited**
Spring Lodge 172 Chester Road Helsby
Frodsham Cheshire WA6 0AR UNITED KINGDOM

Description: Gas Analyser

Model: GA5000

Serial Number: G503628

UKAS Accredited results:

Results after adjustment :

Methane (CH_4)		
Certified Gas (%)	**Instrument Reading (%)**	**Uncertainty (%)**
5.0	4.9	0.072
15.0	14.9	0.13
60.0	59.7	0.42

Carbon Dioxide (CO_2)		
Certified Gas (%)	**Instrument Reading (%)**	**Uncertainty (%)**
5.0	4.9	0.074
15.0	14.7	0.13
40.0	40.1	0.29

Oxygen (O_2)		
Certified Gas (%)	**Instrument Reading (%)**	**Uncertainty (%)**
21.0	21.1	0.25

The inwards assessment was carried out 24-Oct-2023.
The maximum adjustment is larger than the specification limit.
Inwards assessment data is available if requested.

All concentrations are molar.

CH_4, CO_2 readings recorded at : 32.3 °C ± 2.5 °C

O2 readings recorded at : 23.6 °C ± 2.5 °C

Barometric Pressure : 0990 mbar ± 4 mbar

Method of Test : The analyser is calibrated in a temperature controlled chamber using a series of reference gases, in compliance with procedure LP004.

Instrument has passed calibration as the measurement result is within the specification limit. The specification limit takes into account the measurement uncertainty.
The results relate only to the item calibrated

This certificate is issued in accordance with the laboratory accreditation requirements of the United Kingdom Accreditation Service. It provides traceability of measurement to the SI system of units and/or to units of measurement realised at the National Physical Laboratory or other recognised national metrology institutes. This certificate may not be reproduced other than in full, except with the prior written approval of the issuing laboratory.

Calibration Instance:118 IGC Instance:118

www.qedenv.com +44 (0) 333 800 0088 sales@qedenv.co.uk

QED Environmental Systems Ltd. Cyan Park - Unit 3, Jimmy Hill Way, Coventry, CV2 4QP, UNITED KINGDOM

Registered in England and Wales 1898734

CERTIFICATION OF CALIBRATION

4533

Date Of Calibration: 08-Nov-2023

Certificate Number: G503628_2/33902

Issued by: QED Environmental Systems Ltd.

The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95%. The uncertainty evaluation has been carried out in accordance with UKAS requirements.

Calibrations marked 'Non-UKAS Accredited results' on this certificate have been included for completeness.

Non-UKAS accredited results after adjustment:

Barometer (mbar)	
Reference	**Instrument Reading**
990	990

Additional Gas Cells		
Gas	**Certified Gas (ppm)**	**Instrument Reading (ppm)**
CO	501	501
H_2S	52.6	53

Internal Flow	
Applied (l/hr)	**Instrument Reading (l/hr)**
5.0	5.0
10.0	9.9

Date of Issue : 15-Nov-2023 **Approved by Signatory** [redacted]

[redacted]
Laboratory Inspection

End of Certificate

This certificate is issued in accordance with the laboratory accreditation requirements of the United Kingdom Accreditation Service. It provides traceability of measurement to the SI system of units and/or to units of measurement realised at the National Physical Laboratory or other recognised national metrology institutes. This certificate may not be reproduced other than in full, except with the prior written approval of the issuing laboratory.

Calibration Instance:118 IGC Instance:118

www.qedenv.com +44 (0) 333 800 0088 sales@qedenv.co.uk

QED Environmental Systems Ltd. Cyan Park - Unit 3, Jimmy Hill Way, Coventry, CV2 4QP, UNITED KINGDOM

Registered in England and Wales 1898734

CERTIFICATION OF CALIBRATION

4533

Date Of Calibration: 14-Sep-2023

Certificate Number: G503807_2/33587

Issued by: QED Environmental Systems Ltd.

Customer: **Structural Soils Limited**
Spring Lodge 172 Chester Road Helsby
Frodsham Cheshire WA6 0AR UNITED KINGDOM

Description: Gas Analyser

Model: GA5000

Serial Number: G503807

UKAS Accredited results:

Results after adjustment :

Methane (CH_4)		
Certified Gas (%)	**Instrument Reading (%)**	**Uncertainty (%)**
5.0	5.0	0.072
15.0	15.1	0.13
60.0	60.0	0.42

Carbon Dioxide (CO_2)		
Certified Gas (%)	**Instrument Reading (%)**	**Uncertainty (%)**
5.0	5.0	0.074
15.0	14.9	0.13
40.0	40.0	0.29

Oxygen (O_2)		
Certified Gas (%)	**Instrument Reading (%)**	**Uncertainty (%)**
20.2	20.3	0.25

The inwards assessment was carried out 31-Aug-2023.
The maximum adjustment is larger than the specification limit.
Inwards assessment data is available if requested.

All concentrations are molar.

CH_4, CO_2 readings recorded at : 36.2 °C ± 2.5 °C

O2 readings recorded at : 23.8 °C ± 2.5 °C

Barometric Pressure : 1010 mbar ± 4 mbar

Method of Test : The analyser is calibrated in a temperature controlled chamber using a series of reference gases, in compliance with procedure LP004.

Instrument has passed calibration as the measurement result is within the specification limit. The specification limit takes into account the measurement uncertainty.
The results relate only to the item calibrated

This certificate is issued in accordance with the laboratory accreditation requirements of the United Kingdom Accreditation Service. It provides traceability of measurement to the SI system of units and/or to units of measurement realised at the National Physical Laboratory or other recognised national metrology institutes. This certificate may not be reproduced other than in full, except with the prior written approval of the issuing laboratory.

Calibration Instance:118 IGC Instance:117

[redacted] +44 (0) 333 800 0088 sales@qedenv.co.uk

QED Environmental Systems Ltd. Cyan Park - Unit 3, Jimmy Hill Way, Coventry, CV2 4QP, UNITED KINGDOM

Registered in England and Wales 1898734

CERTIFICATION OF CALIBRATION

4533

Date Of Calibration: 14-Sep-2023

Certificate Number: G503807_2/33587

Issued by: QED Environmental Systems Ltd.

The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95%. The uncertainty evaluation has been carried out in accordance with UKAS requirements.

Calibrations marked 'Non-UKAS Accredited results' on this certificate have been included for completeness.

Non-UKAS accredited results after adjustment:

Barometer (mbar)	
Reference	**Instrument Reading**
1010	1010

Additional Gas Cells		
Gas	**Certified Gas (ppm)**	**Instrument Reading (ppm)**
CO	501	501
H_2S	52.6	53

Internal Flow	
Applied (l/hr)	**Instrument Reading (l/hr)**
5	5.1
10	9.9

Date of Issue : 28-Sep-2023 **Approved by Signatory**

[redacted]

Laboratory Inspection

End of Certificate

This certificate is issued in accordance with the laboratory accreditation requirements of the United Kingdom Accreditation Service. It provides traceability of measurement to the SI system of units and/or to units of measurement realised at the National Physical Laboratory or other recognised national metrology institutes. This certificate may not be reproduced other than in full, except with the prior written approval of the issuing laboratory.

Calibration Instance:118 IGC Instance:117

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QED Environmental Systems Ltd. Cyan Park - Unit 3, Jimmy Hill Way, Coventry, CV2 4QP, UNITED KINGDOM

Registered in England and Wales 1898734

Instrument Service Report

Unit Type: GA5000	Part Number:	Date:	Next Service Due:	Customer Name:
Serial Number: G503807	GA5KB0B0-101	28-Sep-2023	14-Mar-2024	Structural Soils Limited

Actions/Investigation Description	Result	Comments
Serial Number Check	Yes	
Battery Requires Replacing	Yes	
Internal Flow Calibrated	Yes	
Full Automatic Calibration	Pass	
Serial Comms Test (USB)	Pass	
Service history of instrument reviewed	Yes	
Inwards gas check data reviewed	Yes	
Instrument turns on	Pass	
Backlight operates correctly	Yes	
External visual inspection performed	Pass	
Internal visual inspection performed	Pass	
All screws tightened to correct torque	Yes	
All connectors are secure	Pass	
Check diagnostic channels	Pass	
Case compression test	Pass	
Impact and stability test	Pass	
Pressure transducer test(s) as per user operation	Pass	

Instrument Service Report

Unit Type: GA5000	Part Number:	Date:	Next Service Due:	Customer Name:
Serial Number: G503807	GA5KB0B0-101	28-Sep-2023	14-Mar-2024	Structural Soils Limited

Actions/Investigation Description	Result	Comments
Final visual inspection on instrument	Pass	
Case assembly closed and screws tightened to correct torque	Yes	
PTFE filters replaced	Yes	
Pump flow greater than 550 ml/min	Pass	
Automated instrument pressure system test (leak test)	Pass	
Pump vacuum greater than -400 mb and flow fails	Pass	
GPS function test	NA	
Temperature probe tested	Pass	
Anemometer tested	Pass	
Chemical gas sensors calibrated – refer to Calibration Certificate	Pass	
Check main PCB and sensor PCB have the latest software	Yes	
Transducers calibrated	Pass	
As Received Chemical Cell Gas Assessment Performed (CAL16)	Yes	
As Received Gas Assessment Performed (CAL01 or CAL02)	Yes	
Chemical sensor(s) replacement over 2yrs UK and 21mths overseas.	No	
O2 sensor replacement over 3yrs UK, 33mths overseas	Pass	

Instrument Service Report

Unit Type: GA5000	Part Number:	Date:	Next Service Due:	Customer Name:
Serial Number: G503807	GA5KB0B0-101	28-Sep-2023	14-Mar-2024	Structural Soils Limited

Actions/Investigation Description	Result	Comments
Verification of Instrument	Pass	

Customer Comments

Returned for full service and calibration

General Comments/Feedback

This instrument was tested against known certified gas values and the user calibration was seen to be worse than the factory calibration for the following channels: CH4 CO2 . Common reasons for this are an out of date or poor user calibration. Regular user calibrations carried out in accordance with our operating manual will help to optimise performance. For further information on user calibration please visit the FAQ section of our website.
Thank you for returning your gas analyser to the QED Service Centre for full service and calibration. We are pleased to inform you that the analyser was received and fully assessed by one of our experienced Service Engineers and no significant faults or issues were observed during the assessment. Our extensive service was carried out, and any necessary components replaced. The analyser has successfully passed all of our rigorous testing and quality checks and has been calibrated using our bespoke, state of the art calibration facility.
For further information about how to get the best use from your instrument please visit our YouTube channel http://www.youtube.com/GeotechTV and on our Website https://qedenv.com
We have replaced the battery because it is over 2 years old. This is in accordance to the battery cell manufacturer's recommendation.

If you require any further assistance with your instrument please email our Technical Support Team at technical@qedenv.co.uk or call us on +44 (0) 333 800 0088 (Monday to Thursday 08.30 - 17.00 & Friday 08.30 - 15.30) UK time zone.

Service Details:		Service Engineer:	Calibration Engineer:	Approved By:	Signature:
Service Scheme	✓	[redacted]ey		FZolota	[redacted]
Standard Service					

QED

Instrument House
91-92 Shrivenham Hundred Business Park
Watchfield
Oxfordshire
SN6 8TY
Fax: 01793 784466
service@shawcity.co.uk

SERVICE / INSPECTION SHEET

JOB NUMBER: 77493
INSTRUMENT: Phocheck Tiger

SERIAL NUMBER: T-114961
DATE RECEIVED: 30/08/2023

FIRMWARE: 1.0.6

CUSTOMER: Structural Soils Ltd

ITEMS RECEIVED	Received	RTN?
Instrument	YES	
Rubber Boot	YES	
Battery Charger	YES	
Charging Cradle	YES	
Operation Manual	YES	
Quick Start Guide	YES	
Spares Kit		
Comms Cable		
Probe FLEXI		
Peli Case		
Tubing		
Regulator		
Software (Memory Stick)		
PLASTIC CASE	YES	
silver case		
	SIGNED:	

TESTS	Pre Service	Post Service
Charger Test		OK
Battery charge Test		OK
Lamp Test		OK
Air Flow Test ≥ 220ml/min		248ml/min
Block Flow Test ≤ 15ml/min		3ml/min
Moisture Sensitivity = 0.0ppm		0.00ppm
Switch Test		OK
Sensor Test		OK
Alarm Test		OK
PC Comms Test		OK
Datalog Test		OK
Display Test		OK
Physical Inspection		OK
PAT Test		OK
Firmware Upgrade		OK
Software Upgrade (usb)	n/a	
Function Test		OK
Run time		111hrs23min

Comments:
Unit in for service and calibration
Firmware upgraded from 9.04 to 1.0.6
Set real time clock
Stack, PTFE filter and inlet/ outlet seals replaced as per service
Cleaned lamp face with aluminium oxide
Sensor cover broken, inner plastic flow path come away from plastic housing when removed from the unit
Replaced sensor cover, which comes with a new sensor seal fitted
Flow rate 238ml/min, Block 3ml/min
Unit calibrated and bump tested
Power supply PAT tested, cradle passed function test

TECHNICIAN [redacted] DATE: 31/08/2023

CERTIFICATE OF CALIBRATION
Phocheck Tiger

CALIBRATION CERTIFICATE NO:

ISSUED BY: SHAWCITY LIMITED
DATE: 31/08/2023

APPROVED SIGNATORY: [redacted]

NAME:

CUSTOMER: Structural Soils Ltd
INSTRUMENT: PhoCheck Tiger
SERIAL NUMBER: T-114961

CALIBRATION METHOD: CM03
AMBIENT CONDITIONS: 20°C ± 2°C and 50% (± 20%) RH

Prior to calibration the instrument was allowed to stabilise in the laboratory for at least 30 minutes.
The instrument was calibrated by exposing the sensor to known values of gas concentrations.
All gases were sampled through the complete probe and in line filter, where applicable.
The reference value is that generated by the certified source and the indicated value is that measured by the instrument.

CALIBRATION RESULTS

GAS	LOT No	REF. VALUE	INDICATED VALUE
Isobutylene	WO409995-1	100 ppm	100 ppm
Isobutylene	WO380827-2	1000 ppm	1000 ppm

COMMENTS:
The reported uncertainty is based on a standard uncertainty multiplied by a coverage factor of $k=2$.
This provides a level of confidence of uncertainty of approximately 95%.
The uncertainty of measurement is ±2 %
The results indicate that the instrument conforms to the applicable parts of the published specification.

HEALTH & SAFETY, OCCUPATIONAL HYGIENE AND ENVIRONMENTAL MONITORING INSTRUMENTS

Tel: [redacted]
[redacted]

Instrument House, 91-92 Shrivenham Hundred Business Park
Watchfield, Oxfordshire, SN6 8TY

CONTROLS
Testing equipment for the construction industry

VANE TESTER
CALIBRATION CERTIFICATE

Wykeham Farrance
Soil Mechanics Division of CONTROLS

501 564

Certificate Number VT03002

Date of Issue 24/03/2023

Vane Ref/S No FTK1

Page 1 of 2

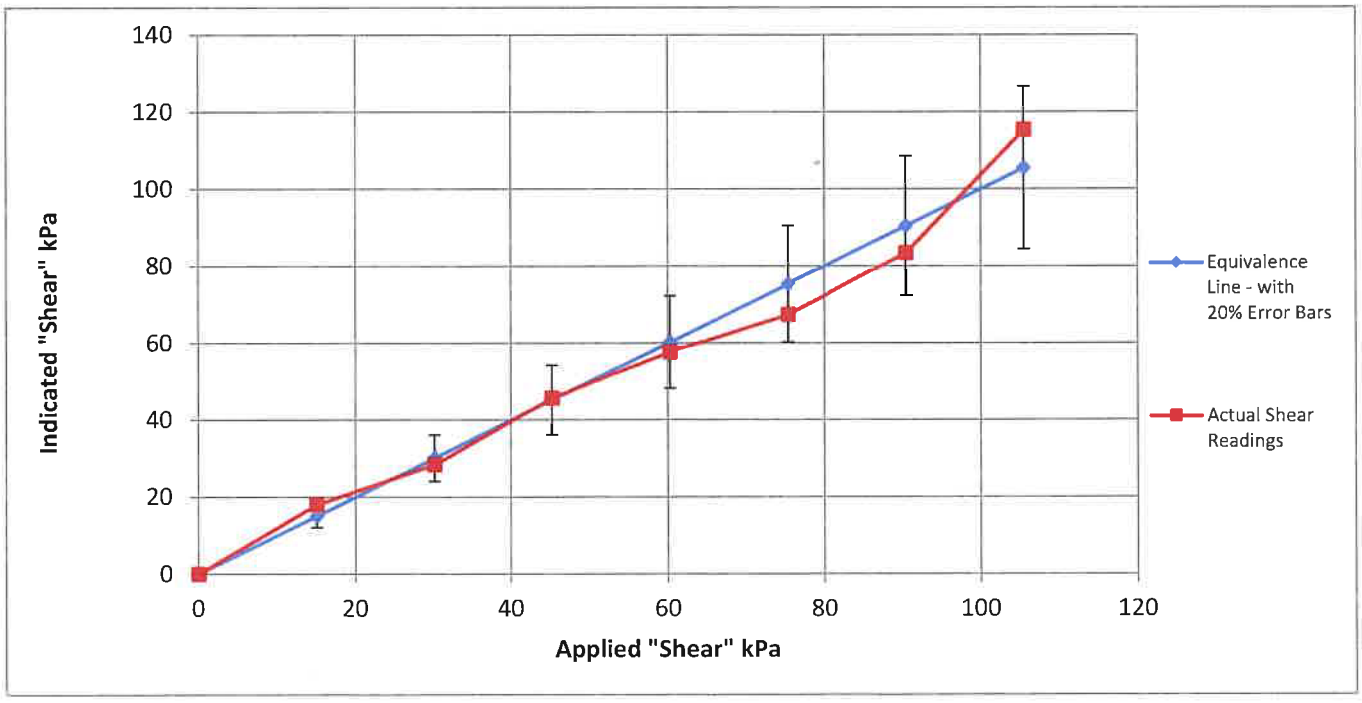
Manufacturer Controls

Model No T0174

Approved Signatory [redacted]

Date of Calibration 24/03/2023

Actual "Shear Stress" Applied kPa	Average "Shear Stress" Recorded kPa	Error %	Repeatability %
0.0	0	0.0%	0.0%
15.1	18.0	16.3%	11.1%
30.1	28.3	-6.4%	14.1%
45.2	45.7	1.0%	6.6%
60.3	57.7	-4.5%	1.7%
75.4	67.3	-11.9%	3.0%
90.4	83.3	-8.5%	7.2%
105.5	115.3	8.5%	1.7%



The above Vane tester was mounted in a "frictionless" rotation lever device and was loaded with traceable weights (Cert No 5120) at fixed centres measured using traceable equipment (Cert No 130040MAH). The shear strength reading recorded was compared back through calculation to BS1377 Part 7 Clause 3.4.2 to the actual torque ("shear strength") applied. The above results were recorded. These apply to the middle size of vane 20mmx40mm. For a simple "lookup" of vane strengths for all 3 sizes of vanes please see over.

CONTROLS TESTING EQUIPMENT LTD – Controls House, Icknield Way Tring Hertfordshire HP23 4JX
Tel +44 (0)1442 828311 – Fax +44 (0)1442 828466 – sales@controlstesting.co.uk [redacted]

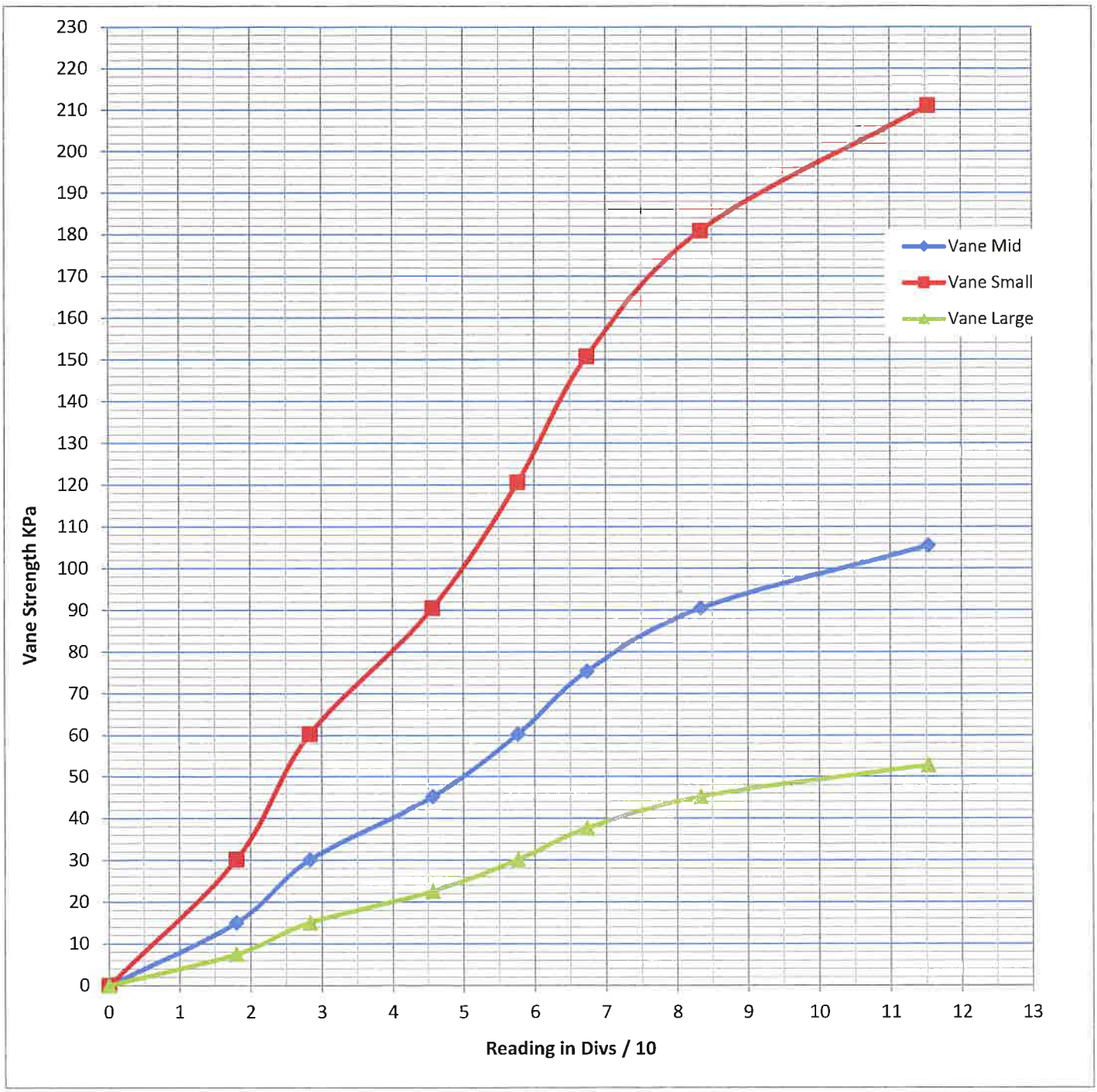
CONTROLS
Testing equipment for the construction industry

VANE TESTER
CALIBRATION CERTIFICATE

Wykeham Farrance
Soil Mechanics Division of CONTROLS

Quick Ref Lookup Chart for Certificate Vane Ref/S No FTK1

Find Indicted Reading on X Axis and follow up to graph and across to Y Axis to read the "True" Shear Vane Reading



Note: 1 Divs = 10KPa

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CONTROLS
Testing equipment for the construction industry

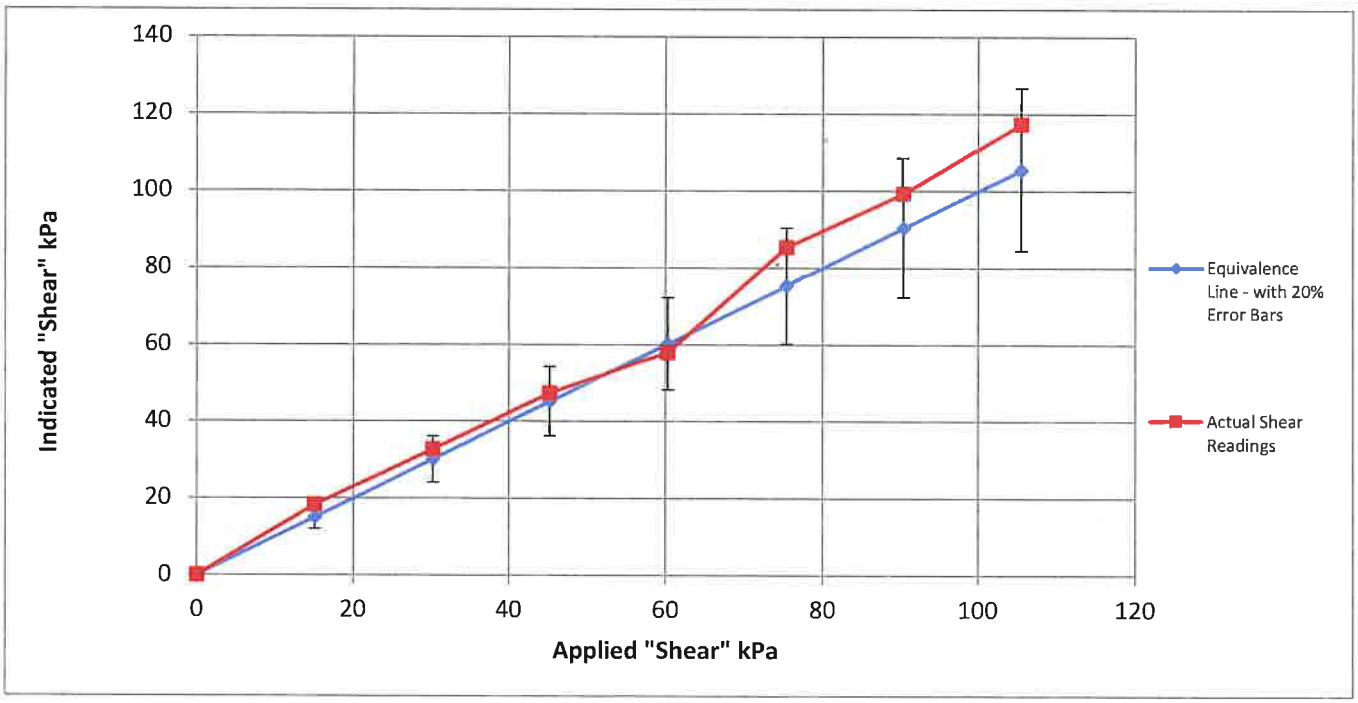
VANE TESTER CALIBRATION CERTIFICATE

Wykeham Farrance
Soil Mechanics Division of CONTROLS

Field Test Kit 2
501555

Certificate Number	VT03003	**Date of Issue**	24/03/2023
Vane Ref/S No	FTK3	**Page**	1 of 2
Manufacturer	Controls	**Approved Signatory**	[redacted]
Model No	T0174		
Date of Calibration	24/03/2023		

Actual "Shear Stress" Applied kPa	Average "Shear Stress" Recorded kPa	Error %	Repeatability %
0.0	0	0.0%	0.0%
15.1	18.3	17.8%	5.5%
30.1	32.7	7.7%	12.2%
45.2	47.3	4.5%	2.1%
60.3	58.0	-3.9%	6.9%
75.4	85.3	11.7%	2.3%
90.4	99.3	8.9%	2.2%
105.5	117.3	10.1%	1.7%



The above Vane tester was mounted in a "frictionless" rotation lever device and was loaded with traceable weights (Cert No 5120) at fixed centres measured using traceable equipment (Cert No 130040MAH). The shear strength reading recorded was compared back through calculation to BS1377 Part 7 Clause 3.4.2 to the actual torque ("shear strength") applied. The above results were recorded. These apply to the middle size of vane 20mmx40mm. For a simple "lookup" of vane strengths for all 3 sizes of vanes please see over.

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Tel +44 (0)1442 828311 – Fax +44 (0)1442 828466 – sales@controlstesting.co.uk [redacted]

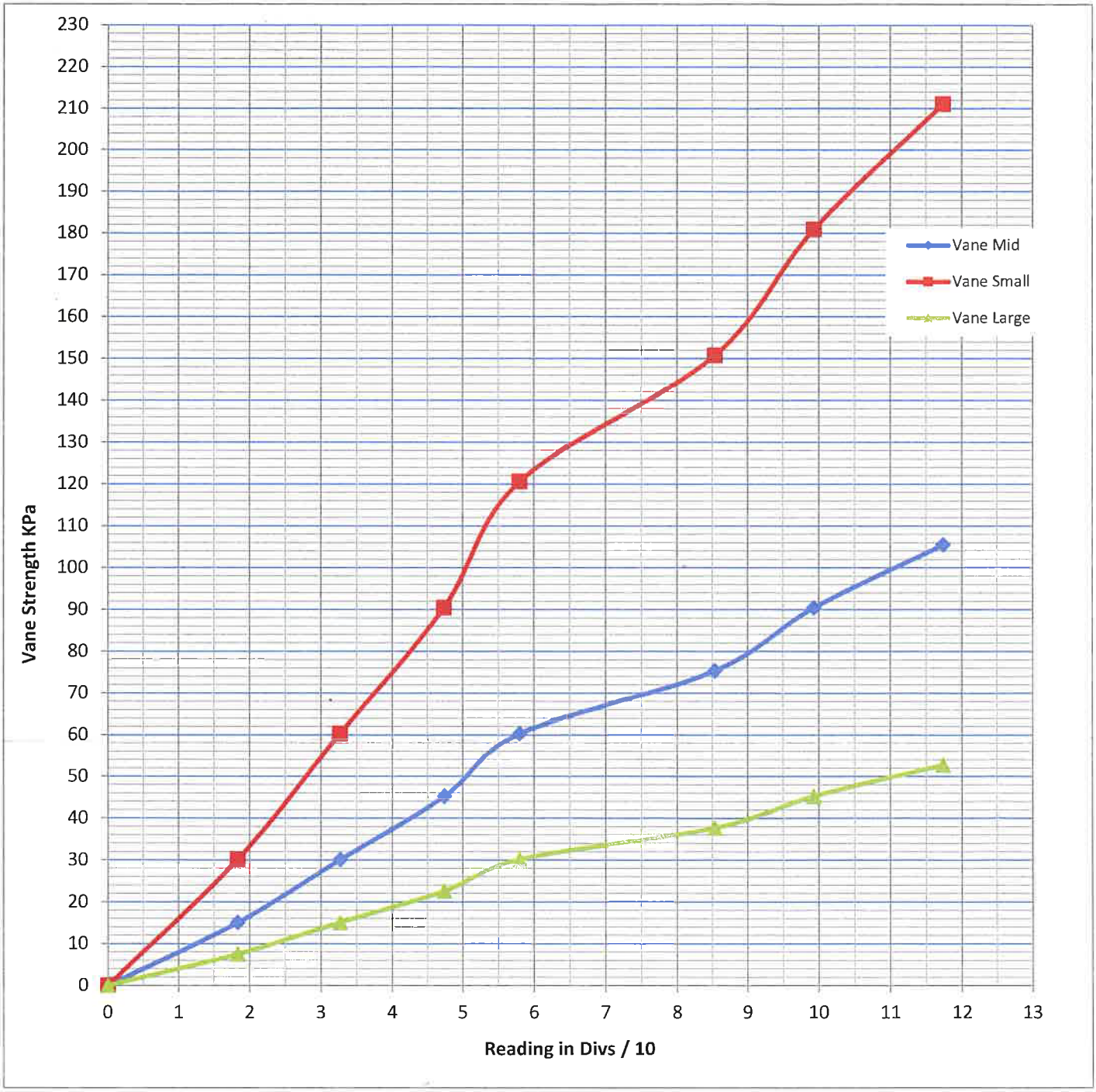
CONTROLS
Testing equipment for the construction industry

VANE TESTER
CALIBRATION CERTIFICATE

Wykeham Farrance
Soil Mechanics Division of CONTROLS

Quick Ref Lookup Chart for Certificate Vane Ref/S No FTK3

Find Indicted Reading on X Axis and follow up to graph and across to Y Axis to read the "True" Shear Vane Reading



Note: 1 Divs = 10KPa

CONTROLS TESTING EQUIPMENT LTD – Controls House, Icknield Way Tring Hertfordshire HP23 4JX
Tel +44 (0)1442 828311 – Fax +44 (0)1442 828466 – sales@controlstesting.co.uk [redacted]

shawcity
Life-saving solutions

CERTIFICATE OF CALIBRATION
Phocheck Tiger

CALIBRATION CERTIFICATE NO: 77247

ISSUED BY: SHAWCITY LIMITED
DATE: 08/08/2023

APPROVED SIGNATORY: [redacted]

NAME:

CUSTOMER: Structural Soils Ltd
INSTRUMENT: PhoCheck Tiger
SERIAL NUMBER: T-108219

CALIBRATION METHOD: CM03
AMBIENT CONDITIONS: 20°C ± 2°C and 50% (± 20%) RH

Prior to calibration the instrument was allowed to stabilise in the laboratory for at least 30 minutes.
The instrument was calibrated by exposing the sensor to known values of gas concentrations.
All gases were sampled through the complete probe and in line filter, where applicable.
The reference value is that generated by the certified source and the indicated value is that measured by the instrument.

CALIBRATION RESULTS

GAS	LOT No	REF. VALUE	INDICATED VALUE
Isobutylene	WO397588-2	100 ppm	100 ppm
Isobutylene	WO380827-2	1000 ppm	1000 ppm

COMMENTS:
The reported uncertainty is based on a standard uncertainty multiplied by a coverage factor of $k=2$.
This provides a level of confidence of uncertainty of approximately 95%.
The uncertainty of measurement is ±2 %
The results indicate that the instrument conforms to the applicable parts of the published specification.

[redacted]
Instrument House, 91-92 Shrivenham Hundred Business Park
Watchfield, Oxfordshire, SN6 8TY

shawcity
Life-saving solutions

Instrument House
91-92 Shrivenham Hundred Business Park
Watchfield
Oxfordshire
SN6 8TY
Fax: 01793 784466
service@shawcity.co.uk

SERVICE / INSPECTION SHEET

JOB NUMBER: 77247
INSTRUMENT: Phocheck Tiger

SERIAL NUMBER: T-108219
DATE RECEIVED: 24/07/2023

FIRMWARE: 9.28

CUSTOMER: Structural Soils Ltd

ITEMS RECEIVED	Received	RTN?
Instrument	yes	
Rubber Boot	yes	
Battery Charger	yes	
Charging Cradle	yes	
Operation Manual		
Quick Start Guide		
Spares Kit		
Comms Cable		
Probe FLEXI		
Peli Case	yes	
Tubing		
Regulator		
Software (Memory Stick)		
PLASTIC CASE		
silver case		
	SIGNED:	

TESTS	Pre Service	Post Service
Charger Test		ok
Battery charge Test		ok
Lamp Test		ok
Air Flow Test ≥ 220ml/min		300ml/min
Block Flow Test ≤ 15ml/min		12ml/min
Moisture Sensitivity = 0.0ppm		0.00ppm
Switch Test		ok
Sensor Test		ok
Alarm Test		ok
PC Comms Test		ok
Datalog Test		ok
Display Test		ok
Physical Inspection		ok
PAT Test		ok
Firmware Upgrade		ok
Software Upgrade (usb)	n/a	
Function Test		ok
Run time		14hr23min

Comments:
Unit in for service and calibration
Firmware upgraded to latest version 9.28
Set real time clock
Replaced sensor seal, stack, PTFE filter and inlet/ outlet seals as per service
Replaced lamp as per biennial service
Flowrate 300ml/min, Block 12ml/min
FU106 blown, should be between 1-1.8Ω, reading over 70Ω. Vibrator and pump not working due to this
Replaced FU106 fuse, pump and vibrator now work
Unit calibrated and bump tested
Power supply PAT tested
Chargin cradle function test OK

TECHNICIAN: [redacted]

DATE: 08/08/2023

APPENDIX H - ARCHAEOLOGICAL WATCHING BRIEF

(i) Archaeological Watching Brief on GI Works Report

SLWB23



SEA LINK FEED - RICHBOROUGH, KENT

ARCHAEOLOGICAL WATCHING BRIEF ON GI WORKS

commissioned by Structural Soils
on behalf of Mott Macdonald

March 2024

HEADLAND ARCHAEOLOGY

REGISTERED ORGANISATION CIfA

SEA LINK FEED - RICHBOROUGH, KENT

ARCHAEOLOGICAL WATCHING BRIEF ON GI WORKS

commissioned by Structural Soils
on behalf of Mott Macdonald

March 2024

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This report adheres to the quality standard of ISO 9001:2015

PROJECT INFO:

HA Project Code **SLWB23** / HA Report No **2024-27** / NGR **TR 32400 63200** / Parish **Ash** / Local Authority **Kent CC** / Fieldwork Date **September to October 2023** / OASIS Ref. **headland1-521230** / Archive Repository **Dover Museum and Bronze Age Boat Gallery**

PROJECT TEAM:

[redacted]

Approved by **Kate Bain** .....

[redacted]

HEADLAND ARCHAEOLOGY

part of the RSK Group

REGISTERED ORGANISATION CIfA

PROJECT SUMMARY

Headland Archaeology (UK) Ltd (part of the RSK Group) was commissioned by Structural Soils Ltd. to undertake programme of archaeological monitoring and recording in association with geotechnical site investigations (GI) as part of the SEA Link project. This document forms the report for the Richborough section of the works.

A total of twenty-three trial pits, located across several fields between Pegwell Bay and Minster in Kent within an area of relatively high archaeological potential, were excavated. Only one of the trial pits (TP503) was identified as containing an archaeological feature, tentatively identified as a curvilinear ditch. The feature contained animal bone, but no datable material was recovered. The remaining twenty two trial pits were observed to be cut into naturally occurring deposits with no observed discrete archaeological features or deposits.

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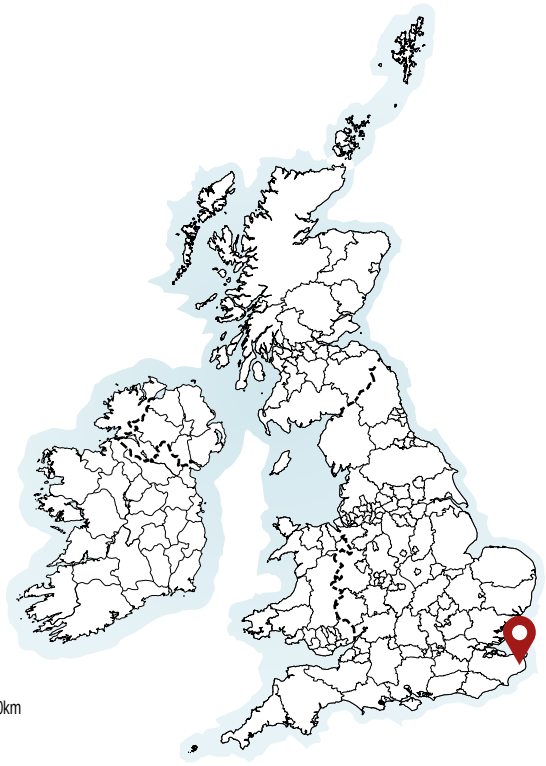
ILLUS 6 VIEW NORTH OF TP201 8

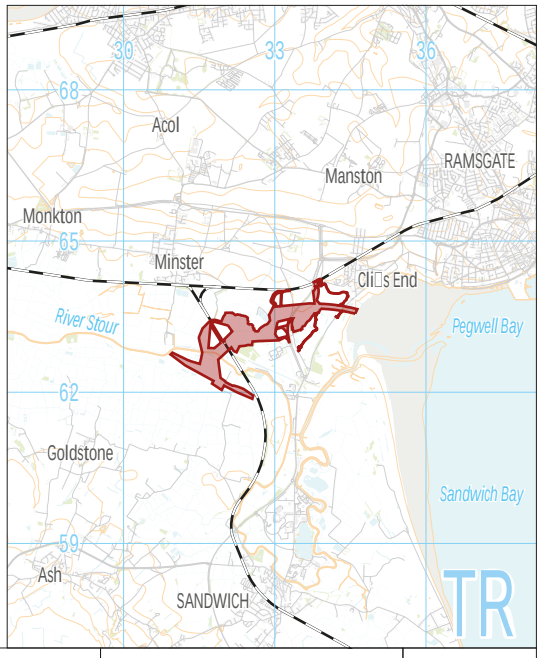
LIST OF TABLES

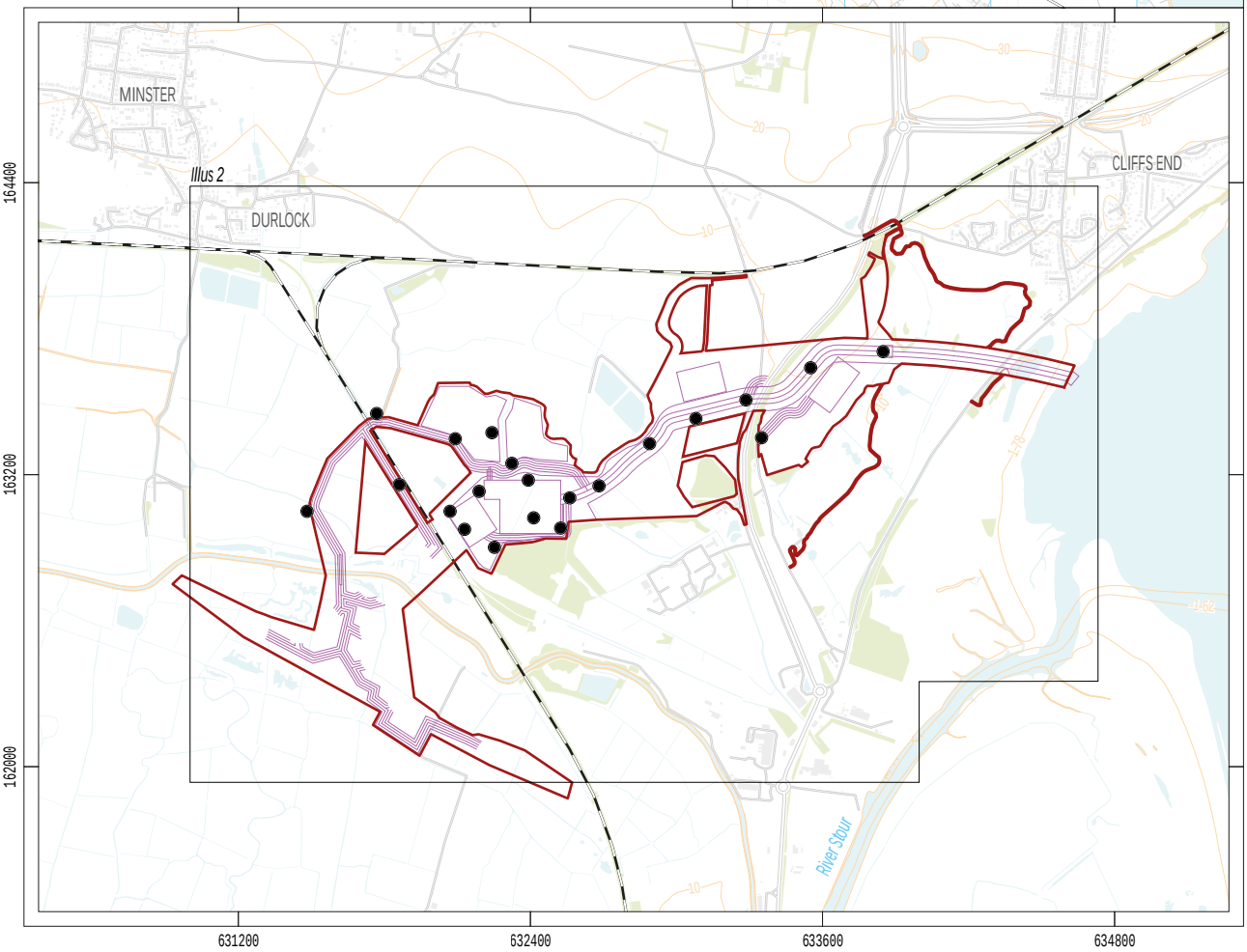
TABLE 1 TEST PITS MONITORED 5

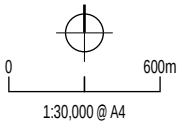
TABLE 2 SUMMARY OF FINDS ASSEMBLAGE BY FEATURE WITH SPOT DATING 6

Sea Link Feed
Richborough
Kent









scheme boundary
alignment
test pit

HEADLAND ARCHAEOLOGY
Headland Archaeology Midlands & West
Unit 1 | Clearview Court | Twyford Rd | Hereford HR2 6JR
t 01432 364 901
e midlandsandwest@headlandarchaeology.com
w www.headlandarchaeology.com

ILLUS 1 Site location

SEA LINK FEED - RICHBOROUGH, KENT

ARCHAEOLOGICAL WATCHING BRIEF ON GI WORKS

1 INTRODUCTION

This report describes the results of a programme of archaeological monitoring and recording undertaken by Headland Archaeology (UK) Ltd, on behalf of Structural Soils Ltd, in association with Geotechnical site Investigations (GI); as part of the Richborough section of the SEA Link project.

The project involves a 2GW HVDC link between Richborough in Kent and Friston in Su□olk (Illus 1). The works comprised the monitoring of 23 trial pits (Illus 2) across the sites of a Cable Route Corridor and Convertor Station/substation connection site north of Richborough, Kent.

The results of the Friston section of the works are presented as a separate report (HA Report no. 2023–115).

1.1 SITE LOCATION AND DESCRIPTION

The works were spread across a roughly east-west aligned linear route, running inland from Pegwell Beach (NGR TR 32400, 63200) in the parish of Minster in Thanet.

The area is characterised by numerous agricultural □elds all of which are bounded by drainage ditches, the largest being Minster Stream (Drain) which transects the site in numerous directions, joining the River Stour which is located approximately 300m west of the site area.

The eastern end of the route passes through the southern limit of the Isle of Thanet, and the western end of the route is located within an area called Minster Marshes. Two reservoirs are located to the immediate north/north-east of the site. A railway line runs roughly north-south approximately 60m west of the site with a wooded strip in between bounding the western perimeter and a further wooded area lies to the south of the site.

The underlying bedrock geology comprises the Thanet Formation. This is overlain across most of the route by Tidal Flat Deposits, Clay and Silt (formally marine and estuarine alluvium). The soils are classi□ed in the Soilscape 21 and Soilscape 6 associations which are characterised as loamy and clayey coastal □ats and freely draining slightly acid loamy soils respectively (Cran□eld University 2023).

1.2 ARCHAEOLOGICAL BACKGROUND

An Environmental Impact Assessment Scoping Report for the project was prepared by National Grid (National Grid 2022) which considered all of the designated and non-designated heritage assets recorded within the onshore Scoping Boundary of the overall scheme.

Designated assets within the Kent Scoping boundary include the Grade II listed St. Augustine's Cross near Cli□s End and St. Augustine's Golf Club and a single Scheduled Monument, which comprises the remains of a Benedictine monastic grange and pre-Conquest nunnery at Minster Abbey (1016850).

Two Grade I, and 32 Grade II listed buildings, the majority of which are located in the settlement of Minster were also recorded.

The HER (Historic Environment Record) for Kent revealed a total of 190 heritage assets within the Scoping Boundary.

The earliest dated site within the study area is the □nd spot of a Lower Palaeolithic (500,000 to 150,000 BC) stone tool. Changes in sea level, as well as the reclamation of the land, has altered the coastline in the study area meaning there is potential for former coastal areas/ palaeo-environmental remains to survive buried under the current land surface.

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Other sites of early prehistoric date were largely limited to find spots, although ditches and pits of Neolithic date (4000 to 2200 BC) have also been recorded.

Extensive Bronze Age (2200 to 700 BC), activity including settlement, field systems and burial monuments have been identified in the area; along with number of individual find-spots, including a hoard.

Iron Age (700 BC to AD 43) activity, particularly during the later period, leading into the transition into the Roman period (AD43 –AD410) is also well represented. Evidence across the study area included enclosed settlements, containing individual buildings, along with field systems of similar date. A large number of finds of Iron Age coins have also been recorded.

Evidence from the early medieval period (AD410 to 1066) is much more limited. Apart from the pre-conquest scheduled nunnery, the recorded remains are predominantly characterised as cemeteries and isolated burials. Early settlement activity is limited to Anglo-Saxon activity within the scheduled Richborough Castle, sunken floored buildings and a possible farmstead. Sites of medieval date (1066 to 1540) are largely related to agricultural activity. Sea defences of medieval date are also recorded.

Post-medieval (1540 to 1900) sites are largely made up of built heritage assets, including farms, houses and churches, many of which are designated as listed buildings. Other evidence includes industrial sites, such as gravel pits, quarries, salt works, and chalk pits. Transport links were also enhanced in the post-medieval period, including the construction of canals and railway lines.

Assets of modern date (1900 to present) are overwhelmingly related to the defence of the area during World War II, with home defences such as pillboxes, coastal batteries and anti-tank and anti-aircraft defences recorded in large numbers. Buildings, or the sites of buildings, from this period also include hospitals, stores and military depots. Bomb craters and an aircraft crash site are also recorded.

1.3 AIMS AND OBJECTIVES

Aims

The aims of the monitoring were to identify, investigate, understand, record, and report the extent, nature and significance of any surviving archaeological remains within the invasive GI works areas.

Objectives

The objectives of the monitoring were to:

- Ensure that the working area was monitored during the contractors' groundworks to ensure any archaeological remains were recorded and recovered with minimal damage.
- Identify and record all archaeological features / deposits present.
- Identify and record any Palaeoarchaeological/Geoarchaeological deposits/sequences.
- Clean, excavate and record a sufficient sample of any features present to place on record and understand the nature, sequence, date and significance of the archaeological remains present within the excavated area.
- Undertake assessment, analysis, archiving and reporting as appropriate to the significance of the results, to be disseminated in an appropriate format.

2 METHODOLOGY

2.1 SITE WORKS

All archaeological site works were undertaken in accordance with the Written Scheme of Investigation (Headland 2023) which was approved by the archaeological advisors to Kent County Council. All ground-breaking works associated with the trial pits were monitored by a suitably qualified archaeologist.

Machine excavation of trial pits was carried out using an excavator fitted with a toothless bucket (Illus 3) and the ground level reduced in controlled spits until such a point as the archaeological horizon, geological subsoil or construction limit was reached.

Where archaeological features or deposits of archaeological origin were encountered, these were recorded in plan, without excavation, and the trial pit moved to avoid further disturbance.

Where this was not practicable features and deposits were to be hand-cleaned as necessary, recorded in plan with and hand-excavated stratigraphically.

2.2 RECORDING

All recording followed CIfA Standard and Guidance for an archaeological Watching Brief (2020). All contexts, small finds and environmental samples were given unique numbers. All excavated contexts were recorded in plan and section with details of location, composition, shape, dimensions, relationships, finds and samples and cross-referenced to other contexts where appropriate. All recording was undertaken on Headland's pro-forma recording forms.

Digital images were taken with a camera with a resolution of at least 10 Megapixels.

Post-excavation plans of areas, including and relevant spot heights were recorded digitally using differential GPS using standard Headland Archaeology methodology.

All 'born digital' data will be archived in accordance with the Chartered Institute for Archaeologists' (CIfA) guidelines for long term storage of digital media (CIfA 2014: Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives).

DURLOCK
SEVENSCORE
CLIFFS END
River Stour
Illus 4
TP506
TP505
TP405
TP504
TP510
TP508
TP101
TP102
TP103
TP106
TP105
TP503
TP205
TP104
TP107
TP204
TP052
TP203
TP201
TP202
TP501
163950
163350
162750
162150
631200
631800
632400
633000
633600
634200
0
200m
1:10,000 @ A3
scheme boundary
test pit

ILLUS 2 Plan showing location of test pits

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ILLUS 3 View north of excavation of TP504 in progress

2.3 REPORTING AND ARCHIVES

All aspects of reporting and archive are undertaken in accordance with guidelines published by the CIfA on behalf of the Archaeological Archives Forum (2014) and with Kent County Council's Manual of Specifications. On completion of the works Headland will produce a site archive in line with the MoRPHE specification, including all specialist assessments of excavated material. An online OASIS report will be completed.

3 RESULTS

The GI works comprised the mechanical excavation of 23 trial pits (see Table 1), carried out under archaeological monitoring conditions.

21 trial pits were planned to be excavated as part of the GI works with 2 extra trenches were excavated due to re-siting, bringing the total number of monitored interventions to 23 (see Table 1). The re-sited pits were given the original trial pit number, suffixed with a, b or c respectively.

TABLE 1 Test pits monitored

TRIAL PIT	TRIAL PIT NO (HA ID)	ARCHAEOLOGY IDENTIFIED
101	13	No
102	14	No
103	11	No
104	8	No
105	12a	No
105	12b	No
106	15	No
107	9	No
201	19	No
202	18	No
203	2	No
204	3	No
205	10	No
405	6	No
501	17	No
502	1	No
503	4a	Yes
503	4b	No
504	5	No
505	7	No
506	21	No

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TRIAL PIT	TRIAL PIT NO (HA ID)	ARCHAEOLOGY IDENTIFIED
508	16	No
510	20	No

The trial pits were located across several fields between Pegwell Bay and Minster and were divided into three areas.

Area 1 - Trial Pits TP101 - TP107, TP204, TP205, TP405, TP503 - TP506, TP508, TP510

Test pits within Area 1 were located to the west the A256 in the low laying farmland known colloquially as the Minister Marshes. The geological strata encountered in this area consisted of thick homogenous silty clay or clay layers which were primarily light yellowish-grey in the upper layers transitioning to dark blueish-greys around 2 to 3m in depth. These deposits contained occasional whole and fragmented shell (marine and possibly fresh water) fragments. The lower dark blueish-grey clay layers were consistently humic in nature with very high organic content. Buried peat and/or decayed coastal grass deposits were observed near the bases of TP102, TP106, TP205, TP506, TP508, and TP510, The observed upper deposits were identified as likely being alluvially deposited by the Wantsum channel over the course of the river life. As this area is reclaimed land following the blocking off of the Wantsum in the 12–14th centuries it is therefore possible that archaeological horizons may be sealed by thick deposits of alluvial clays relating to the Wantsum river system.

A single archaeological feature was recorded in TP503 (Illus 4 & 4a) exposed at a depth of 0.4m from the ground surface at the north-eastern end of the trial pit. It was identified as a curvilinear ditch [404] cut into the natural geology, and animal bone was observed in its uppermost fill (405). Only the western edge of the ditch was exposed (Illus 5); the extent of the feature continued beyond the limit of excavation to the north, south and east. It was decided to relocate the trial pit roughly 10m to the west where no archaeological deposits / features were encountered so that the ditch could be preserved in situ therefore its dimensions are unknown.

A curving line of higher vegetation at the ground surface corresponding to the exposed feature was observed. This indicated that the feature formed part of a possible enclosure ditch, the fill of which was retaining moisture, leading to a surface expression of its below ground presence.

A localised chalk deposit was observed at the south-western end of the initial TP503 (Illus 5). As with the ditch [404] it was not excavated therefore it is unclear whether it is a naturally occurring outcrop of chalk (an island in the Wantsum channel) or a deliberate deposit. It was not observed in the second trial pit excavated 10m to the west.

An additional trial pit was excavated close to the location of TP105 for the purposes of a soakaway test. No archaeology was observed in either trial pit.

Area 2 - Trial pits TP203 and TP502

Two trial pits in Area 2 were also located to the west the A256: on a shallow raising hill sloping up towards the Isle of Thanet. The geological strata observed within these test pits consisted of mid-yellowish-brown silty clays consistent with the Thanet Formation with occasional flint gravel patches. Trial pits TP502 and TP203 are therefore considered likely to have been on the edge of the Isle of Thanet outside the course of the Wantsum channel.

Area 3 - Trial Pits TP201, TP202, TP501

Three trial pits in Area 3 were located to the east of A256 very close to Pegwell Bay. The test pits were all located within a single field on a large hill. TP501 and TP202 were located at the crest of the hill and TP201 (Illus 6) was located towards the bases of the hillslope in a narrow valley. All three test pits were observed to contain sandy clay and sand deposits which were light yellowish grey in colour. Due to the landscape of the area and the sand deposits it is likely this field is located overtop of an old sand dune formed by Pagnell Bay. Within TP201 at 1m in depth a 0.2m thick deposit of rounded small to medium sized flint gravels (1904) was observed. As TP201 is located on a hill slope it is possible these gravels are the result of river terracing or landscaping. A single sherd of pottery was recovered from these gravel deposit, and dated to between 1200–1325 (see finds report section 3.1).

No further archaeological features or deposits were encountered.

3.1 FINDS

by Luke Barber and Rebecca Sillwood

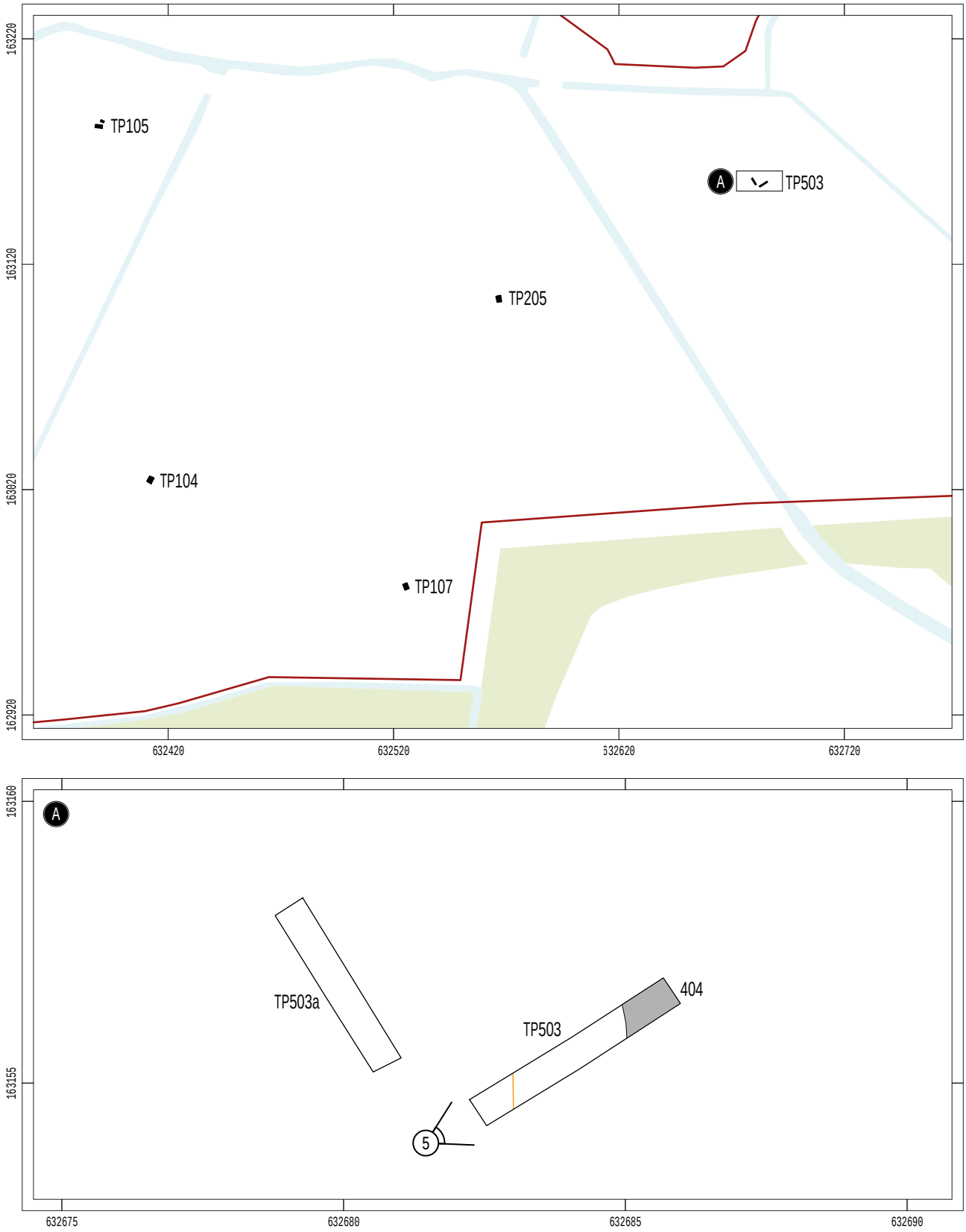
The finds assemblage numbered one sherd of medieval pottery (8g) which was found in a single test pit. The finds are summarised by trench/feature in Table 2.

TABLE 2 Summary of finds assemblage by feature with spot dating (dating is for finds in the fills of these features and does not necessarily date the features; small assemblages should be used with particular caution for dating purposes)

AREA	FEATURE TYPE	FEATURE NO	POTTERY (MEDI)		SPOT DATE
			QTY	WGT (G)	
TP201	Gravel layer	1904	1	8	1200–1325
Total			1	8	

Methodology

The report includes hand-collected finds, no finds were recovered from the samples for this area. The finds were collected, processed and packaged for long term storage in accordance with professional guidelines (CIfA 2014b; Watkinson and Neal 1998). The finds were each assessed and recorded by appropriate specialists using relevant typologies (CIfA 2021). The resultant data was then drawn together into one MS Excel database.



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ILLUS 4 TP503 and the surounding area





ILLUS 5 View north-east of TP503 showing chalk deposit and ditch 404
ILLUS 6 View north of TP201

The pottery was examined visually, using x20 magni□cation where necessary. It was recorded according to standards set out by specialist bodies (Slowikovski 2001).

Medieval pottery

By Luke Barber

The archaeological work recovered a single 8g sherd of post-Roman pottery from layer (1904) in TP201. This consists of a body sherd from a jug with oxidised exterior and reduced interior in Tyler Hill sandy ware (a production site just to the north of Canterbury). The vessel, which has a patchy clear/green glaze, is best placed between c 1200 and 1325.

Dating, distribution & discussion

A single piece of medieval pottery was recovered from Trial Pit TP201 within the Kent section of the site. The pottery was recovered from the gravel layer and was dated to between the 13th and early-14th centuries. This was the only □nd from the site.

Recommendations for further work

No further work is required on any □nds from this site.

Recommendations for archive

Retention and discard recommendations are recorded in the □nds data. They are summarised here. The archive will be prepared in accordance with professional standards (AAF 2011) and the speci□c requirements of the receiving repository.

MATERIAL	TOTAL QTY	TOTAL WGT (G)	RETAIN	DISCARD
Medieval pottery	1	8g	None	All

3.2 ENVIRONMENTAL

No environmental samples were recovered as part of the works.

4 DISCUSSION

The single feature identi□ed in TP4 appeared to represent part of a curvilinear enclosure, expressed at the ground surface by more vigorous vegetation growth than that in the surrounding area.

The absence of further archaeological features or deposits identi□ed as part of the GI works does not necessarily preclude their presence in the wider area.

It is recommended that the sherd of pottery, recovered from the gravel deposit be discarded.

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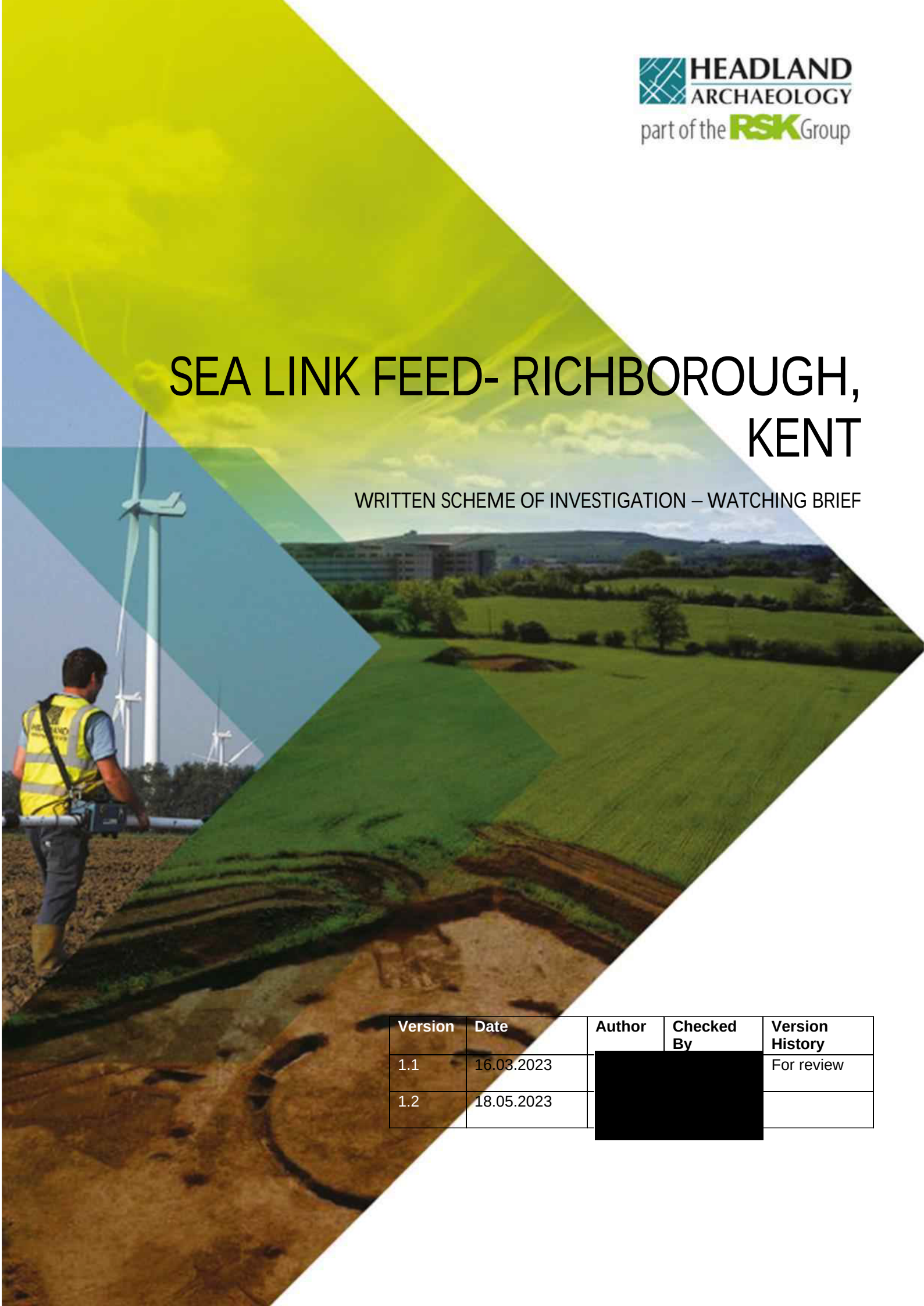
6 APPENDICES

APPENDIX 1 WSI

HEADLAND ARCHAEOLOGY
part of the RSK Group

SEA LINK FEED- RICHBOROUGH, KENT

WRITTEN SCHEME OF INVESTIGATION – WATCHING BRIEF



Version	Date	Author	Checked By	Version History
1.1	16.03.2023	[redacted]	[redacted]	For review
1.2	18.05.2023			

HERITAGE CONSULTANCY
ARCHAEOLOGY CONTRACTING SITE INVESTIGATIONS
SPECIALIST SERVICES

HEADLAND ARCHAEOLOGY
part of the RSK Group

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PROJECT NAME	SEA link Feed - Richborough, Kent - Archaeological Watching Brief
PLANNING REF	N/A HEADLAND REF P23-071
HEADLAND PROJECT CODE	SLWB23
WORK STAGE	Watching brief
PURPOSE OF WORK	To monitor the contractor's site groundworks through a watching brief and to record any archaeological remains exposed. To present the results of the work in a report.
AUTHOR	[redacted]
PROJECT MANAGER	TBC

Name	Reference
Client	Structural Soils
Planning authority	Kent
Consultant	N/A
Archaeological advisor	Kent CC
Historic environment record (HER)	Kent
Portable antiquities officer	Lori Rogerson
Collecting museum	TBC
Journal for summary publication	N/A

RELEVANT STANDARDS:

NAME	REFERENCE	
Applicable CIfA standards	1.	Code of Conduct (CIfA 2022)
	2.	Standards and guidance for an archaeological watching brief (CIfA 2020)
Regional research framework	3.	South East Research Framework
Local standards/guidelines	4.	Kent County Council Manual of Specifications

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3 Aims and Objectives 6
4 Project Team 7
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1 INTRODUCTION

1.1 This Written Scheme of Investigation (WSI) has been commissioned on behalf of Structural Soils and prepared by Headland Archaeology (UK) Ltd (Part of the RSK Group)

1.2 The WSI describes a programme of archaeological monitoring and recording work to be undertaken in association with Geotechnical site Investigations (GI) as part of the SEA Link project, which involves a 2GW HVDC link between Richborough in Kent and Friston in Suffolk. The proposed GI works at Richborough comprise 28 trial pits, 4 Rotary Boreholes, 11 Cone Penetration Tests and 12 cable percussion boreholes.

1.3 This WSI covers the monitoring, by means of an archaeological Watching Brief, of the 28 trial pits and 4 rotary boreholes across the sites of a Cable Route Corridor and Convertor Station/substation connection site north of Richborough, Kent.

1.4 This document takes into account relevant CIfA and Kent County Standards and Guidance.

2 PROJECT BACKGROUND

2.1 The SEA Link project involves a 2GW HVDC link between Richborough in Kent and Friston in Suffolk. It forms part of the solution to resolve the operational boundary issues in the South Coast, East Coast and London areas, to increase transfer capacity between the South Coast and South London and maintain voltage at compliance level. The proposed construction at Richborough, which is covered in the scope of this preliminary GI work will comprise the HVDC southern cable route option and a convertor Station/substation connection.

SITE LOCATION, TOPOGRAPHY AND GEOLOGY

2.2 The works are spread across a roughly east-west aligned linear route, running inland from Pegwell Beach, in the parish of Minster in Thanet.

2.3 The area is characterised by numerous agricultural fields all of which are bounded by drainage ditches, the largest being Minster Stream (Drain) which transects the site in numerous directions, joining the River Stour which is located approximately 300m west of the site area. The site is within an area called Minster Marshes. Two reservoirs are located to the immediate north/north-east of the site. A railway line runs roughly north-south approximately 60m west of the site with a wooded strip in between bounding the western perimeter and a further wooded area lies to the south of the site.

2.4 The underlying bedrock geology comprises the Thanet Formation. This is overlain across most of the route by Tidal Flat Deposits, Clay and Silt (formally marine and estuarine alluvium). The soils are classified in the Soilscape 21 and Soilscape 6 associations which are characterised as loamy and clayey coastal flats and freely draining slightly acid loamy soils respectively (Cranfield University 2023).

ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

2.5 An Environmental Impact Assessment Scoping Report for the project was prepared by National Grid (National Grid 2022) which considered all of the designated and non-designated heritage assets recorded within the onshore Scoping Boundary of the overall scheme.

2.6 Designated assets within the Kent Scoping boundary include the Grade II listed St. Augustine's Cross near Cliffs End and St. Augustine's Golf Club and a single Scheduled Monument, which comprises the remains of a Benedictine monastic grange and pre-Conquest nunnery at Minster Abbey (1016850).

2.7 Two Grade I, and 32 Grade II listed buildings, the majority of which are located in the settlement of Minster were also recorded.

2.8 The HER (Historic Environment Record) for Kent revealed a total of 190 heritage assets within the Scoping Boundary.

2.9 The earliest dated site within the study area is the find spot of a Lower Palaeolithic (500,000 to 150,000 BC) stone tool. Changes in sea level, as well as the reclamation of the land, has altered the coastline in the study area meaning there is potential for former coastal areas/palaeo-environmental remains to survive buried under the current land surface.

2.10 Other sites of early prehistoric date were largely limited to find spots, although ditches and pits of Neolithic date (4000 to 2200 BC) have also been recorded.

2.11 Extensive Bronze Age (2200 to 700 BC), activity including settlement, field systems and burial monuments have been identified in the area; along with number of individual find-spots, including a hoard.

2.12 Iron Age (700 BC to AD 43) activity, particularly during the later period, leading into the transition into the Roman period (AD43 –AD410) is also well represented. Evidence across the study area included enclosed settlements, containing individual buildings, along with field systems of similar date. A large number of finds of Iron Age coins have also been recorded.

2.13 Evidence from the early medieval period (AD410 to 1066) is much more limited. Apart from the pre-conquest scheduled nunnery, the recorded remains are predominantly characterised as cemeteries and isolated burials. Early settlement activity is limited to Anglo-Saxon activity within the scheduled Richborough Castle, sunken floored buildings and a possible farmstead. Sites of medieval date (1066 to 1540) are largely related to agricultural activity. Sea defences of medieval date are also recorded.

2.14 Post-medieval (1540 to 1900) sites are largely made up of built heritage assets, including farms, houses and churches, many of which are designated as listed buildings. Other evidence includes industrial sites, such as gravel pits, quarries, salt works, and chalk pits. Transport links were also enhanced in the post-medieval period, including the construction of canals and railway lines.

2.15 Assets of modern date (1900 to present) are overwhelmingly related to the defence of the area during World War II, with home defences such as pillboxes, coastal batteries and anti-tank and anti-aircraft defences recorded in large numbers. Buildings, or the sites of buildings, from this period also include hospitals, stores and military depots. Bomb craters and an aircraft crash site are also recorded.

3 AIMS AND OBJECTIVES

AIMS

3.1 The aims of the monitoring are to identify, investigate, understand, record, and report the extent, nature and significance of any surviving archaeological remains within the invasive GI works areas.

OBJECTIVES

3.2 The objectives of the monitoring are to:

- Ensure that the working area is monitored during the contractors' groundworks to ensure any archaeological remains are recorded and recovered with minimal damage;
- Identify and record all archaeological features / deposits present;
- Identify and record any Palaeoarchaeological/Geoarchaeological deposits/sequences;
- Clean, excavate and record a sufficient sample of any features present to place on record and understand the nature, sequence, date and significance of the archaeological remains present within the excavated area; and;
- Undertake assessment, analysis, archiving and reporting as appropriate to the significance of the results, to be disseminated in an appropriate format.

4 PROJECT TEAM

4.1 Headland Archaeology (UK) Ltd is a Registered Organisation and abides by the Codes of Conduct and Approved Practice and Standards of the Chartered Institute for Archaeologists (CIfA). The company has all the necessary technical and personnel resources for the satisfactory completion of the work.

4.2 Curricula vitae of key personnel can be supplied on request. The project team will familiarise themselves with the background to the site and will be aware of the project's aims and methodologies.

4.3 Specialist artefact analyses will be managed by Julie Franklin who is Headland's Finds Manager. Julie will undertake finds assessment within her areas of competence (medieval and post-medieval ceramics, metalwork, glassware, clay pipes, ceramic building material and other small finds). Further consultation will be sub-contracted to recognised period specialists where appropriate.

4.4 Environmental analysis will be managed by Kate Turner. Headland has in-house specialists who can undertake analysis of pollen, plant macrofossils, insect remains and thin sections.

4.5 The results of the fieldwork will be reviewed and incorporated into reporting and an Online Access to the Index of archaeological investigations (OASIS) record will be set up and completed along with the archive.

5 MONITORING

5.1 Monitoring of the works will be carried out by the Kent County Council Principal Archaeology Officer.

5.2 All archaeological work will be reviewed by the Principal Archaeology Officer, directly on site and / or through summary reports and telephone / email with Structural Soils and their representatives, as appropriate.

5.3 The Principal Archaeology Officer will be updated as the work proceeds and will be invited to visit the site by prior arrangement.

The planning archaeologist's monitoring will potentially include:

- One or more site visits to confirm the fieldwork is being undertaken in accordance with the WSI and discuss the findings;
- Review and discussion of all reports and archives drafts before final submission.

6 STRATEGY

6.1 All ground-breaking works associated with the excavation of the GI trial pits is to be monitored by an archaeologist until the archaeological horizon or the maximum construction depth is reached; whichever is encountered soonest.

6.2 During the drilling of rotary boreholes, a geoarchaeologist will be present to monitor the works.

6.3 Recording and subsampling of borehole cores will be carried out on site by the monitoring geoarchaeologist.

6.4 Notification to the archaeological contractor will be required, and sufficient time allowed to mobilise the attending archaeologist to site prior to the commencement of ground-breaking works.

6.5 Regular communication between the attending archaeologist and on-site client contact will be required to discuss intended upcoming works and plan accordingly.

6.6 Works will be monitored to the first archaeological horizon, geological subsoil or the construction limit – whichever is encountered first.

6.7 Upon completion of all stages of fieldwork, an archaeological report will be completed for the findings for the site as a whole.

7 METHODOLOGY

FIELDWORK; MONITORING OF EXCAVATIONS-TEST PITS

7.1 It is anticipated that the works will comprise 28 trial pits, 4 Rotary Boreholes, 11 Cone Penetration Tests and 12 cable percussion boreholes. Only the trial pits and rotary boreholes are considered for archaeological/geoarchaeological monitoring.

7.2 All ground-breaking works associated with the trial pits will be monitored by a suitably qualified archaeologist, however, due to the limited potential and disturbed nature of the material recovered from them, the boreholes will not be subject to monitoring.

7.3 Machine excavation of trial pits will proceed under archaeological observation but would not be controlled directly by the nominated on-site archaeologist(s). Reasonable time should be allowed for the monitoring archaeologist(s) to investigate test pits once the topsoil/overburden has been removed, and/or if potential archaeological deposits are identified.

7.4 Machine excavation should be carried out using an excavator fitted with a toothless bucket and the ground level reduced in controlled spits until such a point as the archaeological horizon, geological subsoil or construction limit is reached (whichever is encountered soonest). After which, archaeological monitoring will cease.

7.5 One archaeologist will normally monitor a single excavation, if one or more excavations is carried out simultaneously, a corresponding number of monitoring archaeologists will be required.

7.6 If potential archaeological features or deposits of archaeological origin are present, they will be defined by hand-cleaning as necessary, recorded in plan with spot-heights, and a sample of each feature / deposit hand-excavated stratigraphically under archaeological conditions.

7.7 Where alluvial sequences are likely, the monitoring archaeologist will have experience in recognising and recording deposits of this nature and, where necessary, a geoarchaeologist will be available to consult and advise on recording and sampling strategies.

7.8 If any archaeological features are found, sample excavation will be sufficient to satisfy the aims and objectives of the work. Provisionally, the sampling policy may be as follows:

- 100% excavation of each sampled stake hole;
- 50% excavation of each sampled post hole or pit up to 1.5m diameter;
- 25% (minimum) excavation of each sampled pit above 1.5m diameter, to include one complete cross section to obtain the feature's profile;
- 20% (minimum) excavation of sampled linear features up to 5m in length;

7.9 Where avoidance is not possible and archaeological deposits are limited (for example, a single small pit or posthole), full excavation and recording of the feature will allow the trial-pit to be continued.

FIELDWORK; MONITORING OF EXCAVATIONS- BOREHOLES

MONTIORING

7.10 During the drilling of rotary boreholes, a geoarchaeologist will be present to monitor the works and to record and subsample borehole cores, as appropriate, on site. Borehole cores which may require further sampling/analysis will be identified on site and potential requirements for preservation or laboratory analysis will be outlined.

7.11 The geoarchaeologist will record litho-stratigraphy during monitoring. The number of records and drawings will be dependent on the nature of encountered deposits.

7.12 Records will be created in accordance with Historic England best practice guidelines for geoarchaeology (2015). The sediments will be described on a summary proforma, according to standard methodologies based on Jones (1999) including a description of colour, compaction, texture, sorting, structure, nature of contacts/boundaries and inclusions (including abundance, shape and material). Any artefact inclusions (daub, pottery or worked flint) will be noted and sub-sampled where appropriate.

7.13 A photographic record will be created throughout the monitoring. A digital camera with an image sensor not less than 10 mega pixels will be used. The photographic record will include general working shots and detailed shots of noteworthy deposits with scale. A detailed register of the location, subject and direction of all photographs will be maintained.

7.14 Any complex deposits will be recorded to standards in line with current best practice, on appropriate proforma and a photographic record will be made for each intervention.

SAMPLING

7.15 During monitoring the geoarchaeologist will select deposits for sampling. Preference will be afforded to undisturbed samples. Samples will be taken by the geoarchaeologist from the sediment cores.

7.16 If deposits are encountered that have the potential to contain Palaeolithic artefacts or faunal remains, then a bulk sample may be taken of the deposit for off-site processing.

7.17 Specialist sampling, including incremental sequences, will be taken for palaeoenvironmental assessment (e.g., pollen, waterlogged plant remains, insects and molluscs) as required and if safe to do so.

7.18 Recovered finds will be recorded and bagged by individual context. Small finds will be given a unique number and their location recorded accurately in 3D.

7.19 A register of all collected finds and samples will be maintained. The register is to include details of location, deposit sampled and contents of the sample.

FIELDWORK-RECORDING

7.20 All recording will follow CIfA Standard and Guidance for archaeological excavation (2020) or CIfA Standard and Guidance for an archaeological watching brief (2020). All contexts, small finds and environmental samples will be given unique numbers. All excavated contexts will be recorded in plan and section with details of location, composition, shape, dimensions, relationships, finds and samples and cross-referenced to other contexts where appropriate. All recording will be undertaken on Headland's pro-forma digital recording system (HARK!).

7.21 Digital images will be taken with a camera with a resolution of at least 10 Megapixels and will follow Historic England guidance (2015). A graduated metric scale will be clearly visible.

7.22 Post-excavation plans of areas, including and relevant spot heights will be recorded digitally using differential GPS using standard Headland Archaeology methodology (available on request). The site plan will be accurately linked to the National Grid. Additional detailed recording of features and sections will be hand-drawn on permatrace at an appropriate scale (normally 1:20 or 1:50 for plans and 1:10 for sections).

7.23 All 'born digital' data will be archived in accordance with the Chartered Institute for Archaeologists' (CIfA) guidelines for long term storage of digital media (CIfA 2014: Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives).

SAMPLES AND ARTEFACTS

7.24 Finds will be routinely recorded by context and recorded 3-dimensionally where appropriate (i.e. where their position within a context can provide further significant information or the find is of particular significance). Any artefacts retrieved during the evaluation will be cleaned using appropriate techniques and packaged and stored in accordance with First Aid for Finds (Watkinson & Neal 1998). All artefacts recovered during the evaluation will be cleaned, marked and catalogued. Headland's in-house finds specialists will be available to provide advice remotely or on site if necessary. Conservation will be undertaken by Scottish Conservation Studio (for metalwork) and AOC Ltd (for organics).

7.25 Deposits identified as archaeologically significant will be sampled for environmental material and other finds (e.g. bone, pottery etc.). Bulk samples will be taken from selected deposits for wet sieving and floatation in order to recover any environmental material. A bulk sample will typically be 40 litres. However, where large deposits are encountered more than one bulk sample may be taken. Similarly, small deposits such as the fill of postholes may contain less than 10 litres of sediment and will be fully sampled. A representative proportion of samples taken on site will be processed and assessed with the results and recommendations for any further work included in the evaluation report.

7.26 Where waterlogged deposits are encountered (such as peat) appropriate sampling techniques will be employed to maximise the environmental information gained from such deposits. This may include the taking of monolith or core samples for pollen and non-pollen palynomorphs (e.g. testates and fungal spores) and large specialist samples for plant macrofossil, wood (including waterlogged wood) and insect analyses.

PALAEOENVIRONMENTAL SAMPLING

7.27 Palaeoenvironmental samples will be taken from appropriate representative deposits (such as occupation and midden deposits or ditch and pit fills) and submitted for assessment. Particular attention will be paid to the recovery of samples from any waterlogged deposits present. Recovery and sampling of environmental remains will be in accordance with guidelines prepared by English Heritage (now Historic England) (2011) and the sampling strategy provided by an appropriate specialist and agreed with and the Historic England Regional Science Advisor, as required.

7.28 Secure contexts will be sampled for dating purposes as appropriate (whether on site or as sub-samples of processed bulk samples). This may include C14 dating, archaeomagnetic dating and dendrochronological dating. Any concentrations of charcoal or other carbonised material recovered on site will usually be retained. Samples for archaeomagnetic dates will be taken on site by the relevant specialist (Historic England, 2006a). Samples for dendrochronological dates would be taken either on site or from recovered timbers by the relevant specialist in accordance with published guidelines (Historic England, 1998). Samples would be processed subsequent to initial post- excavation assessment.

7.29 Headland's Environmental Manager, Kate Turner, will liaise with site staff to ensure an appropriate strategy for the recovery and sampling of environmental remains develops in tandem with fieldwork results.

TREASURE

7.30 Finds of treasure are governed by the Treasure Act 1996 (and as amended by the Treasure Designation Order 2002 No 2666). This Act replaced the common law of treasure trove in England, Wales and Northern Ireland, which was previously the only legal protection afforded to antiquities. Under the law of treasure trove, finds of gold or silver had to be reported to the coroner and could be declared treasure trove and the property of the Crown if they had been deliberately hidden with the intention of recovery and their owner, or heirs were unknown. The 1996 Act removed the need to establish that objects were hidden with the intention of being recovered, except in a very few cases; it sets out the precious metal content required for a find to qualify as treasure; and it extends the definition of treasure to include other objects found in archaeological association with finds of treasure. Six categories of object are now classed as treasure:

- any object other than a coin which is at least 10% silver or gold by weight and more than 300 years old;
- any coins that are at least 10% silver or gold by weight and come from a single find, provided the find contains at least two coins with a gold or silver content of at least 10%. The coins must be at least 300 years old at the time of discovery. Where finds consist of coins that are less than 10% gold or silver by weight, there must be at least 10 coins in the find and they must be at least 300 years old at the time of discovery for the find to be considered treasure;
- any object, of whatever composition, that is found in the same place as, or that had previously been together with, another object that is treasure;
- any object (other than a coin), any part of which is base metal, which, when found is one of at least two base metal objects in the same find which are of prehistoric date;
- any object, (other than a coin) which is of prehistoric date, and any part of which is gold or silver; and
- any object that would previously have been treasure trove but does not fall within the specific categories given above.

7.31 The Act also introduces a Code of Practice for the voluntary recording of archaeological finds.

7.32 If any objects are recovered that are deemed to potentially qualify as treasure, the Archaeological Sub-Contractor will inform the client and consult with the archaeological advisor to determine the object's status. Objects that qualify as treasure will be notified to the local coroner and Finds Liaison Officer within fourteen days of discovery, in accordance with The Treasure Act 1996 Code of Practice and its amendment. The Treasure will initially be deposited with the Finds Liaison Officer.

HUMAN REMAINS

7.33 All finds of human remains will be reported to the client, the coroner and the KCC Principal Archaeology Officer. None will be excavated during the course of the present program of work unless circumstances (e.g. security) require their removal. Any reburial of human skeletal remains will be done utilising a protective geotextile mesh If human remains are to be excavated during subsequent work, a license will be gained from the Home Office in accordance with Section 25 of the 1857 Burial Act. All excavation and treatment of cremated and inhumed human remains will be undertaken in cognisance of CIFA Technical Paper Number 13 (Brickley & McKinley & 2004) and relevant Historic England guidelines (2005).

8 REPORTING AND ARCHIVE

REPORTING

8.1 All aspects of reporting and archive will be undertaken in accordance with guidelines published by the CIfA on behalf of the Archaeological Archives Forum (2014). On completion of the evaluation Headland will produce a site archive in line with the MoRPHE specification, including all specialist assessments of excavated material. An online OASIS report will be completed.

8.2 The final report contents and format will be in line with Kent County Council's Manual of Specifications and include a clear statement of the archaeological value of the results, and their significance in the context of the (South East Archaeological Research Framework (SERF) 2019 (https://www.kent.gov.uk/leisure-and-community/history-and-heritage/south-east-research-framework).

8.3 A copy of the WSI will be included as an appendix to the report.

8.4 A completed HER Summary and Fieldwork Notification Form will be provided to the Kent Historic Environment Record at the end of fieldwork.

8.5 Copies of the report will be sent to the client for onward transmission to the local planning authority; copies (paper & electronic) will also be submitted to be deposited in the Kent Historic Environment Record. An electronic copy will be sent to Kent County Council. All reports will normally be submitted within twelve weeks of the completion of fieldwork.

8.6 A digital copy of the report, clearly marked DRAFT, will be presented to the archaeological advisors for approval. Following acceptance, a single hard copy of the report will be presented to the Kent HER as well as a digital copy of the approved report.

ARCHIVE

8.7 An archive of all records and finds will be prepared, consistent with the principles of Management of Research Projects in the Historic Environment (MoRPHE) (Historic England 2015a) and compliant with Kent County Council's Manual of Specifications. It will be adequate to perform the function of a final archive for deposition in the appropriate museum (TBC).

8.8 The project archive will be compiled in accordance with the guidelines published by CIfA on behalf of the Archaeological Archives Forum (2011). The documentary and digital archive will be submitted within twelve months of completion of all work on this project.

8.9 Every effort will be made to obtain the agreement of the landowners for the deposition of the full site archive, and transfer of title, with the designated Kent Museum.

8.10 For deposition, the archive will comply with the Archive Guidelines for Kent.

8.11 It is proposed that the digital archive relating to this project will be lodged with the Archaeology Data Service (ADS 2013).

9 HEALTH & SAFETY

9.1 All of Headland's work is undertaken in accordance with current Health & Safety legislation. A risk assessment will be prepared prior to the commencement of fieldwork. All staff will wear appropriate PPE and this will include high-visibility clothing, hard hats and safety footwear. Suitable site welfare facilities will be provided by the main contractor.

10 INSURANCE & COPYRIGHT

10.1 Headland Archaeology (UK) Ltd is fully indemnified and all necessary insurances can be presented on request.

10.2 Copyright will be retained by Headland Archaeology (UK) Ltd. Headland will licence the client, Local Planning Authority and other bodies as necessary for use in matters relating to the project and for use of the project archive by NRHE. This licence will also extend to non-commercial use.

11 REFERENCES

Archaeological Archives Forum (AAF) 2011 *Archaeological Archives A guide to best practice in creation, compilation, transfer and curation* (2nd edn) (CIfA: Reading) [redacted]

Brickley M & McKinley JI (eds) 2004 *Guidelines to the Standards for Recording Human Remains* (Paper No 7, BABAO, IFA: Reading) [redacted]

British Geological Survey (Website) http://bgs.ac.uk.

Chartered Institute for Archaeologists (CIfA) 2020 *Standard and guidance for archaeological excavation* (updated January 2017) (Reading) [redacted]

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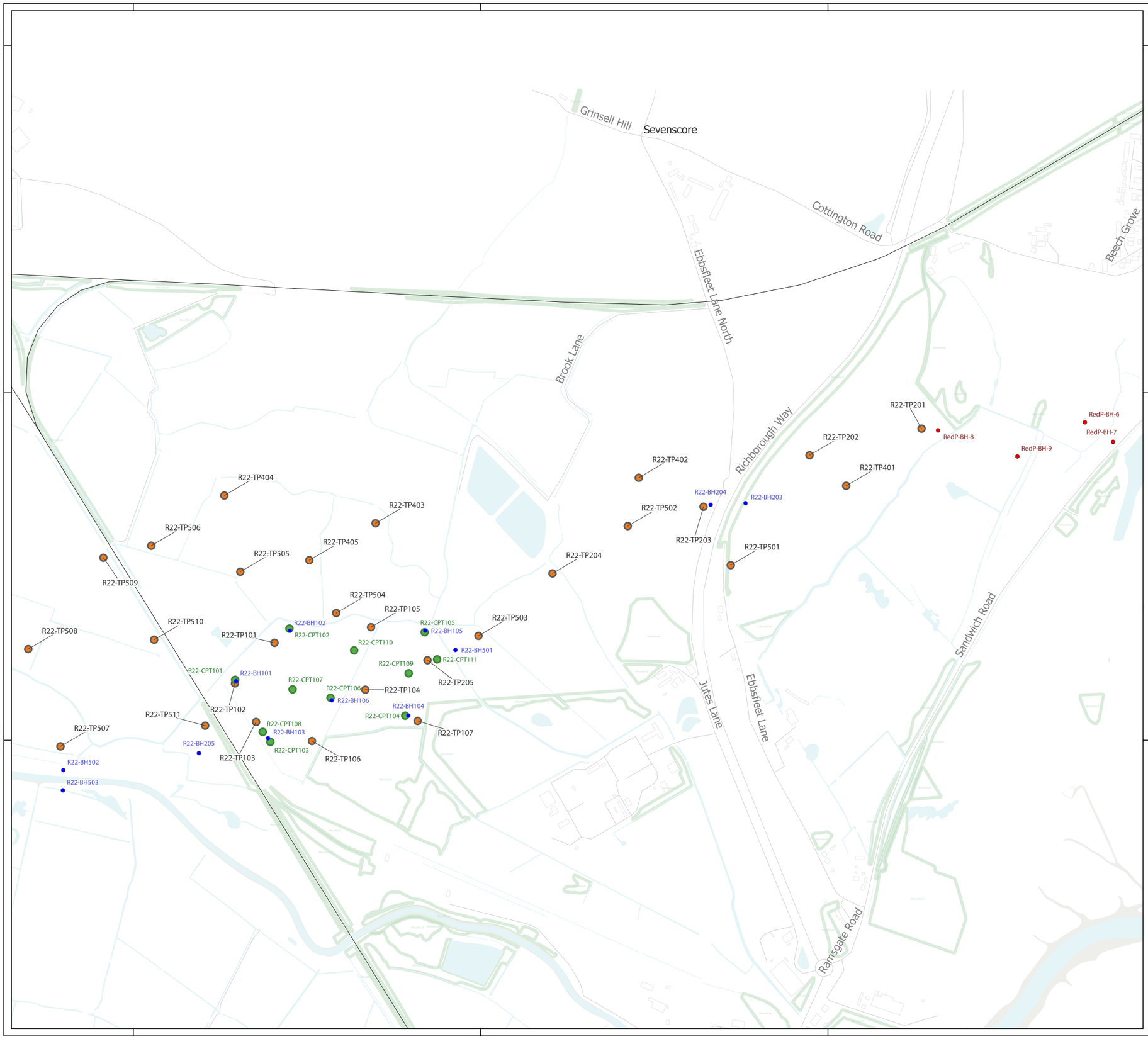
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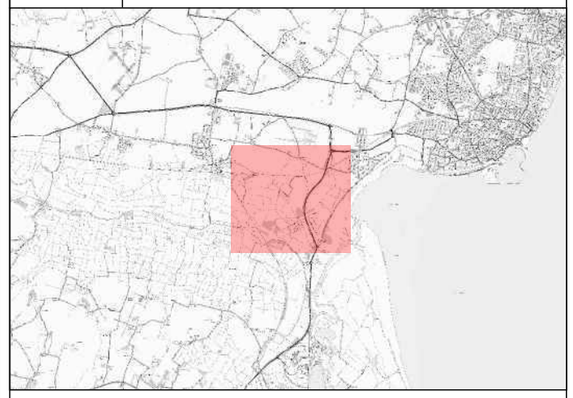
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Watkinson D & Neal V. 1998. *First aid for finds*, (Third Edition 1998).



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Key

Revised Kent GI Locations 09.02.23

- Cable Percussion Boreholes
- Red Penguin (Rotary) Boreholes
- Cone Penetration Tests
- Test Pits

0 100 200 m

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Site:	SLWB23 - Kent
Created by:	LD
Checked by:	KH
Version:	v1.0
Date:	22/03/2023
Scale:	1:10,000 @ A3

SLWB23: Revised Kent GI Locations 09.02.23

APPENDIX 2 OASIS DATA COLLECTION FROM: ENGLAND

OASIS ID (UID): headland1-521230

Project Name	Sea Link Feed -Richborough, Kent- Archaeological Watching Brief on GI Works
Activity type	Watching Brief
Sitecode(s)	[no data]
Project Identifier(s)	SLWB23
Planning Id	[no data]
Reason for Investigation	Planning requirement
Organisation Responsible for work	Headland Archaeology (UK) Ltd
Project Dates	24-Sep-2023–31-Oct-2023
HER	Kent HER
HER Identifiers	[no data]
Project Methodology	Monitoring of GI Trial Pits in advance of grid connection works
Project Results	Twenty three trial pits, located across several fields between Pegwell Bay and Minster in Kent within an area of relatively high archaeological potential, were excavated. Only one of the trial pits (TP-4A) was identified as containing an archaeological feature, tentatively identified as a curvilinear ditch. The feature contained animal bone, but no datable material was recovered. The remaining twenty two trial pits were observed to be cut into naturally occurring deposits with no observed discreet archaeological features or deposits.
Keywords	[no data]
Archive	[no data]

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C. Human Health Assessment Criteria Methodology

Risks to human health from historically contaminated soils have been assessed by comparison of laboratory contamination data with generic screening values established using the UK Contaminated Land Exposure Assessment (CLEA) framework.

Suitable for Use Levels (S4ULs) have been developed by Land Quality Management (LQM)[2] in accordance with the CLEA framework which replace the previously developed 2009 LQM / Chartered Institute of Environmental Health (CIEH) Generic Assessment Criteria (GAC) values. S4ULs are based on the principles of '*minimal*' or '*tolerable*' risk enshrined within SR2[3] and are intended as '*trigger values*' above which further assessment of the risks may be needed. The derivation of S4ULs has adopted modifications to the CLEA exposure assessment parameters proposed by Department for Environment, Food and Rural Affairs (Defra)[4] and used revised toxicological data based on recent research. S4ULs have been calculated for the four standard land use scenarios published within the CLEA model[5] and also include two new land uses for public open space developed by Defra. GACs developed by Contaminated Land: Applications in Real Environments (CL:AIRE), Association of Geotechnical and Geo-environmental Specialist (AGS), and Environmental Industries Commission (EIC) (2010)[6] have been recalculated by Mott MacDonald using the revisions to the CLEA exposure assessment parameters and including the public open space land uses.

LQM states that their GAC are '*broadly equivalent to the SGVs*'. Defra (2012)[7] recognises the use of the LQM and CL:AIRE GAC through statutory guidance thereby providing authoritative backing to their use in appropriate circumstances.

In the absence of SGVs and S4ULs, lead has been assessed by reference to the Category 4 Screening Level (C4SL)[8]; C4SLs have been developed in support of Defra's revision to the Statutory Guidance for Part 2A of the Environmental Protection Act 1990. The revised guidance presents a four-category system for determining land as contaminated land under Part 2A, ranging from Category 4 (the level of risk posed is acceptably low) to Category 1 (the level of risk is clearly unacceptable). The C4SLs provide criteria to determine whether contamination risks are low and definitely do not represent contaminated land (i.e., contaminant concentrations do not present a Significant Possibility of Significant Harm). The published C4SLs and S4ULs are therefore conservative thresholds.

The Environment Agency (EA) withdrew SGVs for nickel due to a report published by the European Food Safety Authority (EFSA) in February 20159 containing new recommendations for nickel. Following the EFSA (2015) opinion and the EA withdrawal of the SGVs for nickel,

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[2] Nathanail, C.P. et al. (2015) *The LQM / CIEH Suitable 4 Use Levels for Human Health Risk Assessment*. Land Quality Press: Nottingham. Document reference: S4UL3389.

[3] Environment Agency. (2009) *Human health toxicological assessment of contaminants in soil (SR2)*.

[4] Defra. (2014) *SP1010 Development of Category 4 Screening Levels for Assessment of Land Affected by Contamination, Final Project Report Revision 2*.

[5] Environment Agency. (2009) *Updated technical background to the CLEA model (SR3)*.

[6] CL:AIRE, AGS, EIC. (2010) *The Soil Generic Assessment Criteria for Human Health Risk Assessment*.

[7] Defra. (2012) *Environmental Protection Act 1990: Part 2A, Contaminated Land Statutory Guidance*.

[8] Defra. (2014) *SP1010 Development of Category 4 Screening Levels for Assessment of Land Affected by Contamination, Final Project Report Revision 2*.

[9] EFSA. (2015) *Scientific Opinion on the risks to public health related to the presence of nickel in food and drinking water*.

LQM published S4ULs for nickel, which have been utilised in this report. The SGV for mercury was withdrawn in 2019 due to EFSA re-evaluating the toxicity of inorganic mercury and methylmercury10; however, the LQM S4ULs use toxicological data from a more recent EFSA publication and are considered current.

[10] EFSA. (2012) *Scientific Opinion on the risk for public health related to the presence of mercury and methylmercury in food*.

D. Controlled Waters Assessment Background

- Defra's guidance[11] on the application of Part 2A defines tests for significant pollution of controlled waters. Key tests are as follows:
- Contaminants are continuing to enter into controlled waters additional to entry which has already occurred, and such entry is likely to occur again
- Contamination on-site has caused and is continuing to cause the following:
  - Pollution equivalent to 'environmental damage' to surface water or groundwater as defined by The Environmental Damage (Prevention and Remediation) Regulations 2009, but which cannot be dealt with under those Regulations
  - Inputs of pollutants resulting in deterioration of the quality of water abstracted, or intended to be used in the future, for use in human consumption such that additional treatment would be required to enable that use
  - A breach of a statutory surface water Environment Quality Standard, either directly or via a groundwater pathway
  - Input of a substance into groundwater resulting in a significant and sustained upward trend in concentration of pollutants [as defined in Article 2(3) of the Groundwater Daughter Directive (2006/118/EC/1)
- If the contamination risks to controlled waters can be ascribed to background soil contamination levels effectively from natural or '*common*' or '*widespread*' human activity the Local Authority should not normally regard the contamination as representing significant possibility of significant risk of pollution to controlled waters.

In-addition, under the Groundwater Daughter Directive (2006/118/EC), entry of hazardous contaminants into groundwater should be prevented ('*prevent objective*'). Entry of non-hazardous substances should not result in pollution of controlled waters ('*limit objective*'). The interpretation of the Groundwater Daughter Directive through the UK contaminated land risk assessment framework is described in EA's '*The Environment Agency's Approach to Groundwater Protection*; (2018)[12].

Hazardous substances are defined in the Water Framework Directive (2000/60/EC) as '*substances or groups of substances that are toxic, persistent and liable to bioaccumulate, and other substances which give rise to an equivalent level of concern*'. An 'equivalent level of concern' refers to a level of protection prescribed for hazardous substances equivalent to the 1980 Groundwater Directive (which has now been repealed). Non-hazardous substances are those substances not defined as hazardous substances. Hazardous substances are defined in accordance with the Groundwater Daughter Directive by the Joint Agencies Groundwater Directive Advisory Group.

The prevent objective is achieved by requiring that hazardous substances must '*not be discernible after the immediate dilution that occurs after the discharge enters groundwater*'. The compliance target used to measure discernibility is the highest of the natural background quality

[11] Defra. (2012) *Environmental Protection Act 1990: Part 2A, Contaminated Land Statutory Guidance*. Report reference: PB13735.

[12] Environment Agency. (2018) *The Environment Agency's Approach to Groundwater Protection, Version 1.2*. Report Reference: LIT 7660.

of groundwater, a Minimum Reporting Value (MRV); (typically the laboratory detection limit for that substance (MDL)) or ‘another value prescribed by legislation’.

E. Screening Results

E.1 Soil Screening

				R22-BH101	R22-BH101	R22-BH102	R22-BH103	R22-BH104	R22-BH105	R22-BH106	R22-BH203	R22-BH204	R22-BH205	R22-BH501	R22-BH502	R22-TP101	R22-TP102	R22-TP103	R22-TP104	R22-TP105	R22-TP106
Determinant Name	Units	LaboratoryTestMatrix	Commercial 1% SOM	0.2	1	0.5	0.2	0.3	0.5	0.5	0.2	0.5	1	0.2	0.2	0.2	0.2	0.5	1	0.2	1
Arsenic	mg/kg	SOLID	640	9.00000	7.00000	13.00000	10.00000	9.00000	15.00000	15.00000	3.00000	2.00000	13.00000	14.00000	10.00000	15.00000	9.00000	18.00000	10.00000	8.00000	7.00000
Barium	mg/kg	SOLID	22000	40.00000	29.00000	36.00000	41.00000	57.00000	33.00000	52.00000	32.00000	40.00000	33.00000	41.00000	44.00000	36.00000	49.00000	45.00000	49.00000	39.00000	33.00000
Beryllium	mg/kg	SOLID	12	1.00000	1.10000	1.20000	1.20000	1.20000	0.90000	1.60000	<0.5000	<0.5000	1.20000	1.10000	1.20000	1.30000	1.20000	1.60000	1.30000	0.80000	1.20000
Boron	mg/kg	SOLID	240000	2.40000	5.70000	3.20000	4.60000	4.90000	2.80000	3.20000	<1.0000	<1.0000	6.10000	2.30000	5.90000	4.50000	3.10000	10.60000	6.50000	3.90000	11.20000
Cadmium	mg/kg	SOLID	190	0.70000	0.60000	0.80000	<0.5000	<0.5000	0.90000	<0.5000	<0.5000	<0.5000	<0.5000	0.90000	<0.5000	<0.5000	<0.5000	<0.5000	0.60000	<0.5000	<0.5000
Trivalent Chromium	mg/kg	SOLID	8600	30.00000	32.00000	38.00000	45.00000	43.00000	29.00000	52.00000	16.00000	22.00000	37.00000	37.00000	37.00000	39.00000	36.00000	52.00000	44.00000	30.00000	39.00000
Chromium - Hexavalent	mg/kg	SOLID	33	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000
Copper	mg/kg	SOLID	68000	14.00000	9.00000	9.00000	12.00000	11.00000	8.00000	11.00000	8.00000	10.00000	10.00000	11.00000	14.00000	13.00000	16.00000	10.00000	12.00000	11.00000	12.00000
Lead	mg/kg	SOLID	2300	21.00000	15.00000	16.00000	18.00000	17.00000	12.00000	15.00000	13.00000	9.00000	15.00000	20.00000	24.00000	17.00000	21.00000	21.00000	17.00000	19.00000	16.00000
Manganese	mg/kg	SOLID	-	296.00000	143.00000	324.00000	253.00000	296.00000	472.00000	374.00000	282.00000	295.00000	119.00000	325.00000	270.00000	343.00000	308.00000	157.00000	194.00000	265.00000	182.00000
Mercury	mg/kg	SOLID	15	0.43000	<0.1700	<0.1700	<0.1700	<0.1700	0.65000	<0.1700	<0.1700	<0.1700	<0.1700	<0.1700	<0.1700	<0.1700	<0.1700	<0.1700	1.03000	<0.1700	<0.1700
Molybdenum	mg/kg	SOLID	18000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	1.00000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	4.00000	<1.0000	<1.0000	2.00000
Nickel	mg/kg	SOLID	980	18.00000	19.00000	24.00000	22.00000	23.00000	20.00000	25.00000	8.00000	10.00000	22.00000	20.00000	20.00000	22.00000	20.00000	25.00000	24.00000	18.00000	25.00000
Selenium	mg/kg	SOLID	12000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	1.00000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000
Vanadium	mg/kg	SOLID	9000	52.00000	59.00000	69.00000	77.00000	70.00000	55.00000	92.00000	20.00000	23.00000	68.00000	64.00000	64.00000	71.00000	63.00000	93.00000	78.00000	51.00000	69.00000
Zinc	mg/kg	SOLID	730000	63.00000	58.00000	60.00000	68.00000	63.00000	48.00000	68.00000	38.00000	36.00000	57.00000	63.00000	71.00000	60.00000	63.00000	61.00000	64.00000	61.00000	60.00000
pH	pH	SOLID	-	8.07000	8.63000	8.23000	7.87000	8.36000	8.60000	8.47000	8.06000	7.83000	9.26000	8.34000	8.02000	8.17000	8.42000	8.36000	8.58000	8.03000	9.02000
Asbestos	-	SOLID	-	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Benzene	mg/kg	SOLID	27	<0.0100			<0.0100				<0.0100				<0.0100						
Toluene	mg/kg	SOLID	56000	<0.0100			<0.0100				<0.0100				<0.0100						
Ethylbenzene	mg/kg	SOLID	5700	<0.0100			<0.0100				<0.0100				<0.0100						
O-Xylene	mg/kg	SOLID	6600	<0.0100			<0.0100				<0.0100				<0.0100						
Methyl tert-butyl ether (MTBE)	mg/kg	SOLID	7500	<0.0100							<0.0100				<0.0100						
Acenaphthylene	mg/kg	SOLID	83000	<0.0100	<0.0100	<0.0100	<0.0100		<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Acenaphthene	mg/kg	SOLID	84000	<0.0100	<0.0100	<0.0100	<0.0100		<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Fluorene	mg/kg	SOLID	63000	<0.0100	<0.0100	<0.0100	<0.0100		<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Phenanthrene	mg/kg	SOLID	22000	<0.0300	<0.0300	<0.0300	<0.0300		<0.0300	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300	0.16000	<0.0300
Anthracene	mg/kg	SOLID	520000	<0.0200	<0.0200	<0.0200	<0.0200		<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200
Fluoranthene	mg/kg	SOLID	23000	<0.0800	<0.0800	<0.0800	<0.0800		<0.0800	<0.0800	<0.0800	<0.0800	<0.0800	<0.0800	<0.0800	<0.0800	<0.0800	<0.0800	<0.0800	0.50000	<0.0800
Pyrene	mg/kg	SOLID	54000	<0.0700	<0.0700	<0.0700	<0.0700		<0.0700	<0.0700	<0.0700	<0.0700	<0.0700	<0.0700	<0.0700	<0.0700	<0.0700	<0.0700	<0.0700	0.42000	<0.0700
Benzo(a)anthracene	mg/kg	SOLID	170	<0.0400	<0.0400	<0.0400	<0.0400		<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	0.21000	<0.0400
Chrysene	mg/kg	SOLID	350	<0.0600	<0.0600	<0.0600	<0.0600		<0.0600	<0.0600	<0.0600	<0.0600	<0.0600	<0.0600	<0.0600	<0.0600	<0.0600	<0.0600	<0.0600	0.29000	<0.0600
Benzo(b)fluoranthene	mg/kg	SOLID	44	<0.0500	<0.0500	<0.0500	<0.0500		<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	0.07000	<0.0500	<0.0500	0.26000	<0.0500
Benzo(k)fluoranthene	mg/kg	SOLID	1200	<0.0700	<0.0700	<0.0700	<0.0700		<0.0700	<0.0700	<0.0700	<0.0700	<0.0700	<0.0700	<0.0700	<0.0700	<0.0700	<0.0700	<0.0700	<0.0700	<0.0700
Benzo(a)pyrene	mg/kg	SOLID	35	<0.0400	<0.0400	<0.0400	<0.0400		<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	0.06000	<0.0400	<0.0400	0.21000	<0.0400
% Moisture at 105C*	% w/w	SOLID	-	29.60000	35.40000	32.90000	32.30000	35.00000	38.20000	33.10000	66.30000	32.70000	34.60000	28.90000	29.70000	34.10000	31.80000	49.10000	37.80000	61.90000	45.60000
4,4-DDE	mg/kg	SOLID	-				<0.0100				0.18000			0.03000	<0.0100	<0.0100					
Acid Neutralisation Capacity at pH 6	mol/kg	SOLID	-				0.04000				0.06000										
Alachlor	mg/kg	SOLID	-				<0.0200				<0.0200			<0.0200	<0.0200	<0.0200					
Aldrin	mg/kg	SOLID	170				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
Aliphatics & Aromatics >C5-35	mg/kg	SOLID	-	8.00000							33.00000				31.00000						
Aliphatics >C10-12	mg/kg	SOLID	9700	<1.0000							<1.0000				<1.0000						
Aliphatics >C12-16	mg/kg	SOLID	59000	<1.0000							<1.0000				<1.0000						
Aliphatics >C16-21	mg/kg	SOLID	-	<1.0000							<1.0000				<1.0000						
Aliphatics >C21-35	mg/kg	SOLID	-	5.00000							6.00000				17.00000						
Aliphatics >C5-39	mg/kg	SOLID	-	5.00000							6.00000				17.00000						
Aliphatics >C5-6	mg/kg	SOLID	3200	<0.0100							<0.0100				<0.0100						
Aliphatics >C6-8	mg/kg	SOLID	7800	<0.0100							<0.0100				<0.0100						
Aliphatics >C8-10	mg/kg	SOLID	2000	<1.0000							<1.0000				<1.0000						
alpha-Hexachlorocyclohexane	mg/kg	SOLID	170				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
Anc/Bnc At Ph4	mol/kg	SOLID	-				0.33000				0.11000										
Aromatics >C10-12	mg/kg	SOLID	16000	<1.0000							<1.0000				1.00000						
Aromatics >C12-16	mg/kg	SOLID	36000	<1.0000							<1.0000				3.00000						
Aromatics >C16-21	mg/kg	SOLID	28000	<1.0000							3.00000				3.00000						
Aromatics >C21-35	mg/kg	SOLID	28000	3.00000							12.00000				6.00000						
Aromatics >C5-35	mg/kg	SOLID	-	3.00000							27.00000				14.00000						
Aromatics >C5-7	mg/kg	SOLID	26000	<0.0100							<0.0100				<0.0100						
Aromatics >C7-8	mg/kg	SOLID	56000	<0.0100							<0.0100				<0.0100						
Aromatics >C8-10	mg/kg	SOLID	3500	<1.0000							12.00000				1.00000						
Asbestos Matrix (microscope)	-	SOLID	-	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Asbestos Matrix (visual)	-	SOLID	-	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Asbestos Quantification Stage 2	% w/w	SOLID	-																		
Atrazine	mg/kg	SOLID	9300				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
Azinphos-ethyl	mg/kg	SOLID	-				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
Azinphos-methyl	mg/kg	SOLID	-				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
Bentazone	mg/kg	SOLID	-				<0.1000				<0.1000			<0.1000	<0.1000	<0.1000					
Benzo (g,h,i) perylene	mg/kg	SOLID	3900	<0.0500	<0.0500	<0.0500	<0.0500		<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500		<0.0500	<0.0500	0.13000	<0.0500
beta-Hexachlorocyclohexane	mg/kg	SOLID	65				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
Carbaryl	mg/kg	SOLID	-				<0.1000				<0.1000			<0.1000	<0.1000	<0.1000					
Carbophenothion	mg/kg	SOLID	-				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
Chlordane - alpha	mg/kg	SOLID	-				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
Chlorfenvinphos	mg/kg	SOLID	-				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
Chlorothalonil	mg/kg	SOLID	-				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
Chlorpyrifos-methyl*	mg/kg	SOLID	-				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
Chlorpyriphos	mg/kg	SOLID	-				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
Chromium	mg/kg	SOLID	-	30.00000	32.00000	38.00000	45.00000	43.00000	29.00000	52.00000	16.00000	22.00000	37.00000	37.00000	37.00000	39.00000	36.00000	52.00000	44.00000	30.00000	39.00000
Coumaphos	mg/kg	SOLID	-				<0.0100				<0.0100				<0.0100	<0.0100					
Cyanide Free	mg/kg	SOLID	-	<1.0000	<1.0000	<1.0000	<1.0000		<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000
Cypermethrin	mg/kg	SOLID	-				<0.1000				<0.1000			<0.1000	<0.1000	<0.1000					
Demeton - S	mg/kg	SOLID	-				<0.5000				<0.5000			<0.5000	<0.5000	<0.5000					
Demeton-O*	mg/kg	SOLID	-				<0.5000				<0.5000			<0.5000	<0.5000	<0.5000					
Delta-Hexachlorocyclohexane	mg/kg	SOLID	-				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
Diazinon	mg/kg	SOLID	-				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
Dibenz-a-h-anthracene	mg/kg	SOLID	3.5	<0.0400	<0.0400	<0.0400	<0.0400		<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400
Dichlobenil	mg/kg	SOLID	-				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
Dichlorvos	mg/kg	SOLID	140				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
Dieldrin	mg/kg	SOLID	170				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
Dimethoate	mg/kg	SOLID	-				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
Disulfoton	mg/kg	SOLID	-				<0.1000				<0.1000			<0.1000	<0.1000	<0.1000					
Diuron	mg/kg	SOLID	-				<0.1000				<0.1000			<0.1000	<0.1000	<0.1000					
Dry Matter	% w/w	SOLID	-				78.90000				88.40000										
Endosulfan I	mg/kg	SOLID	5600				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
Endosulfan II	mg/kg	SOLID	6300				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
Endosulfan Sulfate	mg/kg	SOLID	-				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
Endrin	mg/kg	SOLID	-				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
Endrin Aldehyde	mg/kg	SOLID	-				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
Endrin Ketone	mg/kg	SOLID	-				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
Ethion	mg/kg	SOLID	-				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
Ethylparathion	mg/kg	SOLID	-				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
Fenitrothion	mg/kg	SOLID	-				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
Fensulfothion	mg/kg	SOLID	-				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
Fenthion	mg/kg	SOLID	-				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
Fraction Organic Carbon (FOC)	N/A	SOLID	-	0.02440	0.00510	0.00990	0.02700	0.02130	0.00440	0.01180	0.01000	0.00580	0.00460	0.03090	0.04510	0.01460	0.03110	0.01050	0.00640	0.02370	0.00430
gamma-hexachlorocyclohexane	mg/kg	SOLID	67				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
Heptachlor	mg/kg	SOLID	-				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
Heptachlor Epoxide	mg/kg	SOLID	-				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
Hexachlorobenzene (HCB)	mg/kg	SOLID	110				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
Indeno(1,2,3-cd)pyrene	mg/kg	SOLID	500	<0.0300	<0.0300	<0.0300	<0.0300		<0.0300	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300	0.04000	<0.0300	<0.0300	0.16000	<0.0300
Isodrin	mg/kg	SOLID	-				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
Isoproturon	mg/kg	SOLID	-				<0.1000				<0.1000			<0.1000	<0.1000	<0.1000					
Linuron	mg/kg	SOLID	-				<0.1000				<0.1000			<0.1000	<0.1000	<0.1000					
Loss on ignition	% w/w	SOLID	-				9.50000				3.60000										
m,p xylenes	mg/kg	SOLID	-	<0.0100			<0.0100				<0.0100				<0.0100						
Malathion	mg/kg	SOLID	-				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
Mass of Sample	kg	SOLID	-				0.22200				0.19800										
Mecoprop (MCPP) (2-(4-chloro-2-methylphenoxy)	mg/kg	SOLID	-				<0.1000				<0.1000			<0.1000	<0.1000	<0.1000					
Methylparathion	mg/kg	SOLID	-				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
Mevinphos	mg/kg	SOLID	-				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
Min. Oil >C10-40	mg/kg	SOLID	-				<10.0000				<10.0000										
Napthalene	mg/kg	SOLID	190	<0.0300	<0.0300	<0.0300	<0.0300		<0.0300	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300
o,p - DDE	mg/kg	SOLID	-				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
o,p - DDT	mg/kg	SOLID	-				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
o,p - TDE	mg/kg	SOLID	-				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
p,p - DDT	mg/kg	SOLID	-				<0.0100				0.09000			0.01000	0.17000	<0.0100					
p,p-Methoxychlor*	mg/kg	SOLID	-				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
PAH 17 Total	mg/kg	SOLID	-				<0.0800				<0.0800										
PAH, Total Detected USEPA 16	mg/kg	SOLID	-									<0.0800									
PCB 105	mg/kg	SOLID	-	<0.0050			<0.0050				<0.0050										
PCB 114	mg/kg	SOLID	-	<0.0050			<0.0050				<0.0050										
PCB 123	mg/kg	SOLID	-	<0.0050			<0.0050				<0.0050										

				R22-BH101	R22-BH101	R22-BH102	R22-BH103	R22-BH104	R22-BH105	R22-BH106	R22-BH203	R22-BH204	R22-BH205	R22-BH501	R22-BH502	R22-TP101	R22-TP102	R22-TP103	R22-TP104	R22-TP105	R22-TP106
Determinant Name	Units	LaboratoryTestMatrix	Commercial 1% SOM	0.2	1	0.5	0.2	0.3	0.5	0.5	0.2	0.5	1	0.2	0.2	0.2	0.2	0.5	1	0.2	1
PCB 126	mg/kg	SOLID	-	<0.0050			<0.0050				<0.0050										
PCB 157	mg/kg	SOLID	-	<0.0050			<0.0050				<0.0050										
PCB 167	mg/kg	SOLID	-	<0.0050			<0.0050				<0.0050										
PCB 169	mg/kg	SOLID	-	<0.0050			<0.0050				<0.0050										
PCB 189	mg/kg	SOLID	-	<0.0050			<0.0050				<0.0050										
PCB 77	mg/kg	SOLID	-	<0.0050			<0.0050				<0.0050										
PCB 81	mg/kg	SOLID	-	<0.0050			<0.0050				<0.0050										
PCB Total of 12 WHO	mg/kg	SOLID	-	<0.0070			<0.0070				<0.0070										
PCB, Total Of 7 Congeners	mg/kg	SOLID	-				<0.0070				<0.0070										
PCB-118 2,3',4,4',5 - Pentachlorobiphenyl	mg/kg	SOLID	-	<0.0070			<0.0070				<0.0070										
PCB-156 2,3,3',4,4',5 - Hexachlorobiphenyl	mg/kg	SOLID	-	<0.0050			<0.0050				<0.0050										
Pendimethalin	mg/kg	SOLID	-				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
Phenol (Monohydric)	mg/kg	SOLID	-	<0.2000	<0.2000	<0.2000	<0.2000	<0.2000	<0.2000	<0.2000	<0.2000	<0.2000	<0.2000	<0.2000	<0.2000	<0.2000	<0.2000	<0.2000	<0.2000	<0.2000	<0.2000
Phorate	mg/kg	SOLID	-				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
Phosalone	mg/kg	SOLID	-				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
Pirimiphos-methyl	mg/kg	SOLID	-				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
Propetamphos	mg/kg	SOLID	-				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
Simazine	mg/kg	SOLID	-				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
Sulphate	g/l	SOLID	-	0.04000	0.06000	0.03000	0.06000	0.05000	0.03000	0.03000	<0.0100	<0.0100	0.06000	<0.0100	0.02000	0.02000	0.02000	0.06000	0.13000	<0.0100	0.08000
Sulphur	mg/kg	SOLID	-	424.00000	157.00000	223.00000	615.00000	465.00000	131.00000	273.00000	152.00000	70.00000	149.00000	609.00000	847.00000	328.00000	438.00000	237.00000	263.00000	797.00000	224.00000
Tecnazene	mg/kg	SOLID	-				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
Telodrin	mg/kg	SOLID	-				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
Tokuthion	mg/kg	SOLID	-				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
Total BTEX	mg/kg	SOLID	-				<0.0100				<0.0100										
Total Organic Carbon	% w/w	SOLID	-	2.44000	0.51000	0.99000	2.70000	2.13000	0.44000	1.18000	1.00000	0.58000	0.46000	3.09000	4.51000	1.46000	3.11000	1.05000	0.64000	2.37000	0.43000
trans - Chlordane	mg/kg	SOLID	-				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
Triallate	mg/kg	SOLID	-				<0.0100				<0.0100			0.03000	<0.0100	<0.0100					
Triazophos	mg/kg	SOLID	-				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
Trichloronate	mg/kg	SOLID	-				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
Trifluralin	mg/kg	SOLID	-				<0.0100				<0.0100			<0.0100	<0.0100	<0.0100					
Water Absorption Test	-	SOLID	-	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!

				R22-TP201	R22-TP201	R22-TP202	R22-TP202	R22-TP202	R22-TP203	R22-TP203	R22-TP204	R22-TP205	R22-TP405	R22-TP501	R22-TP502	R22-TP503A	R22-TP504	R22-TP505	R22-TP505	R22-TP506	R22-TP508	R22-TP510
Determinant Name	Units	LaboratoryTestMatrix	Commercial 1% SOM	0.2	1	0.2	0.5	1	0.2	0.5	1	1	1	0.2	1	0.2	1	0.5	1	0.2	0.5	0.2
Arsenic	mg/kg	SOLID	640	3.00000			2.00000		2.00000		8.00000	12.00000	4.00000		3.00000	18.00000	10.00000		18.00000		7.00000	10.00000
Barium	mg/kg	SOLID	22000	47.00000			33.00000		41.00000		50.00000	44.00000	64.00000		40.00000	37.00000	59.00000		46.00000		67.00000	35.00000
Beryllium	mg/kg	SOLID	12	<0.5000			<0.5000		<0.5000		1.50000	1.30000	1.30000		0.70000	0.90000	2.00000		1.50000		1.20000	1.10000
Boron	mg/kg	SOLID	240000	<1.0000			<1.0000		<1.0000		3.40000	5.90000	8.70000		<1.0000	2.80000	2.20000		5.40000		7.60000	3.50000
Cadmium	mg/kg	SOLID	190	<0.5000			<0.5000		0.60000		0.90000	1.40000	<0.5000		<0.5000	0.80000	1.40000		0.70000		<0.5000	<0.5000
Trivalent Chromium	mg/kg	SOLID	8600	24.00000			25.00000		25.00000		49.00000	32.00000	47.00000		41.00000	25.00000	58.00000		49.00000		42.00000	35.00000
Chromium - Hexavalent	mg/kg	SOLID	33	<1.0000			<1.0000		<1.0000		<1.0000	<1.0000	<1.0000		<1.0000	<1.0000	<1.0000		<1.0000		<1.0000	<1.0000
Copper	mg/kg	SOLID	68000	11.00000			6.00000		11.00000		14.00000	7.00000	11.00000		14.00000	9.00000	16.00000		14.00000		19.00000	13.00000
Lead	mg/kg	SOLID	2300	21.00000			6.00000		16.00000		15.00000	28.00000	12.00000		10.00000	20.00000	23.00000		17.00000		30.00000	17.00000
Manganese	mg/kg	SOLID	-	363.00000			222.00000		309.00000		238.00000	332.00000	453.00000		86.00000	406.00000	435.00000		216.00000		252.00000	345.00000
Mercury	mg/kg	SOLID	15	<0.1700			<0.1700		<0.1700		0.17000	<0.1700	<0.1700		<0.1700	0.78000	1.10000		0.40000		<0.1700	<0.1700
Molybdenum	mg/kg	SOLID	18000	<1.0000			<1.0000		<1.0000		<1.0000	<1.0000	4.00000		<1.0000	<1.0000	<1.0000		<1.0000		<1.0000	<1.0000
Nickel	mg/kg	SOLID	980	12.00000			9.00000		12.00000		26.00000	18.00000	28.00000		17.00000	16.00000	38.00000		27.00000		23.00000	19.00000
Selenium	mg/kg	SOLID	12000	<1.0000			<1.0000		<1.0000		1.00000	<1.0000	<1.0000		<1.0000	<1.0000	<1.0000		1.00000		<1.0000	<1.0000
Vanadium	mg/kg	SOLID	9000	29.00000			28.00000		26.00000		89.00000	59.00000	85.00000		41.00000	45.00000	103.00000		85.00000		68.00000	61.00000
Zinc	mg/kg	SOLID	730000	38.00000			31.00000		42.00000		66.00000	86.00000	58.00000		50.00000	47.00000	103.00000		75.00000		83.00000	56.00000
pH	pH	SOLID	-	7.74000	8.07000	6.98000	7.72000	8.24000	7.44000	7.62000	8.90000	8.81000	8.83000		8.22000	7.87000	8.62000		8.07000		8.03000	7.88000
Asbestos	-	SOLID	-	#VALUE!			#VALUE!		#VALUE!		#VALUE!	#VALUE!	#VALUE!		#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!		#VALUE!	#VALUE!
Benzene	mg/kg	SOLID	27																<0.0100			
Toluene	mg/kg	SOLID	56000																<0.0100			
Ethylbenzene	mg/kg	SOLID	5700																<0.0100			
O-Xylene	mg/kg	SOLID	6600																<0.0100			
Methyl tert-butyl ether (MTBE)	mg/kg	SOLID	7500																<0.0100			
Acenaphthylene	mg/kg	SOLID	83000	<0.0100			<0.0100		<0.0100		<0.0100	<0.0100			<0.0100	<0.0100	<0.0100		<0.0100		<0.0100	<0.0100
Acenaphthene	mg/kg	SOLID	84000	<0.0100			<0.0100		<0.0100		<0.0100	<0.0100			<0.0100	<0.0100	<0.0100		<0.0100		<0.0100	<0.0100
Fluorene	mg/kg	SOLID	63000	<0.0100			<0.0100		<0.0100		<0.0100	<0.0100			<0.0100	<0.0100	<0.0100		<0.0100		<0.0100	<0.0100
Phenanthrene	mg/kg	SOLID	22000	<0.0300			<0.0300		0.12000		<0.0300	<0.0300			<0.0300	<0.0300	<0.0300		<0.0300		<0.0300	<0.0300
Anthracene	mg/kg	SOLID	520000	<0.0200			<0.0200		<0.0200		<0.0200	<0.0200			<0.0200	<0.0200	<0.0200		<0.0200		<0.0200	<0.0200
Fluoranthene	mg/kg	SOLID	23000	<0.0800			<0.0800		0.43000		<0.0800	<0.0800			<0.0800	<0.0800	<0.0800		<0.0800		<0.0800	<0.0800
Pyrene	mg/kg	SOLID	54000	<0.0700			<0.0700		0.35000		<0.0700	<0.0700			<0.0700	<0.0700	<0.0700		<0.0700		<0.0700	<0.0700
Benzo(a)anthracene	mg/kg	SOLID	170	<0.0400			<0.0400		0.17000		<0.0400	<0.0400			<0.0400	<0.0400	<0.0400		<0.0400		<0.0400	<0.0400
Chrysene	mg/kg	SOLID	350	<0.0600			<0.0600		0.18000		<0.0600	<0.0600			<0.0600	<0.0600	<0.0600		<0.0600		<0.0600	<0.0600
Benzo(b)fluoranthene	mg/kg	SOLID	44	<0.0500			<0.0500		0.20000		<0.0500	<0.0500			<0.0500	<0.0500	<0.0500		<0.0500		0.09000	<0.0500
Benzo(k)fluoranthene	mg/kg	SOLID	1200	<0.0700			<0.0700		<0.0700		<0.0700	<0.0700			<0.0700	<0.0700	<0.0700		<0.0700		<0.0700	<0.0700
Benzo(a)pyrene	mg/kg	SOLID	35	<0.0400			<0.0400		0.16000		<0.0400	<0.0400			<0.0400	<0.0400	<0.0400		<0.0400		<0.0400	<0.0400
% Moisture at 105C*	% w/w	SOLID	-	27.70000			20.70000		23.80000		37.40000	37.50000	49.70000		28.30000	38.50000	39.60000		43.50000		33.50000	35.80000
4,4-DDE	mg/kg	SOLID	-	<0.0100		0.03000								0.04000		0.12000				<0.0100		<0.0100
Acid Neutralisation Capacity at pH 6	mol/kg	SOLID	-		0.08000	0.01000		<0.0100		0.07000						0.22000			0.16000			
Alachlor	mg/kg	SOLID	-	<0.0200		<0.0200								<0.0200		<0.0200				<0.0200		<0.0200
Aldrin	mg/kg	SOLID	170	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
Aliphatics & Aromatics >C5-35	mg/kg	SOLID	-																<1.0000			
Aliphatics >C10-12	mg/kg	SOLID	9700																<1.0000			
Aliphatics >C12-16	mg/kg	SOLID	59000																<1.0000			
Aliphatics >C16-21	mg/kg	SOLID	-																<1.0000			
Aliphatics >C21-35	mg/kg	SOLID	-																<1.0000			
Aliphatics >C5-39	mg/kg	SOLID	-																<1.0000			
Aliphatics >C5-6	mg/kg	SOLID	3200																<0.0100			
Aliphatics >C6-8	mg/kg	SOLID	7800																<0.0100			
Aliphatics >C8-10	mg/kg	SOLID	2000																<1.0000			
alpha-Hexachlorocyclohexane	mg/kg	SOLID	170	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
Anc/Bnc At Ph4	mol/kg	SOLID	-		0.09000	0.02000		0.02000		0.08000						2.32000			1.26000			
Aromatics >C10-12	mg/kg	SOLID	16000																<1.0000			
Aromatics >C12-16	mg/kg	SOLID	36000																<1.0000			
Aromatics >C16-21	mg/kg	SOLID	28000																<1.0000			
Aromatics >C21-35	mg/kg	SOLID	28000																<1.0000			
Aromatics >C5-35	mg/kg	SOLID	-																<1.0000			
Aromatics >C5-7	mg/kg	SOLID	26000																<0.0100			
Aromatics >C7-8	mg/kg	SOLID	56000																<0.0100			
Aromatics >C8-10	mg/kg	SOLID	3500																<1.0000			
Asbestos Matrix (microscope)	-	SOLID	-	#VALUE!			#VALUE!		#VALUE!		#VALUE!	#VALUE!	#VALUE!		#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!		#VALUE!	#VALUE!
Asbestos Matrix (visual)	-	SOLID	-	#VALUE!			#VALUE!		#VALUE!		#VALUE!	#VALUE!	#VALUE!		#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!		#VALUE!	#VALUE!
Asbestos Quantification Stage 2	% w/w	SOLID	-																			
Atrazine	mg/kg	SOLID	9300	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
Azinphos-ethyl	mg/kg	SOLID	-	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
Azinphos-methyl	mg/kg	SOLID	-	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
Bentazone	mg/kg	SOLID	-	<0.1000		<0.1000								<0.1000		<0.1000				<0.1000		<0.1000
Benzo (g,h,i) perylene	mg/kg	SOLID	3900	<0.0500			<0.0500		0.09000		<0.0500	<0.0500			<0.0500	<0.0500	<0.0500		<0.0500		<0.0500	<0.0500
beta-Hexachlorocyclohexane	mg/kg	SOLID	65	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
Carbaryl	mg/kg	SOLID	-	<0.1000		<0.1000								<0.1000		<0.1000				<0.1000		<0.1000
Carbophenothion	mg/kg	SOLID	-	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
Chlordane - alpha	mg/kg	SOLID	-	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
Chlorfenvinphos	mg/kg	SOLID	-	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
Chlorothalonil	mg/kg	SOLID	-	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
Chlorpyrifos-methyl*	mg/kg	SOLID	-	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
Chlorpyriphos	mg/kg	SOLID	-	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
Chromium	mg/kg	SOLID	-	24.00000			25.00000		25.00000		49.00000	32.00000	47.00000		41.00000	25.00000	58.00000		49.00000		42.00000	35.00000
Coumaphos	mg/kg	SOLID	-	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
Cyanide Free	mg/kg	SOLID	-	<1.0000			<1.0000		<1.0000		<1.0000	<1.0000			<1.0000	<1.0000	<1.0000		<1.0000		<1.0000	<1.0000
Cypermethrin	mg/kg	SOLID	-	<0.1000		<0.1000								<0.1000		<0.1000				<0.1000		<0.1000
Demeton - S	mg/kg	SOLID	-	<0.5000		<0.5000								<0.5000		<0.5000				<0.5000		<0.5000
Demeton-O*	mg/kg	SOLID	-	<0.5000		<0.5000								<0.5000		<0.5000				<0.5000		<0.5000
Deta-Hexachlorocyclohexane	mg/kg	SOLID	-	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
Diazinon	mg/kg	SOLID	-	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
Dibenz-a-h-anthracene	mg/kg	SOLID	3.5	<0.0400			<0.0400		<0.0400		<0.0400	<0.0400			<0.0400	<0.0400	<0.0400		<0.0400		<0.0400	<0.0400
Dichlobenil	mg/kg	SOLID	-	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
Dichlorvos	mg/kg	SOLID	140	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
Dieldrin	mg/kg	SOLID	170	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
Dimethoate	mg/kg	SOLID	-	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
Disulfoton	mg/kg	SOLID	-	<0.1000		<0.1000								<0.1000		<0.1000				<0.1000		<0.1000
Diuron	mg/kg	SOLID	-	<0.1000		<0.1000								<0.1000		<0.1000				<0.1000		<0.1000
Dry Matter	% w/w	SOLID	-		91.50000	84.70000		86.40000		90.00000						79.90000			70.90000			
Endosulfan I	mg/kg	SOLID	5600	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
Endosulfan II	mg/kg	SOLID	6300	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
Endosulfan Sulfate	mg/kg	SOLID	-	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
Endrin	mg/kg	SOLID	-	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
Endrin Aldehyde	mg/kg	SOLID	-	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
Endrin Ketone	mg/kg	SOLID	-	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
Ethion	mg/kg	SOLID	-	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
Ethylparathion	mg/kg	SOLID	-	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
Fenitrothion	mg/kg	SOLID	-	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
Fensulfothion	mg/kg	SOLID	-	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
Fenthion	mg/kg	SOLID	-	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
Fraction Organic Carbon (FOC)	N/A	SOLID	-	0.01240			0.00500		0.01130		0.00420	0.00410	0.00420		0.00200	0.01490	0.00360		0.00710		0.04880	0.02710
gamma-hexachlorocyclohexane	mg/kg	SOLID	67	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
Heptachlor	mg/kg	SOLID	-	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
Heptachlor Epoxide	mg/kg	SOLID	-	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
Hexachlorobenzene (HCB)	mg/kg	SOLID	110	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
Indeno(1,2,3-cd)pyrene	mg/kg	SOLID	500	<0.0300			<0.0300		0.12000		<0.0300	<0.0300			<0.0300	<0.0300	<0.0300		<0.0300		0.06000	<0.0300
Isodrin	mg/kg	SOLID	-	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
Isoproturon	mg/kg	SOLID	-	<0.1000		<0.1000								<0.1000		<0.1000				<0.1000		<0.1000
Linuron	mg/kg	SOLID	-	<0.1000		<0.1000								<0.1000		<0.1000				<0.1000		<0.1000
Loss on ignition	% w/w	SOLID	-		3.90000	3.60000		3.30000		2.90000						5.50000			6.80000			
m,p xylenes	mg/kg	SOLID	-																<0.0100			
Malathion	mg/kg	SOLID	-	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
Mass of Sample	kg	SOLID	-		0.19100	0.20700		0.20200		0.19400						0.21900			0.24700			
Mecoprop (MCPP) (2-(4-chloro-2-methylphenoxy)	mg/kg	SOLID	-	<0.1000		<0.1000								<0.1000		<0.1000				<0.1000		<0.1000
Methylparathion	mg/kg	SOLID	-	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
Mevinphos	mg/kg	SOLID	-	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
Min. Oil >C10-40	mg/kg	SOLID	-		<10.0000	<10.0000		<10.0000		<10.0000						<10.0000			<10.0000			
Napthalene	mg/kg	SOLID	190	<0.0300			<0.0300		<0.0300		<0.0300	<0.0300			<0.0300	<0.0300	<0.0300		<0.0300		<0.0300	<0.0300
o,p - DDE	mg/kg	SOLID	-	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
o,p - DDT	mg/kg	SOLID	-	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
o,p - TDE	mg/kg	SOLID	-	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
p,p - DDT	mg/kg	SOLID	-	<0.0100		0.01000								0.03000		0.03000				<0.0100		<0.0100
p,p-Methoxychlor*	mg/kg	SOLID	-	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
PAH 17 Total	mg/kg	SOLID	-		<0.0800	<0.0800		<0.0800		<0.0800						<0.0800			<0.0800			
PAH, Total Detected USEPA 16	mg/kg	SOLID	-																			
PCB 105	mg/kg	SOLID	-																<0.0050			
PCB 114	mg/kg	SOLID	-																<0.0050			
PCB 123	mg/kg	SOLID	-																<0.0050			

				R22-TP201	R22-TP201	R22-TP202	R22-TP202	R22-TP202	R22-TP203	R22-TP203	R22-TP204	R22-TP205	R22-TP405	R22-TP501	R22-TP502	R22-TP503A	R22-TP504	R22-TP505	R22-TP505	R22-TP506	R22-TP508	R22-TP510
Determinant Name	Units	LaboratoryTestMatrix	Commercial 1% SOM	0.2	1	0.2	0.5	1	0.2	0.5	1	1	1	0.2	1	0.2	1	0.5	1	0.2	0.5	0.2
PCB 126	mg/kg	SOLID	-																<0.0050			
PCB 157	mg/kg	SOLID	-																<0.0050			
PCB 167	mg/kg	SOLID	-																<0.0050			
PCB 169	mg/kg	SOLID	-																<0.0050			
PCB 189	mg/kg	SOLID	-																<0.0050			
PCB 77	mg/kg	SOLID	-																<0.0050			
PCB 81	mg/kg	SOLID	-																<0.0050			
PCB Total of 12 WHO	mg/kg	SOLID	-																<0.0070			
PCB, Total Of 7 Congeners	mg/kg	SOLID	-		<0.0070	<0.0070		<0.0070		<0.0070						<0.0070			<0.0070			
PCB-118 2,3',4,4',5 - Pentachlorobiphenyl	mg/kg	SOLID	-																<0.0070			
PCB-156 2,3,3',4,4',5 - Hexachlorobiphenyl	mg/kg	SOLID	-																<0.0050			
Pendimethalin	mg/kg	SOLID	-	<0.0100		<0.0100								<0.0100		0.03000				<0.0100		<0.0100
Phenol (Monohydric)	mg/kg	SOLID	-	<0.2000			<0.2000		<0.2000		<0.2000	<0.2000	<0.2000		<0.2000	<0.2000	<0.2000		<0.2000		<0.2000	<0.2000
Phorate	mg/kg	SOLID	-	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
Phosalone	mg/kg	SOLID	-	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
Pirimiphos-methyl	mg/kg	SOLID	-	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
Propetamphos	mg/kg	SOLID	-	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
Simazine	mg/kg	SOLID	-	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
Sulphate	g/l	SOLID	-	<0.0100			<0.0100		<0.0100		0.03000	0.03000	0.26000		0.07000	0.23000	0.04000		0.40000		0.14000	0.04000
Sulphur	mg/kg	SOLID	-	196.00000			73.00000		151.00000		120.00000	162.00000	343.00000		112.00000	626.00000	232.00000		415.00000		1320.00000	435.00000
Tecnazene	mg/kg	SOLID	-	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
Telodrin	mg/kg	SOLID	-	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
Tokuthion	mg/kg	SOLID	-	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
Total BTEX	mg/kg	SOLID	-		<0.0100	<0.0100		<0.0100		<0.0100						<0.0100			<0.0100			
Total Organic Carbon	% w/w	SOLID	-	1.24000	0.51000	1.15000	0.50000	0.19000	1.13000	0.52000	0.42000	0.41000	0.42000		0.20000	1.49000	0.36000		0.71000		4.88000	2.71000
trans - Chlordane	mg/kg	SOLID	-	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
Triallate	mg/kg	SOLID	-	<0.0100		<0.0100								<0.0100		0.03000				<0.0100		<0.0100
Triazophos	mg/kg	SOLID	-	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
Trichloronate	mg/kg	SOLID	-	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
Trifluralin	mg/kg	SOLID	-	<0.0100		<0.0100								<0.0100		<0.0100				<0.0100		<0.0100
Water Absorption Test	-	SOLID	-	#VALUE!			#VALUE!		#VALUE!		#VALUE!	#VALUE!	#VALUE!		#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!		#VALUE!	#VALUE!

E.2 Soil Leachate Screening

Laboratory testing:

Soil Leachate

Client Sample ID	Units	Limit of Detec	Method	UK DWS	EQS	R22-BH101	R22-BH102	R22-BH103	R22-BH103	R22-BH106	R22-BH203	R22-BH204	R22-BH502 MG	R22-BH502 Natural	R22-TP101	R22-TP201	R22-TP202	R22-TP202	R22-TP203
Depth to Top						0.20	0.50	0.20	0.50	0.50	0.20	0.50	0.20	0.50	0.50	0.20	0.50	1.00	0.20
Date Sampled						05-Oct-23	05-Oct-23	18-Oct-23	18-Oct-23	12-Oct-23	10-Oct-23	18-Sep-23	17-Oct-23	17-Oct-23	11-Oct-23	19-Oct-23	18-Oct-23	18-Oct-23	26-Sep-23
Lithology						Made Ground	Tidal Flat	Topsoil	Tidal Flat	Tidal Flat	Made Ground	Thanet Fm	Tidal Flat	Tidal Flat	Tidal Flat	Topsoil	Thanet Fm	Thanet Fm	Topsoil
Sample Matrix Code						6AE	3	3E	3	3	3A	4AE	3A	3A	5A	4AE	5A	6	4AE
Determinant																			
pH	pH	0.01	A-T-031w	-	-	7.69	8.03	7.38	7.34	7.88	7.9	7.07	7.65	7.71	8.02	7.13	7.52	7.49	7.76
Ammoniacal nitrogen as N	mg/l	0.05	A-T-033w	-	-	0.09	<0.05	<0.05	<0.05	0.13	<0.05	<0.05	0.74	0.24	<0.05	0.13	0.14	<0.05	0.16
Chloride	mg/l	1	A-T-026w	250	250	24.67	19.42	9.75	95.8	6.61	6.62	5.04	10.91	3.98	9.14	15.4	1.72	1.42	4.19
Fluoride	mg/l	0.1	A-T-026w (F	1.5	-	0.8	1.42	0.4	1.6	1.07	1.33	1.02	0.52	0.45	1.46	1.2	1.34	0.34	1.2
Sulphate	mg/l	1	A-T-026w	250	400	29.43	26.82	21.85	56.7	21.53	13.65	<1.00	4.21	32.31	17.43	8.39	14.83	3.4	<1.00
Cyanide (free)	mg/l	0.005	A-T-042wFC	-	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Cyanide (total)	mg/l	0.005	A-T-042wTC	0.05	0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Cyanide (complex)	mg/l	0.005	Calc	-	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Phenol	mg/l	0.01	A-T-050w	0.0005	0.0077	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cresols	mg/l	0.01	A-T-050w	10	0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Resorcinol	mg/l	0.01	A-T-050w	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Catechol	mg/l	0.01	A-T-050w	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Xylenols & Ethylphenols	mg/l	0.01	A-T-050w	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Naphthols	mg/l	0.01	A-T-050w	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Trimethylphenol	mg/l	0.01	A-T-050w	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Phenols (total by HPLC)	mg/l	0.01	A-T-050w	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Antimony	µg/l	1	A-T-025w	5	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	2	<1	<1	<1
Arsenic	µg/l	1	A-T-025w	10	50	1	2	4	2	4	3	2	6	4	3	3	6	3	4
Boron	µg/l	10	A-T-025w	1000	2000	121	175	89	349	180	36	31	262	219	160	33	56	37	48
Barium	µg/l	1	A-T-025w	1000	-	8	6	8	4	6	35	68	17	13	4	19	355	230	50
Beryllium	µg/l	1	A-T-025w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	2	3	<1
Cadmium	µg/l	1	A-T-025w	5	0.08	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Copper	µg/l	4	A-T-025w	2000	23.89	<4	<4	<4	<4	5	5	5	9	8	<4	6	14	8	8
Chromium	µg/l	1	A-T-025w	50	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium (hexavalent)	mg/l	0.05	A-T-040w	-	0.0034	<0.05	<0.05	<0.10	<0.10	<0.05	<0.10	<0.05	<0.05	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05
Chromium (trivalent)	mg/l	0.05	Calc	-	0.0047	<0.05	<0.05	<0.10	<0.10	<0.05	<0.10	<0.05	<0.05	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05
Iron	µg/l	10	A-T-025w	200	1000	31	68	300	99	251	486	242	304	309	148	238	423	108	688
Lead	µg/l	1	A-T-025w	10	1.2	<1	3	3	2	4	5	3	2	2	5	3	5	7	7
Manganese	µg/l	1	A-T-025w	50	573.34	<1	3	11	2	4	25	22	5	5	5	10	52	20	51
Magnesium	mg/l	1	A-T-049w	50	-	4	6	7	7	5	4	12	6	5	4	2	170	188	11
Mercury	µg/l	0.1	A-T-025w	1	0.07	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Molybdenum	µg/l	1	A-T-025w	-	-	5	4	2	9	7	<1	2	4	4	5	1	<1	<1	<1
Nickel	µg/l	2	A-T-025w	20	16.37	3	4	3	3	3	3	2	6	6	3	2	7	5	4
Selenium	µg/l	1	A-T-025w	10	-	<1	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium	µg/l	1	A-T-025w	-	20	2	3	7	4	11	11	8	10	8	8	10	21	8	16
Zinc	µg/l	2	A-T-025w	5000	28.33	5	6	12	18	20	43	34	15	22	24	5	34	33	15
Calcium	mg/l	1	A-T-049w	-	250	47	29	19	23	23	23	33	39	26	17	32	149	166	31

Laboratory testing:

Soil Leachate

Client Sample ID	Units	Limit of Detec	Method	UK DWS	EQS	R22-TP501 Topsoil	R22-TP505	R22-TP506	R22-TP510	RedP-BH-10	RedP-BH-10	RedP-BH-10 M	RedP-BH-100	RedP-BH-11	RedP-BH-6	RedP-BH-7	RedP-BH-8	RedP-BH-9	RedP-BH-9
Depth to Top						0.20	1.00	0.20	0.20	1.50	2.50	9.80	5.50	0.20	1.00	0.25	0.20	0.20	0.50
Date Sampled						17-Oct-23	03-Oct-23	23-Oct-23	20-Oct-23	12-Oct-23	12-Oct-23	17-Oct-23	13-Oct-23	06-Oct-23	23-Oct-23	23-Nov-23	04-Oct-23	19-Oct-23	19-Oct-23
Lithology						Topsoil	Tidal Flat	Topsoil	Topsoil										
Sample Matrix Code						4AE	3	6AE	6AE	6AB	6A	5A	6ABE	6AE	6ABE	3A	6AE	6AE	6AE
Determinant																			
pH	pH	0.01	A-T-031w	-	-	7.81	7.98	7.67	7.81	7.81	7.88	9.25	9.9	6.79	7.44		7.58	7.55	7.15
Ammoniacal nitrogen as N	mg/l	0.05	A-T-033w	-	-	<0.05	<0.05	<0.05	0.11	4.55	8.25	5.22	3.45	0.16	<0.05	NAD	<0.05	0.21	0.06
Chloride	mg/l	1	A-T-026w	250	250	6.19	221	47.82	14.97	8.5	14.48	80.14	46.49	26.48	1.42	N/A	23.59	5.1	3.02
Fluoride	mg/l	0.1	A-T-026w (F	1.5	-	0.5	1.27	1.23	0.5	0.4	0.47	0.78	0.34	0.94	0.59		0.98	1	1.09
Sulphate	mg/l	1	A-T-026w	250	400	11.85	250.71	40.63	23.48	169.64	113.85	79.14	49.43	28.2	7.06		33.79	14.18	11.23
Cyanide (free)	mg/l	0.005	A-T-042wFC	-	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.08	<0.005	<0.005	<0.005
Cyanide (total)	mg/l	0.005	A-T-042wTC	0.05	0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.016	<0.005	<0.005	<0.005	0.05	<0.005	<0.005	<0.005
Cyanide (complex)	mg/l	0.005	Calc	-	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.016	<0.005	<0.005	<0.005	0.24	<0.005	<0.005	<0.005
Phenol	mg/l	0.01	A-T-050w	0.0005	0.0077	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	0.02	<0.01	0.01	1.11	<0.01	<0.01	<0.01
Cresols	mg/l	0.01	A-T-050w	10	0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	1.05	<0.01	<0.01	<0.01
Resorcinol	mg/l	0.01	A-T-050w	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	1.27	<0.01	<0.01	<0.01
Catechol	mg/l	0.01	A-T-050w	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.72	<0.01	<0.01	<0.01
Xylenols & Ethylphenols	mg/l	0.01	A-T-050w	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.46	<0.01	<0.01	<0.01
Naphthols	mg/l	0.01	A-T-050w	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	1.12	<0.01	<0.01	<0.01
Trimethylphenol	mg/l	0.01	A-T-050w	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.13	<0.01	<0.01	<0.01
Phenols (total by HPLC)	mg/l	0.01	A-T-050w	-	-	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	0.02	<0.01	0.01	2.18	<0.01	<0.01	<0.01
Antimony	µg/l	1	A-T-025w	5	-	<1	<1	2	2	8	7	11	18	<1	3	0.07	<1	2	4
Arsenic	µg/l	1	A-T-025w	10	50	5	4	9	2	3	4	27	39	9	6	0.84	5	4	2
Boron	µg/l	10	A-T-025w	1000	2000	29	415	495	117	226	204	124	61	89	33	<0.03	44	142	84
Barium	µg/l	1	A-T-025w	1000	-	22	12	12	12	84	67	23	21	257	33	0.81	67	19	29
Beryllium	µg/l	1	A-T-025w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	2	<1	1.92	<1	<1	<1
Cadmium	µg/l	1	A-T-025w	5	0.08	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	12.1	<1	<1	<1
Copper	µg/l	4	A-T-025w	2000	23.89	6	7	7	6	4	9	14	36	22	9		10	6	7
Chromium	µg/l	1	A-T-025w	50	5	<1	1	1	<1	<1	<1	2	2	27	2		<1	<1	<1
Chromium (hexavalent)	mg/l	0.05	A-T-040w	-	0.0034	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.05
Chromium (trivalent)	mg/l	0.05	Calc	-	0.0047	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.05
Iron	µg/l	10	A-T-025w	200	1000	234	760	1120	216	48	211	40	106	5380	318		223	881	255
Lead	µg/l	1	A-T-025w	10	1.2	4	3	10	55	3	11	6	24	22	48		17	12	9
Manganese	µg/l	1	A-T-025w	50	573.34	20	10	17	7	164	254	8	19	141	27		40	9	8
Magnesium	mg/l	1	A-T-049w	50	-	3	12	8	3	7	5	<1	<1	56	2		5	7	3
Mercury	µg/l	0.1	A-T-025w	1	0.07	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		<0.1	<0.1	<0.1
Molybdenum	µg/l	1	A-T-025w	-	-	1	27	18	4	18	38	66	25	<1	3		<1	4	7
Nickel	µg/l	2	A-T-025w	20	16.37	3	4	6	3	5	6	12	15	15	<2		5	4	<2
Selenium	µg/l	1	A-T-025w	10	-	<1	2	2	<1	<1	<1	5	4	<1	<1		<1	2	2
Vanadium	µg/l	1	A-T-025w	-	20	17	6	18	4	5	4	165	500	47	8		25	11	4
Zinc	µg/l	2	A-T-025w	5000	28.33	19	15	4	6	30	26	8	32	63	33		17	8	7
Calcium	mg/l	1	A-T-049w	-	250	27	30	28	41	65	47	43	42	55	11		32	29	19

E.3 Groundwater Screening

Laboratory testing:
Groundwater

Sample ID						R22-BH102	R22-BH102	R22-BH102	R22-BH103 (d)	R22-BH103 (d)	R22-BH103 (d)	R22-BH103 (s)	R22-BH103 (s)	R22-BH103 (s)	R22-BH104	R22-BH104	R22-BH104	R22-BH105	R22-BH105	R22-BH105
Depth to Top						1.80	1.50	1.80	4.00	4.00	4.00	0.80	0.80	0.80	4.00	4.00	4.00	1.80	1.50	1.80
Date Sampled						13-Dec-23	03-Jan-24	18-Jan-24	14-Dec-23	03-Jan-24	18-Jan-24	14-Dec-23	03-Jan-24	18-Jan-24	13-Dec-23	04-Jan-24	18-Jan-24	13-Dec-23	03-Jan-24	18-Jan-24
Determinant	**Units**	Limit of Detection	Method	UK DWS	EQS															
pH	pH	0.01	A-T-031w	-	-	7.63	8.1	8.2	7.14	7.22	7.27	7.42	7.59	7.79	7.43	7.31	7.93	6.96	7.1	7.16
Alkalinity by titration (bicarbonate)	mg/l Ca CO	15	Titration w	-	-	290	300	330	1275	1035	1285	985	890	850	905	595	895	670	695	355
Hardness Total	mg/l Ca CO	4	A-T-049w	-	-	508	504	488	4720	4900	4850	2310	1950	1640	1788	3460	1553	1613	1627	2310
Total Dissolved Solids	mg/l	20	A-T-035w	-	-	1564	1391	1454	27180	25683	27176	542491	2861	10903	12566	17044	11144	6568	5905	6799
Ammoniacal nitrogen as N	mg/l	0.05	A-T-033w	0.38	0.2	0.31	0.3	0.2	11.1	9.91	11.3	1.85	1.44	0.96	2.26	2.69	2.19	0.73	0.63	0.76
Chloride	mg/l	1	A-T-026w	250	250	553	406	511	12300	16300	13800	9170	6960	5840	6750	8990	5470	16400	2860	3480
Fluoride	mg/l	0.1	A-T-026w (F	1.5	-	0.53	0.52	0.67	0.61	0.4	0.35	0.58	0.53	0.62	0.9	0.75	1.08	0.66	0.94	0.81
Nitrate	mg/l	0.1	A-T-026w (N	0.15	-	18.2	2.4	1.2	0.1	<0.1	<0.1	2.7	9.8	6.4	0.2	<0.1	<0.1	<0.1	<0.1	<0.1
Sulphate	mg/l	1	A-T-026w	250	400	146	100	125	1392	1300	1390	932	745	657	996	1130	881	52	23	12
Cyanide (free)	mg/l	0.005	A-T-042wFC	-	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Cyanide (total)	mg/l	0.005	A-T-042wTC	0.05	0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Antimony	µg/l	1	A-T-025w	5	-	2	2	1	<20	<20	<20	<10	<10	<5	<20	<10	<5	<10	<2	<5
Arsenic	µg/l	1	A-T-025w	10	50	<1	<1	<1	<20	<20	<20	<10	<10	<5	<20	<10	<5	<10	<2	7
Boron	µg/l	10	A-T-025w	1000	2000	202	231	248	4120	3440	3680	1120	986	1230	675	784	867	718	123	1090
Barium	µg/l	1	A-T-025w	1000	-	95	99	106	313	263	276	237	186	135	335	273	314	1850	407	3070
Beryllium	µg/l	1	A-T-025w	-	-	<1	<1	<1	<20	<20	<20	<10	<10	<5	<20	<10	<5	<10	<2	<5
Cadmium	µg/l	0.2	A-T-025w	5	0.08	<0.2	<0.2	<0.2	<4.0	<4.0	<40.0	<2.0	<2.0	<1.0	<4.0	<2.0	<1.0	<2.0	<0.4	<1.0
Calcium	mg/l	1	A-T-049w	-	250	160	158	150	509	512	492	302	259	242	248	532	209	330	316	409
Copper	µg/l	4	A-T-025w	2000	23.89	20	13	9	<80	<80	<80	<40	<40	<20	<80	<40	<20	<40	<8	<20
Chromium (dissolved)	µg/l	1	A-T-025w	50	5	<1	1	1	<20	<20	<20	<10	<10	<5	<20	<10	<5	<10	<2	<5
Chromium (hexavalent)	mg/l	0.01	A-T-040w	-	0.0034	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium (trivalent)	mg/l	0.01	Calc	-	0.0047	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01
Iron	µg/l	10	A-T-025w	200	1000	<10	28	23	1640	2810	2020	943	962	<50	637	846	327	16900	27200	28600
Lead	µg/l	1	A-T-025w	10	1.2	<1	<1	<1	<20	<20	<20	<10	<10	<5	<20	<10	<5	<10	<2	<5
Manganese	µg/l	1	A-T-025w	50	573.34	53	41	51	3210	3210	3860	2560	1760	936	4740	6620	3850	16500	14900	20200
Magnesium	mg/l	1	A-T-049w	50	-	26	26	28	839	879	880	378	316	251	284	516	250	192	203	313
Magnesium BRE	mg/l	1	A-T-049w	-	-	26	26.5	27.6	838	879	880	378	316	251	284	516	250	192	203	312
Mercury	µg/l	0.1	A-T-025w	1	0.07	<0.1	<0.1	<0.1	<2.0	3.3	<2.0	<1.0	<1.0	<0.5	<2.0	<1.0	<0.5	<1.0	<0.2	<0.5
Molybdenum	µg/l	0.5	A-T-025w	-	-	2.4	2.3	2.1	<10.0	<10.0	<10.0	<5.0	<5.0	6.7	<10.0	<5.0	4.8	<5.0	<0.5	<2.5
Nickel	µg/l	2	A-T-025w	20	16.37	7	8	9	<40	<40	<40	<20	<20	16	<40	<20	14	<20	<4	<10
Selenium	µg/l	1	A-T-025w	10	-	7	6	3	<20	<20	<20	<10	<10	<5	<20	<10	<5	<10	<2	<5
Sodium	mg/l	1	A-T-049w	-	-	294	292	311	7720	7690	8130	4900	4230	3070	4500	5090	3500	1580	1450	2620
Sulphur, Total	mg/l	1	A-T-072w	-	-	43	41	41	485	471	458	328	275	233	350	410	305	20	11	2
Vanadium	µg/l	1	A-T-025w	-	20	<1	<1	<1	<20	<20	<20	<10	<10	<5	<20	<10	<5	<10	<2	<5
Zinc	µg/l	2	A-T-025w	5000	28.33	4	6	5	<40	<40	<40	56	23	<10	<40	<20	<10	31	<4	<10
				-	-															
PAH 16MS (w)				-	-															
Acenaphthene	µg/l	0.01	A-T-019w	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	0.02	<0.01
Acenaphthylene	µg/l	0.01	A-T-019w	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Anthracene	µg/l	0.01	A-T-019w	-	0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo(a)anthracene	µg/l	0.01	A-T-019w	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo(a)pyrene	µg/l	0.01	A-T-019w	0.01	0.00017	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo(b)fluoranthene	µg/l	0.01	A-T-019w	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo(ghi)perylene	µg/l	0.01	A-T-019w	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo(k)fluoranthene	µg/l	0.01	A-T-019w	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chrysene	µg/l	0.01	A-T-019w	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Dibenzo(ah)anthracene	µg/l	0.01	A-T-019w	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Fluoranthene	µg/l	0.01	A-T-019w	-	0.0063	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Fluorene	µg/l	0.01	A-T-019w	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01
Indeno(123-cd)pyrene	µg/l	0.01	A-T-019w	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Naphthalene	µg/l	0.01	A-T-019w	-	2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.07	<0.02	0.03	0.06	0.05	0.09
Phenanthrene	µg/l	0.01	A-T-019w	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01
Pyrene	µg/l	0.01	A-T-019w	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Total PAH 16MS	µg/l	0.01	A-T-019w	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.07	<0.02	0.03	0.09	0.08	0.09
				-	-															
Phenols NG (speciated HPLC) (w)				-	-															
Phenol	mg/l	0.01	A-T-050w	0.0005	0.0077	<0.01	<0.01	<0.01	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.20
Cresols	mg/l	0.01	A-T-050w	-	0.1	<0.01	<0.01	<0.01	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.20
Catechol	mg/l	0.01	A-T-050w	-	-	<0.01	<0.01	<0.01	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.20
Resorcinol	mg/l	0.01	A-T-050w	-	-	<0.01	<0.01	<0.01	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.20
Xylenols & Ethylphenols	mg/l	0.01	A-T-050w	-	-	<0.01	<0.01	<0.01	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.20
Naphthols	mg/l	0.01	A-T-050w	-	-	<0.01	<0.01	<0.01	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.20
Trimethylphenol	mg/l	0.01	A-T-050w	-	-	<0.01	<0.01	<0.01	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.20
Phenols - Total by HPLC	mg/l	0.01	A-T-050w	-	-	<0.01	<0.01	<0.01	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.20
				-	-															
VOC (w)				-	-															
Dichlorodifluoromethane	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	µg/l	10	A-T-006w	-	-	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10

Determinant	Units	Limit of Detection	Method	UK DWS	EQS	R22-BH102 1.80 13-Dec-23	R22-BH102 1.50 03-Jan-24	R22-BH102 1.80 18-Jan-24	R22-BH103 (d) 4.00 14-Dec-23	R22-BH103 (d) 4.00 03-Jan-24	R22-BH103 (d) 4.00 18-Jan-24	R22-BH103 (s) 0.80 14-Dec-23	R22-BH103 (s) 0.80 03-Jan-24	R22-BH103 (s) 0.80 18-Jan-24	R22-BH104 4.00 13-Dec-23	R22-BH104 4.00 04-Jan-24	R22-BH104 4.00 18-Jan-24	R22-BH105 1.80 13-Dec-23	R22-BH105 1.50 03-Jan-24	R22-BH105 1.80 18-Jan-24
Vinyl Chloride	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans 1,2-Dichloroethene	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichloromethane	µg/l	5	A-T-006w	-	-	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Carbon Disulphide	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis 1,2-Dichloroethene	µg/l	1	A-T-006w	3	10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	µg/l	5	A-T-006w	-	-	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloroform	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	µg/l	2	A-T-006w	-	-	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,1,1-Trichloroethane	µg/l	1	A-T-006w	3	100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloropropene	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Benzene	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon Tetrachloride	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	µg/l	10	A-T-006w	-	-	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Trichloroethene	µg/l	1	A-T-006w	10	10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis 1,3-Dichloropropene	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans 1,3-Dichloropropene	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toluene	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	2	3	6
1,3-Dichloropropane	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromochloromethane	µg/l	3	A-T-006w	-	-	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
1,2-Dibromoethane	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1,2-Tetrachloroethane	µg/l	1	A-T-006w	-	140	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
m & p Xylene	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	µg/l	3	A-T-006w	-	-	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Styrene	µg/l	1	A-T-006w	-	50	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	µg/l	1	A-T-006w	100	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	µg/l	1	A-T-006w	-	0.4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Isopropylbenzene	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromobenzene	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	µg/l	1	A-T-006w	10	10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
n-propylbenzene	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
4-Chlorotoluene	µg/l	1	A-T-006w	-	20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	µg/l	1	A-T-006w	100	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
4-Isopropyltoluene	µg/l	1	A-T-006w	100	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene	µg/l	1	A-T-006w	100	2.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	µg/l	1	A-T-006w	3	12	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	µg/l	1	A-T-006w	0.5	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	µg/l	2	A-T-006w	-	-	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,3-Dichlorobenzene	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
n-butylbenzene	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	µg/l	2	A-T-006w	-	-	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,2,4-Trichlorobenzene	µg/l	3	A-T-006w	-	0.4	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
1,2,3-Trichlorobenzene	µg/l	3	A-T-006w	-	0.4	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Hexachlorobutadiene	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
				-	-															
TPH CWG (w) with Clean Up				-	-															
Ali >C5-C6	µg/l	1	A-T-022w	10	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ali >C6-C8	µg/l	1	A-T-022w	10	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ali >C8-C10	µg/l	5	A-T-055w	10	-	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	11	26	53
Ali >C10-C12	µg/l	5	A-T-055w	10	-	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ali >C12-C16	µg/l	5	A-T-055w	10	-	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ali >C16-C21	µg/l	5	A-T-055w	10	-	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ali >C21-C35	µg/l	5	A-T-055w	10	-	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	11
Total Aliphatics	µg/l	5	Calc-As Rec	-	-	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	11	26	64
Aro >C5-C7	µg/l	1	A-T-022w	10	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Aro >C7-C8	µg/l	1	A-T-022w	10	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	1	<1	<1	2	3	4
Aro >C8-C10	µg/l	5	A-T-055w	10	-	<5	<5	<5	<5	<5	<5	<5	<5	<5	6	<5	<5	63	146	78
Aro >C10-C12	µg/l	5	A-T-055w	10	-	<5	<5	<5	<5	<5	<5	<5	<5	<5	5	<5	<5	5	6	7

Determinant	Units	Limit of Detection	Method	UK DWS	EQS	R22-BH102 1.80 13-Dec-23	R22-BH102 1.50 03-Jan-24	R22-BH102 1.80 18-Jan-24	R22-BH103 (d) 4.00 14-Dec-23	R22-BH103 (d) 4.00 03-Jan-24	R22-BH103 (d) 4.00 18-Jan-24	R22-BH103 (s) 0.80 14-Dec-23	R22-BH103 (s) 0.80 03-Jan-24	R22-BH103 (s) 0.80 18-Jan-24	R22-BH104 4.00 13-Dec-23	R22-BH104 4.00 04-Jan-24	R22-BH104 4.00 18-Jan-24	R22-BH105 1.80 13-Dec-23	R22-BH105 1.50 03-Jan-24	R22-BH105 1.80 18-Jan-24
Aro >C12-C16	µg/l	5	A-T-055w	10	-	<5	<5	<5	<5	<5	<5	<5	5	<5	10	<5	<5	8	9	13
Aro >C16-C21	µg/l	5	A-T-055w	10	-	<5	<5	<5	<5	<5	<5	<5	5	<5	8	<5	<5	8	8	14
Aro >C21-C35	µg/l	10	A-T-055w	10	-	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	12
Total Aromatics	µg/l	10	Calc-As Rec	-	-	<10	<10	<10	<10	<10	<10	<10	10	<10	30	<10	<10	86	172	128
TPH (Ali & Aro >C5-C35)	µg/l	10	Calc-As Rec	-	-	<10	<10	<10	<10	<10	<10	<10	10	<10	30	<10	<10	97	198	192
BTEX - Benzene	µg/l	1	A-T-022w	1	10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
BTEX - Toluene	µg/l	1	A-T-022w	-	74	<1	<1	<1	<1	<1	<1	<1	<1	<1	1	<1	<1	2	3	4
BTEX - Ethyl Benzene	µg/l	1	A-T-022w	-	20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
BTEX - m & p Xylene	µg/l	1	A-T-022w	-	30	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
BTEX - o Xylene	µg/l	1	A-T-022w	-	30	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
MTBE	µg/l	1	A-T-022w			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1

Laboratory testing:
Groundwater

Sample ID						R22-BH204	R22-BH204	R22-BH204	R22-BH205	R22-BH205	R22-BH205	R22-BH501	R22-BH501	R22-BH501
Depth to Top						27.30	27.30	27.30	21.00	21.00	21.00	24.50	24.65	24.65
Date Sampled						13-Dec-23	03-Jan-24	18-Jan-24	14-Dec-23	03-Jan-24	18-Jan-24	13-Dec-23	04-Jan-24	18-Jan-24
Determinant	Units	Limit of Detection	Method	UK DWS	EQS									
pH	pH	0.01	A-T-031w	-	-	7.61	7.91	8	7.28	6.97	7.23	7.56	7.5	7.79
Alkalinity by titration (bicarbonate)	mg/l Ca CO	15	Titration w	-	-	370	375	375	710	460	525	330	350	340
Hardness Total	mg/l Ca CO	4	A-T-049w	-	-	340	397	352	5430	7320	6760	855	1043	766
Total Dissolved Solids	mg/l	20	A-T-035w	-	-	597	602	573	21809	20578	21315	1931	1337	1477
Ammoniacal nitrogen as N	mg/l	0.05	A-T-033w	0.38	0.2	0.36	0.35	0.37	5.47	5.26	5.35	1.34	1.22	1.15
Chloride	mg/l	1	A-T-026w	250	250	67	64	62	2620	11800	11800	606	539	479
Fluoride	mg/l	0.1	A-T-026w (F	1.5	-	0.83	1.04	1.09	0.26	0.12	0.11	0.9	0.99	0.98
Nitrate	mg/l	0.1	A-T-026w (N	0.15	-	<0.1	0.6	<0.1	0.5	<0.1	<0.1	0.1	0.1	<0.1
Sulphate	mg/l	1	A-T-026w	250	400	75	63	69	957	909	979	73	69	69
Cyanide (free)	mg/l	0.005	A-T-042wFC	-	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Cyanide (total)	mg/l	0.005	A-T-042wTC	0.05	0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Antimony	µg/l	1	A-T-025w	5	-	<5	<1	<1	<20	<20	<20	<5	<2	<1
Arsenic	µg/l	1	A-T-025w	10	50	<5	<1	<1	<20	<20	<20	<5	<2	<1
Boron	µg/l	10	A-T-025w	1000	2000	164	147	143	996	793	782	139	136	131
Barium	µg/l	1	A-T-025w	1000	-	213	70	252	335	191	142	133	94	76
Beryllium	µg/l	1	A-T-025w	-	-	<5	<1	<1	<20	<20	<20	<5	<2	<1
Cadmium	µg/l	0.2	A-T-025w	5	0.08	<1.0	<0.2	<0.2	<4.0	<4.0	<4.0	<1.0	<0.4	<0.2
Calcium	mg/l	1	A-T-049w	-	250	87	101	87	874	1350	1250	188	210	172
Copper	µg/l	4	A-T-025w	2000	23.89	<20	<4	<4	<80	144	<80	<20	<8	<4
Chromium (dissolved)	µg/l	1	A-T-025w	50	5	<5	<1	<1	<20	<20	<20	<5	<2	<1
Chromium (hexavalent)	mg/l	0.01	A-T-040w	-	0.0034	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01
Chromium (trivalent)	mg/l	0.01	Calc	-	0.0047	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.01	<0.02	<0.01
Iron	µg/l	10	A-T-025w	200	1000	2450	1040	2480	379	5110	5950	1030	997	745
Lead	µg/l	1	A-T-025w	10	1.2	<5	<1	<1	<20	<20	<20	<5	<2	<1
Manganese	µg/l	1	A-T-025w	50	573.34	1100	718	1890	3000	1320	1030	187	146	60
Magnesium	mg/l	1	A-T-049w	50	-	30	35	33	789	962	886	94	126	82
Magnesium BRE	mg/l	1	A-T-049w	-	-	29.8	35	32.5	789	962	886	93.6	126	81.8
Mercury	µg/l	0.1	A-T-025w	1	0.07	<0.5	<0.1	<0.1	<2.0	<2.0	<2.0	<0.5	<0.2	<0.1
Molybdenum	µg/l	0.5	A-T-025w	-	-	3.4	1.7	2	<10.0	<10.0	<10.0	<2.5	<1.0	0.9
Nickel	µg/l	2	A-T-025w	20	16.37	13	5	3	55	<40	<40	<10	<4	<2
Selenium	µg/l	1	A-T-025w	10	-	<5	<1	<1	<20	<20	<20	<5	<2	<1
Sodium	mg/l	1	A-T-049w	-	-	61	70	56	5150	4460	4140	145	189	107
Sulphur, Total	mg/l	1	A-T-072w	-	-	27	35	24	337	347	331	26	23	22
Vanadium	µg/l	1	A-T-025w	-	20	<5	<1	<1	<20	<20	<20	<5	<2	<1
Zinc	µg/l	2	A-T-025w	5000	28.33	<10	<2	<2	454	229	101	<10	15	9
				-	-									
PAH 16MS (w)				-	-									
Acenaphthene	µg/l	0.01	A-T-019w	-	-	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01
Acenaphthylene	µg/l	0.01	A-T-019w	-	-	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01
Anthracene	µg/l	0.01	A-T-019w	-	0.1	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01
Benzo(a)anthracene	µg/l	0.01	A-T-019w	-	-	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01
Benzo(a)pyrene	µg/l	0.01	A-T-019w	0.01	0.00017	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01
Benzo(b)fluoranthene	µg/l	0.01	A-T-019w	-	-	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01
Benzo(ghi)perylene	µg/l	0.01	A-T-019w	-	-	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01
Benzo(k)fluoranthene	µg/l	0.01	A-T-019w	-	-	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01
Chrysene	µg/l	0.01	A-T-019w	-	-	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01
Dibenzo(ah)anthracene	µg/l	0.01	A-T-019w	-	-	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01
Fluoranthene	µg/l	0.01	A-T-019w	-	0.0063	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01
Fluorene	µg/l	0.01	A-T-019w	-	-	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01
Indeno(123-cd)pyrene	µg/l	0.01	A-T-019w	-	-	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01
Naphthalene	µg/l	0.01	A-T-019w	-	2	0.07	0.06	0.07		0.02	0.02	0.03	<0.01	<0.01
Phenanthrene	µg/l	0.01	A-T-019w	-	-	0.01	0.01	0.01		<0.01	<0.01	<0.01	<0.01	<0.01
Pyrene	µg/l	0.01	A-T-019w	-	-	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01
Total PAH 16MS	µg/l	0.01	A-T-019w	-	-	0.08	0.07	0.08		0.02	0.02	0.03	<0.01	<0.01
				-	-									
Phenols NG (speciated HPLC) (w)				-	-									
Phenol	mg/l	0.01	A-T-050w	0.0005	0.0077	<0.10	<0.10	<0.10	<0.10	<0.01	<0.10	<0.01	<0.01	<0.01
Cresols	mg/l	0.01	A-T-050w	-	0.1	<0.10	<0.10	<0.10	<0.10	<0.01	<0.10	<0.01	<0.01	<0.01
Catechol	mg/l	0.01	A-T-050w	-	-	<0.10	0.84	<0.10	<0.10	<0.01	<0.10	<0.01	<0.01	<0.01
Resorcinol	mg/l	0.01	A-T-050w	-	-	<0.10	<0.10	<0.10	<0.10	<0.01	<0.10	<0.01	<0.01	<0.01
Xylenols & Ethylphenols	mg/l	0.01	A-T-050w	-	-	<0.10	<0.10	<0.10	<0.10	<0.01	<0.10	<0.01	<0.01	<0.01
Naphthols	mg/l	0.01	A-T-050w	-	-	<0.10	<0.10	<0.10	<0.10	<0.01	<0.10	<0.01	<0.01	<0.01
Trimethylphenol	mg/l	0.01	A-T-050w	-	-	<0.10	<0.10	<0.10	<0.10	<0.01	<0.10	<0.01	<0.01	<0.01
Phenols - Total by HPLC	mg/l	0.01	A-T-050w	-	-	<0.10	0.84	<0.10	<0.10	<0.01	<0.10	<0.01	<0.01	<0.01
				-	-									
VOC (w)				-	-									
Dichlorodifluoromethane	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	µg/l	10	A-T-006w	-	-	<10	<10	<10	<10	<10	<10	<10	<10	<10

Sample ID Depth to Top Date Sampled Determinant	Units	Limit of Detection	Method	UK DWS	EQS	R22-BH204 27.30 13-Dec-23	R22-BH204 27.30 03-Jan-24	R22-BH204 27.30 18-Jan-24	R22-BH205 21.00 14-Dec-23	R22-BH205 21.00 03-Jan-24	R22-BH205 21.00 18-Jan-24	R22-BH501 24.50 13-Dec-23	R22-BH501 24.65 04-Jan-24	R22-BH501 24.65 18-Jan-24
Vinyl Chloride	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans 1,2-Dichloroethene	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichloromethane	µg/l	5	A-T-006w	-	-	<5	<5	<5	<5	<5	<5	<5	<5	<5
Carbon Disulphide	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis 1,2-Dichloroethene	µg/l	1	A-T-006w	3	10	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	µg/l	5	A-T-006w	-	-	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloroform	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	µg/l	2	A-T-006w	-	-	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,1,1-Trichloroethane	µg/l	1	A-T-006w	3	100	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloropropene	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1
Benzene	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon Tetrachloride	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	µg/l	10	A-T-006w	-	-	<10	<10	<10	<10	<10	<10	<10	<10	<10
Trichloroethene	µg/l	1	A-T-006w	10	10	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis 1,3-Dichloropropene	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans 1,3-Dichloropropene	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toluene	µg/l	1	A-T-006w	-	-	3	2	2	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromochloromethane	µg/l	3	A-T-006w	-	-	<3	<3	<3	<3	<3	<3	<3	<3	<3
1,2-Dibromoethane	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1,2-Tetrachloroethane	µg/l	1	A-T-006w	-	140	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1
m & p Xylene	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	µg/l	3	A-T-006w	-	-	<3	<3	<3	<3	<3	<3	<3	<3	<3
Styrene	µg/l	1	A-T-006w	-	50	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	µg/l	1	A-T-006w	100	-	<1	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	µg/l	1	A-T-006w	-	0.4	<1	<1	<1	<1	<1	<1	<1	<1	<1
Isopropylbenzene	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromobenzene	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	µg/l	1	A-T-006w	10	10	<1	<1	<1	<1	<1	<1	<1	<1	<1
n-propylbenzene	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1
4-Chlorotoluene	µg/l	1	A-T-006w	-	20	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	µg/l	1	A-T-006w	100	-	<1	<1	<1	<1	<1	<1	<1	<1	<1
4-Isopropyltoluene	µg/l	1	A-T-006w	100	-	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene	µg/l	1	A-T-006w	100	2.5	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	µg/l	1	A-T-006w	3	12	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	µg/l	1	A-T-006w	0.5	-	<1	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	µg/l	2	A-T-006w	-	-	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,3-Dichlorobenzene	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1
n-butylbenzene	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	µg/l	2	A-T-006w	-	-	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,2,4-Trichlorobenzene	µg/l	3	A-T-006w	-	0.4	<3	<3	<3	<3	<3	<3	<3	<3	<3
1,2,3-Trichlorobenzene	µg/l	3	A-T-006w	-	0.4	<3	<3	<3	<3	<3	<3	<3	<3	<3
Hexachlorobutadiene	µg/l	1	A-T-006w	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1
				-	-									
TPH CWG (w) with Clean Up				-	-									
Ali >C5-C6	µg/l	1	A-T-022w	10	-	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ali >C6-C8	µg/l	1	A-T-022w	10	-	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ali >C8-C10	µg/l	5	A-T-055w	10	-	<5	<5	<5		<5	<5	<5	<5	<5
Ali >C10-C12	µg/l	5	A-T-055w	10	-	<5	<5	<5		<5	<5	<5	<5	<5
Ali >C12-C16	µg/l	5	A-T-055w	10	-	<5	<5	<5		<5	<5	<5	<5	<5
Ali >C16-C21	µg/l	5	A-T-055w	10	-	<5	<5	<5		<5	<5	<5	<5	<5
Ali >C21-C35	µg/l	5	A-T-055w	10	-	<5	<5	<5		<5	<5	<5	<5	<5
Total Aliphatics	µg/l	5	Calc-As Rec	-	-	<5	<5	<5		<5	<5	<5	<5	<5
Aro >C5-C7	µg/l	1	A-T-022w	10	-	<1	<1	<1	<1	<1	<1	<1	<1	<1
Aro >C7-C8	µg/l	1	A-T-022w	10	-	3	2	<1	<1	<1	<1	<1	<1	<1
Aro >C8-C10	µg/l	5	A-T-055w	10	-	<5	<5	<5		<5	<5	<5	<5	<5
Aro >C10-C12	µg/l	5	A-T-055w	10	-	<5	7	<5		<5	<5	<5	<5	<5

Determinant	Units	Limit of Detection	Method	UK DWS	EQS	R22-BH204 27.30 13-Dec-23	R22-BH204 27.30 03-Jan-24	R22-BH204 27.30 18-Jan-24	R22-BH205 21.00 14-Dec-23	R22-BH205 21.00 03-Jan-24	R22-BH205 21.00 18-Jan-24	R22-BH501 24.50 13-Dec-23	R22-BH501 24.65 04-Jan-24	R22-BH501 24.65 18-Jan-24
Aro >C12-C16	µg/l	5	A-T-055w	10	-	6	11	<5		<5	<5	<5	<5	<5
Aro >C16-C21	µg/l	5	A-T-055w	10	-	7	12	<5		<5	<5	<5	<5	<5
Aro >C21-C35	µg/l	10	A-T-055w	10	-	<10	<10	<10		<10	<10	<10	<10	<10
Total Aromatics	µg/l	10	Calc-As Rec	-	-	16	32	<10		<10	<10	<10	<10	<10
TPH (Ali & Aro >C5-C35)	µg/l	10	Calc-As Rec	-	-	16	32	<10		<10	<10	<10	<10	<10
BTEX - Benzene	µg/l	1	A-T-022w	1	10	<1	<1	<1	<1	<1	<1	<1	<1	<1
BTEX - Toluene	µg/l	1	A-T-022w	-	74	3	2	<1	<1	<1	<1	<1	<1	<1
BTEX - Ethyl Benzene	µg/l	1	A-T-022w	-	20	<1	<1	<1	<1	<1	<1	<1	<1	<1
BTEX - m & p Xylene	µg/l	1	A-T-022w	-	30	<1	<1	<1	<1	<1	<1	<1	<1	<1
BTEX - o Xylene	µg/l	1	A-T-022w	-	30	<1	<1	<1	<1	<1	<1	<1	<1	<1
MTBE	µg/l	1	A-T-022w			<1	<1	<1	<1	<1	<1	<1	<1	<1

E.4 Ground Gas Monitoring

Summary of Gas Monitoring: Sea Link - Richborough

BH ID	Response Zone	Strata of Response Zone	Date of Monitoring	Flow (l/hr) Peak	Flow (l/hr) Steady State	CH_4 (%vol) Peak	CH_4 (%vol) Steady State	CO_2 (%vol) Peak	CO_2 (%vol) Steady State	Qhg (%vol) Q_{hg} CH_4	Qhg (%vol) Q_{hg} CO_2	*Characteristic Situation based on Q_{hg}*	O_2 (%vol) Minimum	H2S (ppm) peak	CO (ppm) peak	Atmospheric Pressure (mB)	Depth to Base (mbgl)	Water Level (mbgl)	Flooded (Y/N)	Gas and Groundwater Monitoring Remarks
R22-BH102	0.80 - 3.00	Tidal Flat Deposits	29/11/2023	0.9	0.9	0	0	0.4	0.4	0.0000	0.0036		16.3	0.0	2.0		3.01	0.10	Y	Had to stop due to water suction
			13/12/2023	-2.2	2	0	0	0.5	0.1	0.0000	0.0020		19.6	0.0	1.0	1024	3.04	0.10	Y	
			03/01/2024	0.1	0.1	0	0	0.1	0.1	0.0000	0.0001		20.4	1.0	1.0	991	3.03	0.08	Y	
			18/01/2024	0	0.1	0	0	0.2	0.1	0.0000	0.0002		20.7	0.0	1.0	1003	3.03	0.31	Y	
R22-BH103	0.50 - 1.00	Tidal Flat Deposits	29/11/2023	0	0.1	0	0	0.4	0.1	0.0000	0.0004		20.7	0.0	0.0	1006	1.01	0.01	Y	
			13/12/2023	0	0.1	0	0	0.6	0.1	0.0000	0.0006		0.1	0.0	5.0	998	1.02	-0.03	Y	
			03/01/2024	-1.4	-0.4	0	0	0.4	0.1	0.0000	-0.0016		20.6	1.0	2.0	1003		0.02	Y	Water interface
			18/01/2024	0	0.1	0	0	0.2	0.1	0.0000	0.0002		20.8	0.0	0.0	1003	1.02	0.08	Y	
R22-BH103	3.00 - 6.00	Tidal Flat Deposits	29/11/2023	0	0	0	0	0.7	0.3	0.0000	0.0000		20.5	0.0	3.0	1006	5.80	0.54	Y	
			13/12/2023	-2.6	-2.6	0	0	5.6	5.5	0.0000	-0.1456		18.2	0.0	3.0	998	5.97	0.33	Y	
			03/01/2024	0	0.1	0	0	0.5	0.5	0.0000	0.0005		20.1	1.0	5.0	992	5.98	0.33	Y	Water interface befrore final reading
			18/01/2024	0	0.1	0	0	1.9	0.5	0.0000	0.0019		20.5	0.0	1.0	1004	5.99	0.28	Y	
R22-BH104	3.00 - 6.00	Tidal Flat Deposits/ Thanet Formation	29/11/2023	0.2	0.2	0.6	0.5	0	0	0.0012	0.0000		19.8	0.0	3.0	1004	6.08	0.44	Y	Had to stop due to water suction
R22-BH105	0.80 - 3.00	Tidal Flat Deposits	29/11/2023	0.1	0.1	0	0	0.1	0.1	0.0000	0.0001		20.7	0.0	0.0	1005	2.83	-0.02	Y	
			13/12/2023	0.4	0.4	0	0	0.1	0.1	0.0000	0.0004		20.8	0.0	0.0	999	2.61	-0.01	Y	
			03/01/2024	0	0.1	0	0	0.2	0.1	0.0000	0.0002		20.9	0.0	0.0	991	2.58	0.01	Y	Water Interface
			18/01/2024	0	0.1	0.3	0	1.8	0.3	0.0003	0.0018		20.5	0.0	6.0	1006	2.56	0.48	Y	
R22-BH204	27.00 - 29.00	Newhaven Chalk Formation	29/11/2023	0	0.1	0	0	0.5	0.3	0.0000	0.0005		20.3	0.0	4.0		27.58	4.36	Y	
R22-BH205	20.00 - 25.00	Thanet Formation	29/11/2023	0	0.1	0	0	0.2	0.2	0.0000	0.0002		20	0.0	4.0		24.70	0.21	Y	Had to stop due to water suction
R22-BH501	24.50 - 26.50	Thanet Formation	29/11/2023	0.2	0.2	0	0	0.1	0.1	0.0000	0.0002		20.9	0.0	0.0		24.06	-0.10	Y	Had to stop due to water suction
Max (unflooded boreholes)				-	-	-	-	-	-	-	-		-	-	-	-				
Min (unflooded borehole)				-	-	-	-	-	-	-	-		-	-	-	-				

Worst Case Check (All boreholes are flooded, the worst case check is not considered representative of the ground conditons)

			Worst Case	
Max Flow (l/h)	Max CH4 (%vol)	Max CO_2 (%vol)	CH4 Qhg (%vol)	CO2 Qhg (%vol)
-	-	-	-	-
		Charateristic Situation =		

Notes

Worst Case Check calculated by multiplying the maximum recorded flow in any standpipe in that strata with the maximum gas concentration in any other standpipe in that strata, but discounting any peak instantaneous flows and negative flows judged to be unrepresentative of a possible worst case.

Where flow results have been reporteded a zero, these have been updated to 0.1 (flow detection limit)

If CO2 >5% or CH4 >1% concentration consider increase to **CS2**

As all of the monitoring wells were flooded during the monitoring visits, the results of the ground gas monitoring are not considered representative of the ground gas regime across the site.

F. Contaminated Land Risk Assessment Methodology

The following Contaminated Land Risk Assessment methodology is based on CIRIA C552 (2001) Contaminated Land Risk Assessment – A Guide to Good Practice, in order to quantify potential risk via risk estimation and risk evaluation, which can be adopted at the Phase I (Desk Study) stage. This will then determine an overall risk category which can be used to identify potential investigation or remedial actions. This methodology uses qualitative descriptors and therefore is a qualitative approach based on desk information. The risk assessment should be refined following receipt of ground investigation data. The methodology requires the classification of:

- the magnitude of the **consequence** (severity) of a risk occurring, and
- the magnitude of the **probability** (likelihood) of a risk occurring.

The potential consequences of contamination risks occurring at this Site are classified in accordance with Table F.1 below, which is adapted from the CIRIA guidance.

Table F.1: Classification of Consequence

Classification	Definition of Consequence
Severe	Short-term (acute) risks to human health likely to result in "significant harm" as defined by the Environmental Protection Act 1990, part IIA. Short-term risk of pollution of sensitive water resource. Catastrophic damage to buildings/property. A short-term risk to a particular ecosystem, or organism forming part of such an ecosystem.
Medium	Chronic damage to Human Health (significant harm as defined in DEFRA, 2012). Pollution of sensitive water resources. A significant change in a particular ecosystem, or organism forming part of such an ecosystem.
Mild	Pollution of non-sensitive water resources. Significant damage to crops, buildings, structures, and services ("significant harm" as defined in the DEFRA, 2012). Damage to sensitive buildings/structures/services or the environment.
Minor	Harm, though not necessarily significant harm, which may result in a financial loss, or expenditure to resolve. Non-permanent health effects to human health (easily prevented by means such as personal protective clothing etc.). Easily repairable effects of damage to buildings, structures, and services.

Source: CIRIA C552

The probability of contamination risks occurring at this site will be classified in accordance with Table F.2 below from the CIRIA guidance. Note: A pollution linkage must first be established before probability is classified. If there is no pollution linkage, then there is no potential risk. If there is no pollution linkage, then there is no need to apply tests for probability and consequence.

Table F.2: Classification of Probability

Classification	Definition of Probability
High Likelihood	There is pollutant linkage, and an event would appear very likely in the short-term and almost inevitable over the long-term, or there is evidence at the receptor of harm or pollution.
Likely	There is pollutant linkage, and all the elements are present and in the right place which means that it is probable that an event will occur. Circumstances are such that an event is not inevitable, but possible in the short-term and likely over the long-term.
Low Likelihood	There is pollutant linkage and circumstances are possible under which an event could occur. However, it is by no means certain that even over a long period such an event would take place and is less likely in the shorter term.
Unlikely	There is pollutant linkage, but circumstances are such that it is improbable that an event would occur even in the very long-term.

R&D 66:2008 presents definitions of the risk categories, together with the investigatory and remedial actions that are likely to be necessary in each case. These definitions are reproduced in Table F.4, with the probability/consequence matrix presented in Table F.3. These risk categories apply to each pollutant linkage, not simply to each hazard or receptor.

Table F.3: Overall Contamination Risk Matrix

		Consequence			
		Severe	**Medium**	**Mild**	**Minor**
Probability	**High likelihood**	Very high risk	High risk	Moderate risk	Low risk
	Likely	High risk	Moderate risk	Moderate / Low risk	Low risk
	Low likelihood	Moderate risk	Moderate / Low risk	Low risk	Very low risk
	Unlikely	Moderate / Low risk	Low risk	Very low risk	Very low risk

Based upon this, CIRIA C552 presents definitions of the risk categories, together with the investigatory and remedial actions that are likely to be necessary in each case, as in Table F.4. These risk categories apply to each pollutant linkage, not simply to each hazard or receptor.

Table F.4: Definitions of Risk Categories and Likely Actions Required

Risk Category	Definition and Likely Actions Required
Very High	There is a high probability that severe harm could arise to a designated receptor from an identified hazard, OR, there is evidence that severe harm to a designated receptor is currently happening. This risk, if realised, is likely to result in a substantial liability. Urgent investigation (if not already undertaken) and remediation are likely to be required.
High	Harm is likely to arise to a designated receptor from an identified hazard. Realisation of the risk is likely to present a substantial liability. Urgent investigation (if not undertaken already) is required and remedial works may be necessary in the short term and are likely over the longer term.
Moderate	It is possible that harm could arise to a designated receptor from an identified hazard. However, it is relatively unlikely that any such harm would be severe, or if any harm were to occur it is more likely that the harm would be relatively mild. Investigation (if not already undertaken is normally required to clarify the risk and to determine the potential liability. Some remedial works may be required in the long term.
Low	It is possible that harm could arise to a designated receptor from an identified hazard, but it is likely that this harm, if realised would at worst be relatively mild.
Very Low	There is a low possibility that harm could arise to a receptor. In the event of such harm being realised it is not likely to be severe.

G. M-BAT Calculation

Bioavailability Assessment Tool

INPUT DATA											RESULTS (Copper)				RESULTS (Zinc)				RESULTS (Mn)				RESULTS (Ni)			
ID	Location	Waterbody	Date	Measured Cu Concentration (dissolved) (µg l^{-1})	Measured Zn Concentration (dissolved) (µg l^{-1})	Measured Mn Concentration (dissolved) (µg l^{-1})	Measured Ni Concentration (dissolved) (µg l^{-1})	pH	DOC	Ca	Site-specific PNEC Dissolved Copper (µg l^{-1})	BioF	Bioavailable Copper Concentration (µg l^{-1})	Risk Characterisation Ratio	Site-specific PNEC Dissolved Zinc (µg l^{-1})	BioF	Bioavailable Zinc Concentration (µg l^{-1})	Risk Characterisation Ratio	Site-specific PNEC Dissolved Manganese (µg l^{-1})	BioF	Bioavailable Manganese Concentration (µg l^{-1})	Risk Characterisation Ratio	Site-specific PNEC Dissolved Nickel (µg l^{-1})	BioF	Bioavailable Nickel Concentration (µg l^{-1})	Risk Characterisation Ratio
1	Average for Sea Link - Richborough							7.504167	5.35	381.125	23.89	0.04			28.33	0.38			573.34	0.21			16.37	0.24		

H. HazWasteOnline™ Assessment

MOTT MACDONALD

HazWasteOnline™

Waste Classification Report

HazWasteOnline™ classifies waste as either **hazardous** or **non-hazardous** based on its chemical composition, related legislation and the rules and data defined in the current UK or EU technical guidance (Appendix C) (note that HP 9 Infectious is not assessed). It is the responsibility of the classifier named below to:

a) understand the origin of the waste
b) select the correct List of Waste code(s)
c) confirm that the list of determinands, results and sampling plan are fit for purpose
d) select and justify the chosen metal species (Appendix B)
e) correctly apply moisture correction and other available corrections
f) add the meta data for their user-defined substances (Appendix A)
g) check that the classification engine is suitable with respect to the national destination of the waste (Appendix C)

To aid the reviewer, the laboratory results, assumptions and justifications managed by the classifier are highlighted in pale yellow.

[redacted]

Job name

Sea Link, Richborough

Description/Comments

Project

Sea Link, Richborough

Site

Sea Link, Richborough

Classified by

Name:
Adam Packman
Date:
22 Mar 2024 11:36 GMT
Telephone:
07595514129

Company:
Mott MacDonald Limited
2 Callaghan Square, Cardiff
Cardiff
CF10 5AZ

HazWasteOnline™ provides a two day, hazardous waste classification course that covers the use of the software and both basic and advanced waste classification techniques. Certification has to be renewed every 3 years.

HazWasteOnline™ Certification: **CERTIFIED**

Course	Date
Hazardous Waste Classification	08 Jun 2023

Next 3 year Refresher due by Jun 2026

Purpose of classification

2 - Material Characterisation

Address of the waste

Land off A256 Richborough Way **Post Code** CT12 5FH

SIC for the process giving rise to the waste

42220 Construction of utility projects for electricity and telecommunications

Description of industry/producer giving rise to the waste

Construction of an electrical infrastructure project

Description of the specific process, sub-process and/or activity that created the waste

Waste created during the excavation of soils for the proposed developments foundations and basement structures

Description of the waste

Made Ground comprising slightly gravelly slightly sandy organic clayey silt. Gravels and fine to coarse chalk, clinker and ceramic. Natural soils comprise silty sandy clays.

Job summary

#	Sample name	Depth [m]	Classification Result	Hazard properties	Page
1	R22-BH101	0.20	Non Hazardous		3
2	R22-BH101[2]	1.00	Non Hazardous		6
3	R22-BH102	0.50	Non Hazardous		8
4	R22-BH103	0.20	Non Hazardous		10
5	R22-BH104	0.30	Non Hazardous		13
6	R22-BH105	0.50	Non Hazardous		15
7	R22-BH106	0.50	Non Hazardous		17
8	R22-BH203	0.20	Non Hazardous		19
9	R22-BH204	0.50	Non Hazardous		22
10	R22-BH205	1.00	Non Hazardous		24
11	R22-BH501	0.2	Non Hazardous		26
12	R22-BH502 MG	0.20	Non Hazardous		28
13	R22-TP101	0.20	Non Hazardous		31
14	R22-TP102	0.20	Non Hazardous		33
15	R22-TP103	0.5	Non Hazardous		35
16	R22-TP104	1.00	Non Hazardous		37
17	R22-TP105	0.20	Non Hazardous		39
18	R22-TP106	1.00	Non Hazardous		41
19	R22-TP201	0.20	Non Hazardous		43
20	R22-TP201[2]	1.00	Non Hazardous		45
21	R22-TP202	0.20	Non Hazardous		46
22	R22-TP202[2]	0.50	Non Hazardous		47
23	R22-TP202[3]	1.00	Non Hazardous		49
24	R22-TP203	0.20	Non Hazardous		50
25	R22-TP203[2]	0.50	Non Hazardous		52
26	R22-TP204	1	Non Hazardous		53
27	R22-TP205	1.00	Non Hazardous		55
28	R22-TP405	1.00	Non Hazardous		57
29	R22-TP502	1.00	Non Hazardous		59
30	R22-TP503a	0.20	Non Hazardous		61
31	R22-TP504	1.00	Non Hazardous		63
32	R22-TP505	1.00	Non Hazardous		65
33	R22-TP508	0.50	Non Hazardous		68
34	R22-TP510	0.20	Non Hazardous		70

Related documents

#	Name	Description
1	MM standard waste stream for soils	waste stream template used to create this Job

Report

Created by: Adam Packman

Created date: 22 Mar 2024 11:36 GMT

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Classification of sample: R22-BH101

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
R22-BH101
Sample Depth:
0.20 m
Moisture content:
29.6%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 29.6% No Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		9 mg/kg	1.32	11.883 mg/kg	0.00119 %		
2	barium { barium sulphide }	016-002-00-X	244-214-4	21109-95-5		40 mg/kg	1.233	49.34 mg/kg	0.00493 %		
3	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		1 mg/kg	2.775	2.775 mg/kg	0.000278 %		
4	boron { diboron trioxide }	005-008-00-8	215-125-8	1303-86-2		2.4 mg/kg	3.22	7.728 mg/kg	0.000773 %		
5	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.7 mg/kg	1.142	0.8 mg/kg	0.00008 %		
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		30 mg/kg	1.462	43.847 mg/kg	0.00438 %		
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		**<LOD**
8	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		14 mg/kg	1.126	15.762 mg/kg	0.00158 %		
9	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	21 mg/kg		21 mg/kg	0.0021 %		
10	manganese { manganese sulphate }	025-003-00-4	232-089-9	7785-87-7		296 mg/kg	2.749	813.575 mg/kg	0.0814 %		
11	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.43 mg/kg	1.353	0.582 mg/kg	0.0000582 %		
12	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		<1 mg/kg	1.5	<1.5 mg/kg	<0.00015 %		**<LOD**
13	nickel { nickel sulfate }	028-009-00-5	232-104-9	7786-81-4		18 mg/kg	2.637	47.46 mg/kg	0.00475 %		
14	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		**<LOD**

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
15	vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		52 mg/kg	1.785	92.83 mg/kg	0.00928 %		
16	zinc { zinc sulphate }	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]		63 mg/kg	2.469	155.566 mg/kg	0.0156 %		
17	pH			PH		8.07 pH		8.07 pH	8.07 pH		
18	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<**LOD**
19	TPH (C6 to C40) petroleum group			TPH		8 mg/kg		8 mg/kg	0.0008 %		
20	benzene	601-020-00-8	200-753-7	71-43-2		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
21	toluene	601-021-00-3	203-625-9	108-88-3		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
22	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
23	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
24	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
25	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<**LOD**
26	acenaphthylene		205-917-1	208-96-8		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
27	acenaphthene		201-469-6	83-32-9		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
28	fluorene		201-695-5	86-73-7		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
29	phenanthrene		201-581-5	85-01-8		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<**LOD**
30	anthracene		204-371-1	120-12-7		<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<**LOD**
31	fluoranthene		205-912-4	206-44-0		<0.08 mg/kg		<0.08 mg/kg	<0.000008 %		<**LOD**
32	pyrene		204-927-3	129-00-0		<0.07 mg/kg		<0.07 mg/kg	<0.000007 %		<**LOD**
33	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<**LOD**
34	chrysene	601-048-00-0	205-923-4	218-01-9		<0.06 mg/kg		<0.06 mg/kg	<0.000006 %		<**LOD**
35	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<**LOD**
36	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.07 mg/kg		<0.07 mg/kg	<0.000007 %		<**LOD**
37	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<**LOD**
38	indeno[123-cd]pyrene		205-893-2	193-39-5		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<**LOD**
39	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<**LOD**
40	benzo[ghi]perylene		205-883-8	191-24-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
41		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
42		polychlorobiphenyls; PCB				<0.007	mg/kg		<0.007	mg/kg	<0.0000007 %		<**LOD**
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.128 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because HP 3 Flammable (first indent) can be discounted as this is a solid waste without a free draining liquid phase. The waste does not display these hazardous properties.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0008%)

Classification of sample: R22-BH101[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
R22-BH101[2]
Sample Depth:
1.00 m
Moisture content:
35.4%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 35.4% No Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		7 mg/kg	1.32	9.242 mg/kg	0.000924 %		
2	barium { barium sulphide }	016-002-00-X	244-214-4	21109-95-5		29 mg/kg	1.233	35.771 mg/kg	0.00358 %		
3	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		1.1 mg/kg	2.775	3.053 mg/kg	0.000305 %		
4	boron { diboron trioxide }	005-008-00-8	215-125-8	1303-86-2		5.7 mg/kg	3.22	18.353 mg/kg	0.00184 %		
5	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.6 mg/kg	1.142	0.685 mg/kg	0.0000685 %		
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		32 mg/kg	1.462	46.77 mg/kg	0.00468 %		
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
8	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		9 mg/kg	1.126	10.133 mg/kg	0.00101 %		
9	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	15 mg/kg		15 mg/kg	0.0015 %		
10	manganese { manganese sulphate }	025-003-00-4	232-089-9	7785-87-7		143 mg/kg	2.749	393.045 mg/kg	0.0393 %		
11	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.17 mg/kg	1.353	<0.23 mg/kg	<0.000023 %		<LOD
12	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		<1 mg/kg	1.5	<1.5 mg/kg	<0.00015 %		<LOD
13	nickel { nickel sulfate }	028-009-00-5	232-104-9	7786-81-4		19 mg/kg	2.637	50.097 mg/kg	0.00501 %		
14	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
15		vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		59	mg/kg	1.785	105.326	mg/kg	0.0105 %		
16		zinc { zinc sulphate }	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]		58	mg/kg	2.469	143.219	mg/kg	0.0143 %		
17		pH			PH		8.63	pH		8.63	pH	8.63 pH		
18		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<**LOD**
19		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
20		acenaphthylene		205-917-1	208-96-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
21		acenaphthene		201-469-6	83-32-9		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
22		fluorene		201-695-5	86-73-7		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
23		phenanthrene		201-581-5	85-01-8		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
24		anthracene		204-371-1	120-12-7		<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<**LOD**
25		fluoranthene		205-912-4	206-44-0		<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
26		pyrene		204-927-3	129-00-0		<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<**LOD**
27		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
28		chrysene	601-048-00-0	205-923-4	218-01-9		<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<**LOD**
29		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
30		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<**LOD**
31		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
32		indeno[123-cd]pyrene		205-893-2	193-39-5		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
33		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
34		benzo[ghi]perylene		205-883-8	191-24-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
35		phenol	604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<**LOD**
											Total:	0.0838 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: R22-BH102

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
R22-BH102
Sample Depth:
0.50 m
Moisture content:
32.9%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 32.9% No Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		13 mg/kg	1.32	17.164 mg/kg	0.00172 %		
2	barium { barium sulphide }	016-002-00-X	244-214-4	21109-95-5		36 mg/kg	1.233	44.406 mg/kg	0.00444 %		
3	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		1.2 mg/kg	2.775	3.33 mg/kg	0.000333 %		
4	boron { diboron trioxide }	005-008-00-8	215-125-8	1303-86-2		3.2 mg/kg	3.22	10.304 mg/kg	0.00103 %		
5	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.8 mg/kg	1.142	0.914 mg/kg	0.0000914 %		
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		38 mg/kg	1.462	55.539 mg/kg	0.00555 %		
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
8	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		9 mg/kg	1.126	10.133 mg/kg	0.00101 %		
9	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	16 mg/kg		16 mg/kg	0.0016 %		
10	manganese { manganese sulphate }	025-003-00-4	232-089-9	7785-87-7		324 mg/kg	2.749	890.535 mg/kg	0.0891 %		
11	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.17 mg/kg	1.353	<0.23 mg/kg	<0.000023 %		<LOD
12	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		<1 mg/kg	1.5	<1.5 mg/kg	<0.00015 %		<LOD
13	nickel { nickel sulfate }	028-009-00-5	232-104-9	7786-81-4		24 mg/kg	2.637	63.28 mg/kg	0.00633 %		
14	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
15		vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		69	mg/kg	1.785	123.178	mg/kg	0.0123 %		
16		zinc { zinc sulphate }	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]		60	mg/kg	2.469	148.158	mg/kg	0.0148 %		
17		pH			PH		8.23	pH		8.23	pH	8.23 pH		
18		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<**LOD**
19		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
20		acenaphthylene		205-917-1	208-96-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
21		acenaphthene		201-469-6	83-32-9		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
22		fluorene		201-695-5	86-73-7		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
23		phenanthrene		201-581-5	85-01-8		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
24		anthracene		204-371-1	120-12-7		<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<**LOD**
25		fluoranthene		205-912-4	206-44-0		<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
26		pyrene		204-927-3	129-00-0		<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<**LOD**
27		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
28		chrysene	601-048-00-0	205-923-4	218-01-9		<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<**LOD**
29		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
30		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<**LOD**
31		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
32		indeno[123-cd]pyrene		205-893-2	193-39-5		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
33		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
34		benzo[ghi]perylene		205-883-8	191-24-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
35		phenol	604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<**LOD**
											Total:	0.139 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: R22-BH103

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
R22-BH103
Sample Depth:
0.20 m
Moisture content:
32.3%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 32.3% No Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		10 mg/kg	1.32	13.203 mg/kg	0.00132 %		
2	barium { barium sulphide }	016-002-00-X	244-214-4	21109-95-5		41 mg/kg	1.233	50.573 mg/kg	0.00506 %		
3	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		1.2 mg/kg	2.775	3.33 mg/kg	0.000333 %		
4	boron { diboron trioxide }	005-008-00-8	215-125-8	1303-86-2		4.6 mg/kg	3.22	14.811 mg/kg	0.00148 %		
5	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		<0.5 mg/kg	1.142	<0.571 mg/kg	<0.0000571 %		<**LOD**
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		45 mg/kg	1.462	65.77 mg/kg	0.00658 %		
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<**LOD**
8	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		12 mg/kg	1.126	13.511 mg/kg	0.00135 %		
9	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	18 mg/kg		18 mg/kg	0.0018 %		
10	manganese { manganese sulphate }	025-003-00-4	232-089-9	7785-87-7		253 mg/kg	2.749	695.387 mg/kg	0.0695 %		
11	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.17 mg/kg	1.353	<0.23 mg/kg	<0.000023 %		<**LOD**
12	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		<1 mg/kg	1.5	<1.5 mg/kg	<0.00015 %		<**LOD**
13	nickel { nickel sulfate }	028-009-00-5	232-104-9	7786-81-4		22 mg/kg	2.637	58.007 mg/kg	0.0058 %		
14	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
15		vanadium { divanadium pentaoxide; vanadium pentoxide }				77	mg/kg	1.785	137.459	mg/kg	0.0137 %		
		023-001-00-8	215-239-8	1314-62-1									
16		zinc { zinc sulphate }				68	mg/kg	2.469	167.912	mg/kg	0.0168 %		
		030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
17		pH				7.87	pH		7.87	pH	7.87 pH		
				PH									
18		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<**LOD**
		006-007-00-5											
19		benzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		601-020-00-8	200-753-7	71-43-2									
20		toluene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		601-021-00-3	203-625-9	108-88-3									
21		ethylbenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		601-023-00-4	202-849-4	100-41-4									
22		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
23		naphthalene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
24		acenaphthylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
			205-917-1	208-96-8									
25		acenaphthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
			201-469-6	83-32-9									
26		fluorene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
			201-695-5	86-73-7									
27		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
			201-581-5	85-01-8									
28		anthracene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<**LOD**
			204-371-1	120-12-7									
29		fluoranthene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
			205-912-4	206-44-0									
30		pyrene				<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<**LOD**
			204-927-3	129-00-0									
31		benzo[a]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
32		chrysene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
33		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
34		benzo[k]fluoranthene				<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
35		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
36		indeno[123-cd]pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
			205-893-2	193-39-5									
37		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
38		benzo[ghi]perylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-883-8	191-24-2									
39		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
40		polychlorobiphenyls; PCB				<0.007	mg/kg		<0.007	mg/kg	<0.0000007 %		<**LOD**
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.125 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: R22-BH104

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
R22-BH104
Sample Depth:
0.30 m
Moisture content:
35%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 35% No Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		9 mg/kg	1.32	11.883 mg/kg	0.00119 %		
2	barium { barium sulphide }	016-002-00-X	244-214-4	21109-95-5		57 mg/kg	1.233	70.309 mg/kg	0.00703 %		
3	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		1.2 mg/kg	2.775	3.33 mg/kg	0.000333 %		
4	boron { diboron trioxide }	005-008-00-8	215-125-8	1303-86-2		4.9 mg/kg	3.22	15.777 mg/kg	0.00158 %		
5	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		<0.5 mg/kg	1.142	<0.571 mg/kg	<0.0000571 %		<LOD
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		43 mg/kg	1.462	62.847 mg/kg	0.00628 %		
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
8	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		11 mg/kg	1.126	12.385 mg/kg	0.00124 %		
9	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	17 mg/kg		17 mg/kg	0.0017 %		
10	manganese { manganese sulphate }	025-003-00-4	232-089-9	7785-87-7		296 mg/kg	2.749	813.575 mg/kg	0.0814 %		
11	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.17 mg/kg	1.353	<0.23 mg/kg	<0.000023 %		<LOD
12	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		<1 mg/kg	1.5	<1.5 mg/kg	<0.00015 %		<LOD
13	nickel { nickel sulfate }	028-009-00-5	232-104-9	7786-81-4		23 mg/kg	2.637	60.644 mg/kg	0.00606 %		
14	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
15		vanadium { divanadium pentaoxide; vanadium pentoxide }				70	mg/kg	1.785	124.963	mg/kg	0.0125 %		
		023-001-00-8	215-239-8	1314-62-1									
16		zinc { zinc sulphate }				63	mg/kg	2.469	155.566	mg/kg	0.0156 %		
		030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
17		pH				8.36	pH		8.36	pH	8.36 pH		
				PH									
18		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.135 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: R22-BH105

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
R22-BH105
Sample Depth:
0.50 m
Moisture content:
38.2%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 38.2% No Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		15 mg/kg	1.32	19.805 mg/kg	0.00198 %		
2	barium { barium sulphide }	016-002-00-X	244-214-4	21109-95-5		33 mg/kg	1.233	40.705 mg/kg	0.00407 %		
3	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		0.9 mg/kg	2.775	2.498 mg/kg	0.00025 %		
4	boron { diboron trioxide }	005-008-00-8	215-125-8	1303-86-2		2.8 mg/kg	3.22	9.016 mg/kg	0.000902 %		
5	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.9 mg/kg	1.142	1.028 mg/kg	0.000103 %		
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		29 mg/kg	1.462	42.385 mg/kg	0.00424 %		
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		**<LOD**
8	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		8 mg/kg	1.126	9.007 mg/kg	0.000901 %		
9	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	12 mg/kg		12 mg/kg	0.0012 %		
10	manganese { manganese sulphate }	025-003-00-4	232-089-9	7785-87-7		472 mg/kg	2.749	1297.322 mg/kg	0.13 %		
11	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.65 mg/kg	1.353	0.88 mg/kg	0.000088 %		
12	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		<1 mg/kg	1.5	<1.5 mg/kg	<0.00015 %		**<LOD**
13	nickel { nickel sulfate }	028-009-00-5	232-104-9	7786-81-4		20 mg/kg	2.637	52.734 mg/kg	0.00527 %		
14	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		**<LOD**

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
15		vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		55	mg/kg	1.785	98.185	mg/kg	0.00982 %		
16		zinc { zinc sulphate }	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]		48	mg/kg	2.469	118.526	mg/kg	0.0119 %		
17		pH			PH		8.6	pH		8.6	pH	8.6 pH		
18		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<**LOD**
19		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
20		acenaphthylene		205-917-1	208-96-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
21		acenaphthene		201-469-6	83-32-9		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
22		fluorene		201-695-5	86-73-7		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
23		phenanthrene		201-581-5	85-01-8		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
24		anthracene		204-371-1	120-12-7		<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<**LOD**
25		fluoranthene		205-912-4	206-44-0		<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
26		pyrene		204-927-3	129-00-0		<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<**LOD**
27		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
28		chrysene	601-048-00-0	205-923-4	218-01-9		<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<**LOD**
29		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
30		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<**LOD**
31		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
32		indeno[123-cd]pyrene		205-893-2	193-39-5		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
33		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
34		benzo[ghi]perylene		205-883-8	191-24-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
35		phenol	604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<**LOD**
											Total:	0.171 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: R22-BH106

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
R22-BH106
Sample Depth:
0.50 m
Moisture content:
33.1%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 33.1% No Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		15	mg/kg	1.32	19.805	mg/kg	0.00198 %		
2	barium { barium sulphide }	016-002-00-X	244-214-4	21109-95-5		52	mg/kg	1.233	64.142	mg/kg	0.00641 %		
3	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		1.6	mg/kg	2.775	4.441	mg/kg	0.000444 %		
4	boron { diboron trioxide }	005-008-00-8	215-125-8	1303-86-2		3.2	mg/kg	3.22	10.304	mg/kg	0.00103 %		
5	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		<0.5	mg/kg	1.142	<0.571	mg/kg	<0.0000571 %		**<LOD**
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		52	mg/kg	1.462	76.001	mg/kg	0.0076 %		
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1	mg/kg	1.923	<1.923	mg/kg	<0.000192 %		**<LOD**
8	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		11	mg/kg	1.126	12.385	mg/kg	0.00124 %		
9	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	15	mg/kg		15	mg/kg	0.0015 %		
10	manganese { manganese sulphate }	025-003-00-4	232-089-9	7785-87-7		374	mg/kg	2.749	1027.963	mg/kg	0.103 %		
11	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.17	mg/kg	1.353	<0.23	mg/kg	<0.000023 %		**<LOD**
12	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		1	mg/kg	1.5	1.5	mg/kg	0.00015 %		
13	nickel { nickel sulfate }	028-009-00-5	232-104-9	7786-81-4		25	mg/kg	2.637	65.917	mg/kg	0.00659 %		
14	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1	mg/kg	1.405	<1.405	mg/kg	<0.000141 %		**<LOD**

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
15		vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		92	mg/kg	1.785	164.237	mg/kg	0.0164 %		
16		zinc { zinc sulphate }	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]		68	mg/kg	2.469	167.912	mg/kg	0.0168 %		
17		pH			PH		8.47	pH		8.47	pH	8.47 pH		
18		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<**LOD**
19		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
20		acenaphthylene		205-917-1	208-96-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
21		acenaphthene		201-469-6	83-32-9		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
22		fluorene		201-695-5	86-73-7		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
23		phenanthrene		201-581-5	85-01-8		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
24		anthracene		204-371-1	120-12-7		<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<**LOD**
25		fluoranthene		205-912-4	206-44-0		<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
26		pyrene		204-927-3	129-00-0		<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<**LOD**
27		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
28		chrysene	601-048-00-0	205-923-4	218-01-9		<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<**LOD**
29		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
30		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<**LOD**
31		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
32		indeno[123-cd]pyrene		205-893-2	193-39-5		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
33		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
34		benzo[ghi]perylene		205-883-8	191-24-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
35		phenol	604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<**LOD**
											Total:	0.164 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: R22-BH203

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
R22-BH203
Sample Depth:
0.20 m
Moisture content:
66.3%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 66.3% No Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		3 mg/kg	1.32	3.961 mg/kg	0.000396 %		
2	barium { barium sulphide }	016-002-00-X	244-214-4	21109-95-5		32 mg/kg	1.233	39.472 mg/kg	0.00395 %		
3	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		<0.5 mg/kg	2.775	<1.388 mg/kg	<0.000139 %		<LOD
4	boron { diboron trioxide }	005-008-00-8	215-125-8	1303-86-2		<1 mg/kg	3.22	<3.22 mg/kg	<0.000322 %		<LOD
5	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		<0.5 mg/kg	1.142	<0.571 mg/kg	<0.0000571 %		<LOD
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		16 mg/kg	1.462	23.385 mg/kg	0.00234 %		
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
8	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		8 mg/kg	1.126	9.007 mg/kg	0.000901 %		
9	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	13 mg/kg		13 mg/kg	0.0013 %		
10	manganese { manganese sulphate }	025-003-00-4	232-089-9	7785-87-7		282 mg/kg	2.749	775.095 mg/kg	0.0775 %		
11	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.17 mg/kg	1.353	<0.23 mg/kg	<0.000023 %		<LOD
12	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		<1 mg/kg	1.5	<1.5 mg/kg	<0.00015 %		<LOD
13	nickel { nickel sulfate }	028-009-00-5	232-104-9	7786-81-4		8 mg/kg	2.637	21.093 mg/kg	0.00211 %		
14	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
15		vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		20	mg/kg	1.785	35.704	mg/kg	0.00357 %		
16		zinc { zinc sulphate }	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]		38	mg/kg	2.469	93.833	mg/kg	0.00938 %		
17		pH			PH		8.06	pH		8.06	pH	8.06 pH		
18		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<**LOD**
19		TPH (C6 to C40) petroleum group			TPH		33	mg/kg		33	mg/kg	0.0033 %		
20		benzene	601-020-00-8	200-753-7	71-43-2		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
21		toluene	601-021-00-3	203-625-9	108-88-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
22		ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
23		xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
24		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
25		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
26		acenaphthylene		205-917-1	208-96-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
27		acenaphthene		201-469-6	83-32-9		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
28		fluorene		201-695-5	86-73-7		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
29		phenanthrene		201-581-5	85-01-8		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
30		anthracene		204-371-1	120-12-7		<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<**LOD**
31		fluoranthene		205-912-4	206-44-0		<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
32		pyrene		204-927-3	129-00-0		<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<**LOD**
33		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
34		chrysene	601-048-00-0	205-923-4	218-01-9		<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<**LOD**
35		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
36		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<**LOD**
37		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
38		indeno[123-cd]pyrene		205-893-2	193-39-5		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
39		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
40		benzo[ghi]perylene		205-883-8	191-24-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
41		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
42		polychlorobiphenyls; PCB				<0.007	mg/kg		<0.007	mg/kg	<0.0000007 %		<**LOD**
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.106 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because HP 3 Flammable (first indent) can be discounted as this is a solid waste without a free draining liquid phase. The waste does not display these hazardous properties.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0033%)

Classification of sample: R22-BH204

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
R22-BH204
Sample Depth:
0.50 m
Moisture content:
32.7%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 32.7% No Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		2 mg/kg	1.32	2.641 mg/kg	0.000264 %		
2	barium { barium sulphide }	016-002-00-X	244-214-4	21109-95-5		40 mg/kg	1.233	49.34 mg/kg	0.00493 %		
3	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		<0.5 mg/kg	2.775	<1.388 mg/kg	<0.000139 %		<LOD
4	boron { diboron trioxide }	005-008-00-8	215-125-8	1303-86-2		<1 mg/kg	3.22	<3.22 mg/kg	<0.000322 %		<LOD
5	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		<0.5 mg/kg	1.142	<0.571 mg/kg	<0.0000571 %		<LOD
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		22 mg/kg	1.462	32.154 mg/kg	0.00322 %		
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
8	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		10 mg/kg	1.126	11.259 mg/kg	0.00113 %		
9	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	9 mg/kg		9 mg/kg	0.0009 %		
10	manganese { manganese sulphate }	025-003-00-4	232-089-9	7785-87-7		295 mg/kg	2.749	810.826 mg/kg	0.0811 %		
11	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.17 mg/kg	1.353	<0.23 mg/kg	<0.000023 %		<LOD
12	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		<1 mg/kg	1.5	<1.5 mg/kg	<0.00015 %		<LOD
13	nickel { nickel sulfate }	028-009-00-5	232-104-9	7786-81-4		10 mg/kg	2.637	26.367 mg/kg	0.00264 %		
14	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
15		vanadium { divanadium pentaoxide; vanadium pentoxide }				23	mg/kg	1.785	41.059	mg/kg	0.00411 %		
		023-001-00-8	215-239-8	1314-62-1									
16		zinc { zinc sulphate }				36	mg/kg	2.469	88.895	mg/kg	0.00889 %		
		030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
17		pH				7.83	pH		7.83	pH	7.83 pH		
				PH									
18		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<**LOD**
		006-007-00-5											
19		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.108 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: R22-BH205

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
R22-BH205
Sample Depth:
1.00 m
Moisture content:
34.6%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 34.6% No Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		13 mg/kg	1.32	17.164 mg/kg	0.00172 %		
2	barium { barium sulphide }	016-002-00-X	244-214-4	21109-95-5		33 mg/kg	1.233	40.705 mg/kg	0.00407 %		
3	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		1.2 mg/kg	2.775	3.33 mg/kg	0.000333 %		
4	boron { diboron trioxide }	005-008-00-8	215-125-8	1303-86-2		6.1 mg/kg	3.22	19.641 mg/kg	0.00196 %		
5	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		<0.5 mg/kg	1.142	<0.571 mg/kg	<0.0000571 %		**<LOD**
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		37 mg/kg	1.462	54.078 mg/kg	0.00541 %		
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		**<LOD**
8	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		10 mg/kg	1.126	11.259 mg/kg	0.00113 %		
9	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	15 mg/kg		15 mg/kg	0.0015 %		
10	manganese { manganese sulphate }	025-003-00-4	232-089-9	7785-87-7		119 mg/kg	2.749	327.079 mg/kg	0.0327 %		
11	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.17 mg/kg	1.353	<0.23 mg/kg	<0.000023 %		**<LOD**
12	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		<1 mg/kg	1.5	<1.5 mg/kg	<0.00015 %		**<LOD**
13	nickel { nickel sulfate }	028-009-00-5	232-104-9	7786-81-4		22 mg/kg	2.637	58.007 mg/kg	0.0058 %		
14	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		**<LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
15		vanadium { divanadium pentaoxide; vanadium pentoxide }				68	mg/kg	1.785	121.393	mg/kg	0.0121 %		
		023-001-00-8	215-239-8	1314-62-1									
16		zinc { zinc sulphate }				57	mg/kg	2.469	140.75	mg/kg	0.0141 %		
		030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
17		pH				9.26	pH		9.26	pH	9.26 pH		
				PH									
18		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<**LOD**
		006-007-00-5											
19		naphthalene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
20		acenaphthylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
			205-917-1	208-96-8									
21		acenaphthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
			201-469-6	83-32-9									
22		fluorene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
			201-695-5	86-73-7									
23		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
			201-581-5	85-01-8									
24		anthracene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<**LOD**
			204-371-1	120-12-7									
25		fluoranthene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
			205-912-4	206-44-0									
26		pyrene				<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<**LOD**
			204-927-3	129-00-0									
27		benzo[a]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
28		chrysene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
29		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
30		benzo[k]fluoranthene				<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
31		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
32		indeno[123-cd]pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
			205-893-2	193-39-5									
33		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
34		benzo[ghi]perylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-883-8	191-24-2									
35		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0817 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: R22-BH501

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
R22-BH501
Sample Depth:
0.2 m
Moisture content:
28.9%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 28.9% No Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		14 mg/kg	1.32	18.485 mg/kg	0.00185 %		
2	barium { barium sulphide }	016-002-00-X	244-214-4	21109-95-5		41 mg/kg	1.233	50.573 mg/kg	0.00506 %		
3	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		1.1 mg/kg	2.775	3.053 mg/kg	0.000305 %		
4	boron { diboron trioxide }	005-008-00-8	215-125-8	1303-86-2		2.3 mg/kg	3.22	7.406 mg/kg	0.000741 %		
5	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.9 mg/kg	1.142	1.028 mg/kg	0.000103 %		
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		37 mg/kg	1.462	54.078 mg/kg	0.00541 %		
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
8	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		11 mg/kg	1.126	12.385 mg/kg	0.00124 %		
9	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	20 mg/kg		20 mg/kg	0.002 %		
10	manganese { manganese sulphate }	025-003-00-4	232-089-9	7785-87-7		325 mg/kg	2.749	893.283 mg/kg	0.0893 %		
11	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.17 mg/kg	1.353	<0.23 mg/kg	<0.000023 %		<LOD
12	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		<1 mg/kg	1.5	<1.5 mg/kg	<0.00015 %		<LOD
13	nickel { nickel sulfate }	028-009-00-5	232-104-9	7786-81-4		20 mg/kg	2.637	52.734 mg/kg	0.00527 %		
14	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1 mg/kg	1.405	1.405 mg/kg	0.000141 %		

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
15		vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		64	mg/kg	1.785	114.252	mg/kg	0.0114 %		
16		zinc { zinc sulphate }	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]		63	mg/kg	2.469	155.566	mg/kg	0.0156 %		
17		pH			PH		8.34	pH		8.34	pH	8.34 pH		
18		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<**LOD**
19		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
20		acenaphthylene		205-917-1	208-96-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
21		acenaphthene		201-469-6	83-32-9		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
22		fluorene		201-695-5	86-73-7		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
23		phenanthrene		201-581-5	85-01-8		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
24		anthracene		204-371-1	120-12-7		<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<**LOD**
25		fluoranthene		205-912-4	206-44-0		<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
26		pyrene		204-927-3	129-00-0		<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<**LOD**
27		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
28		chrysene	601-048-00-0	205-923-4	218-01-9		<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<**LOD**
29		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
30		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<**LOD**
31		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
32		indeno[123-cd]pyrene		205-893-2	193-39-5		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
33		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
34		benzo[ghi]perylene		205-883-8	191-24-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
35		phenol	604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<**LOD**
											Total:	0.139 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: R22-BH502 MG

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
R22-BH502 MG
Sample Depth:
0.20 m
Moisture content:
29.7%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 29.7% No Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		10 mg/kg	1.32	13.203 mg/kg	0.00132 %		
2	barium { barium sulphide }	016-002-00-X	244-214-4	21109-95-5		44 mg/kg	1.233	54.274 mg/kg	0.00543 %		
3	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		1.2 mg/kg	2.775	3.33 mg/kg	0.000333 %		
4	boron { diboron trioxide }	005-008-00-8	215-125-8	1303-86-2		5.9 mg/kg	3.22	18.997 mg/kg	0.0019 %		
5	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		<0.5 mg/kg	1.142	<0.571 mg/kg	<0.0000571 %		<LOD
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		37 mg/kg	1.462	54.078 mg/kg	0.00541 %		
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
8	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		14 mg/kg	1.126	15.762 mg/kg	0.00158 %		
9	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	24 mg/kg		24 mg/kg	0.0024 %		
10	manganese { manganese sulphate }	025-003-00-4	232-089-9	7785-87-7		270 mg/kg	2.749	742.112 mg/kg	0.0742 %		
11	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.17 mg/kg	1.353	<0.23 mg/kg	<0.000023 %		<LOD
12	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		<1 mg/kg	1.5	<1.5 mg/kg	<0.00015 %		<LOD
13	nickel { nickel sulfate }	028-009-00-5	232-104-9	7786-81-4		20 mg/kg	2.637	52.734 mg/kg	0.00527 %		
14	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
15		vanadium { divanadium pentaoxide; vanadium pentoxide }				64	mg/kg	1.785	114.252	mg/kg	0.0114 %		
		023-001-00-8	215-239-8	1314-62-1									
16		zinc { zinc sulphate }				71	mg/kg	2.469	175.32	mg/kg	0.0175 %		
		030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
17		pH				8.02	pH		8.02	pH	8.02 pH		
				PH									
18		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<**LOD**
		006-007-00-5											
19		TPH (C6 to C40) petroleum group				31	mg/kg		31	mg/kg	0.0031 %		
				TPH									
20		benzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		601-020-00-8	200-753-7	71-43-2									
21		toluene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		601-021-00-3	203-625-9	108-88-3									
22		ethylbenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		601-023-00-4	202-849-4	100-41-4									
23		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
24		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
25		naphthalene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
26		acenaphthylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
			205-917-1	208-96-8									
27		acenaphthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
			201-469-6	83-32-9									
28		fluorene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
			201-695-5	86-73-7									
29		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
			201-581-5	85-01-8									
30		anthracene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<**LOD**
			204-371-1	120-12-7									
31		fluoranthene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
			205-912-4	206-44-0									
32		pyrene				<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<**LOD**
			204-927-3	129-00-0									
33		benzo[a]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
34		chrysene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
35		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
36		benzo[k]fluoranthene				<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
37		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
38		indeno[123-cd]pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
			205-893-2	193-39-5									
39		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
40		benzo[ghi]perylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-883-8	191-24-2									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number							
41		phenol				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.131 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because HP 3 Flammable (first indent) can be discounted as this is a solid waste without a free draining liquid phase. The waste does not display these hazardous properties.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0031%)

Classification of sample: R22-TP101

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
R22-TP101
Sample Depth:
0.20 m
Moisture content:
34.1%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 34.1% No Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		15	mg/kg	1.32	19.805	mg/kg	0.00198 %		
2	barium { barium sulphide }	016-002-00-X	244-214-4	21109-95-5		36	mg/kg	1.233	44.406	mg/kg	0.00444 %		
3	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		1.3	mg/kg	2.775	3.608	mg/kg	0.000361 %		
4	boron { diboron trioxide }	005-008-00-8	215-125-8	1303-86-2		4.5	mg/kg	3.22	14.489	mg/kg	0.00145 %		
5	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		<0.5	mg/kg	1.142	<0.571	mg/kg	<0.0000571 %		<**LOD**
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		39	mg/kg	1.462	57.001	mg/kg	0.0057 %		
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1	mg/kg	1.923	<1.923	mg/kg	<0.000192 %		<**LOD**
8	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		13	mg/kg	1.126	14.637	mg/kg	0.00146 %		
9	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	17	mg/kg		17	mg/kg	0.0017 %		
10	manganese { manganese sulphate }	025-003-00-4	232-089-9	7785-87-7		343	mg/kg	2.749	942.757	mg/kg	0.0943 %		
11	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.17	mg/kg	1.353	<0.23	mg/kg	<0.000023 %		<**LOD**
12	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		<1	mg/kg	1.5	<1.5	mg/kg	<0.00015 %		<**LOD**
13	nickel { nickel sulfate }	028-009-00-5	232-104-9	7786-81-4		22	mg/kg	2.637	58.007	mg/kg	0.0058 %		
14	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1	mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<**LOD**

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
15		vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		71	mg/kg	1.785	126.748	mg/kg	0.0127 %		
16		zinc { zinc sulphate }	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]		60	mg/kg	2.469	148.158	mg/kg	0.0148 %		
17		pH			PH		8.17	pH		8.17	pH	8.17 pH		
18		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<**LOD**
19		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
20		acenaphthylene		205-917-1	208-96-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
21		acenaphthene		201-469-6	83-32-9		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
22		fluorene		201-695-5	86-73-7		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
23		phenanthrene		201-581-5	85-01-8		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
24		anthracene		204-371-1	120-12-7		<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<**LOD**
25		fluoranthene		205-912-4	206-44-0		<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
26		pyrene		204-927-3	129-00-0		<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<**LOD**
27		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
28		chrysene	601-048-00-0	205-923-4	218-01-9		<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<**LOD**
29		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
30		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<**LOD**
31		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
32		indeno[123-cd]pyrene		205-893-2	193-39-5		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
33		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
34		benzo[ghi]perylene		205-883-8	191-24-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
35		phenol	604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<**LOD**
											Total:	0.145 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: R22-TP102

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
R22-TP102
Sample Depth:
0.20 m
Moisture content:
31.8%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 31.8% No Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		9 mg/kg	1.32	11.883 mg/kg	0.00119 %		
2	barium { barium sulphide }	016-002-00-X	244-214-4	21109-95-5		49 mg/kg	1.233	60.441 mg/kg	0.00604 %		
3	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		1.2 mg/kg	2.775	3.33 mg/kg	0.000333 %		
4	boron { diboron trioxide }	005-008-00-8	215-125-8	1303-86-2		3.1 mg/kg	3.22	9.982 mg/kg	0.000998 %		
5	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		<0.5 mg/kg	1.142	<0.571 mg/kg	<0.0000571 %		**<LOD**
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		36 mg/kg	1.462	52.616 mg/kg	0.00526 %		
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		**<LOD**
8	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		16 mg/kg	1.126	18.014 mg/kg	0.0018 %		
9	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	21 mg/kg		21 mg/kg	0.0021 %		
10	manganese { manganese sulphate }	025-003-00-4	232-089-9	7785-87-7		308 mg/kg	2.749	846.558 mg/kg	0.0847 %		
11	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.17 mg/kg	1.353	<0.23 mg/kg	<0.000023 %		**<LOD**
12	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		<1 mg/kg	1.5	<1.5 mg/kg	<0.00015 %		**<LOD**
13	nickel { nickel sulfate }	028-009-00-5	232-104-9	7786-81-4		20 mg/kg	2.637	52.734 mg/kg	0.00527 %		
14	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		**<LOD**

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
15		vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		63	mg/kg	1.785	112.467	mg/kg	0.0112 %		
16		zinc { zinc sulphate }	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]		63	mg/kg	2.469	155.566	mg/kg	0.0156 %		
17		pH			PH		8.42	pH		8.42	pH	8.42 pH		
18		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<**LOD**
19		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
20		acenaphthylene		205-917-1	208-96-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
21		acenaphthene		201-469-6	83-32-9		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
22		fluorene		201-695-5	86-73-7		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
23		phenanthrene		201-581-5	85-01-8		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
24		anthracene		204-371-1	120-12-7		<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<**LOD**
25		fluoranthene		205-912-4	206-44-0		<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
26		pyrene		204-927-3	129-00-0		<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<**LOD**
27		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
28		chrysene	601-048-00-0	205-923-4	218-01-9		<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<**LOD**
29		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		0.07	mg/kg		0.07	mg/kg	0.000007 %		
30		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<**LOD**
31		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		0.06	mg/kg		0.06	mg/kg	0.000006 %		
32		indeno[123-cd]pyrene		205-893-2	193-39-5		0.04	mg/kg		0.04	mg/kg	0.000004 %		
33		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
34		benzo[ghi]perylene		205-883-8	191-24-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
35		phenol	604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<**LOD**
											Total:	0.135 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: R22-TP103

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
R22-TP103
Sample Depth:
0.5 m
Moisture content:
49.1%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 49.1% No Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		18 mg/kg	1.32	23.766 mg/kg	0.00238 %		
2	barium { barium sulphide }	016-002-00-X	244-214-4	21109-95-5		45 mg/kg	1.233	55.507 mg/kg	0.00555 %		
3	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		1.6 mg/kg	2.775	4.441 mg/kg	0.000444 %		
4	boron { diboron trioxide }	005-008-00-8	215-125-8	1303-86-2		10.6 mg/kg	3.22	34.131 mg/kg	0.00341 %		
5	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		<0.5 mg/kg	1.142	<0.571 mg/kg	<0.0000571 %		**<LOD**
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		52 mg/kg	1.462	76.001 mg/kg	0.0076 %		
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		**<LOD**
8	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		10 mg/kg	1.126	11.259 mg/kg	0.00113 %		
9	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	21 mg/kg		21 mg/kg	0.0021 %		
10	manganese { manganese sulphate }	025-003-00-4	232-089-9	7785-87-7		157 mg/kg	2.749	431.525 mg/kg	0.0432 %		
11	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.17 mg/kg	1.353	<0.23 mg/kg	<0.000023 %		**<LOD**
12	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4 mg/kg	1.5	6.001 mg/kg	0.0006 %		
13	nickel { nickel sulfate }	028-009-00-5	232-104-9	7786-81-4		25 mg/kg	2.637	65.917 mg/kg	0.00659 %		
14	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		**<LOD**

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
15		vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		93	mg/kg	1.785	166.022	mg/kg	0.0166 %		
16		zinc { zinc sulphate }	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]		61	mg/kg	2.469	150.627	mg/kg	0.0151 %		
17		pH			PH		8.36	pH		8.36	pH	8.36 pH		
18		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<**LOD**
19		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
20		acenaphthylene		205-917-1	208-96-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
21		acenaphthene		201-469-6	83-32-9		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
22		fluorene		201-695-5	86-73-7		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
23		phenanthrene		201-581-5	85-01-8		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
24		anthracene		204-371-1	120-12-7		<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<**LOD**
25		fluoranthene		205-912-4	206-44-0		<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
26		pyrene		204-927-3	129-00-0		<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<**LOD**
27		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
28		chrysene	601-048-00-0	205-923-4	218-01-9		<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<**LOD**
29		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
30		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<**LOD**
31		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
32		indeno[123-cd]pyrene		205-893-2	193-39-5		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
33		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
34		benzo[ghi]perylene		205-883-8	191-24-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
35		phenol	604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<**LOD**
											Total:	0.105 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: R22-TP104

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
R22-TP104
Sample Depth:
1.00 m
Moisture content:
37.8%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 37.8% No Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		10 mg/kg	1.32	13.203 mg/kg	0.00132 %		
2	barium { barium sulphide }	016-002-00-X	244-214-4	21109-95-5		49 mg/kg	1.233	60.441 mg/kg	0.00604 %		
3	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		1.3 mg/kg	2.775	3.608 mg/kg	0.000361 %		
4	boron { diboron trioxide }	005-008-00-8	215-125-8	1303-86-2		6.5 mg/kg	3.22	20.929 mg/kg	0.00209 %		
5	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.6 mg/kg	1.142	0.685 mg/kg	0.0000685 %		
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		44 mg/kg	1.462	64.308 mg/kg	0.00643 %		
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
8	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		12 mg/kg	1.126	13.511 mg/kg	0.00135 %		
9	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	17 mg/kg		17 mg/kg	0.0017 %		
10	manganese { manganese sulphate }	025-003-00-4	232-089-9	7785-87-7		194 mg/kg	2.749	533.221 mg/kg	0.0533 %		
11	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		1.03 mg/kg	1.353	1.394 mg/kg	0.000139 %		
12	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		<1 mg/kg	1.5	<1.5 mg/kg	<0.00015 %		<LOD
13	nickel { nickel sulfate }	028-009-00-5	232-104-9	7786-81-4		24 mg/kg	2.637	63.28 mg/kg	0.00633 %		
14	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
15		vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		78	mg/kg	1.785	139.244	mg/kg	0.0139 %		
16		zinc { zinc sulphate }	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]		64	mg/kg	2.469	158.035	mg/kg	0.0158 %		
17		pH			PH		8.58	pH		8.58	pH	8.58 pH		
18		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<**LOD**
19		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
20		acenaphthylene		205-917-1	208-96-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
21		acenaphthene		201-469-6	83-32-9		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
22		fluorene		201-695-5	86-73-7		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
23		phenanthrene		201-581-5	85-01-8		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
24		anthracene		204-371-1	120-12-7		<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<**LOD**
25		fluoranthene		205-912-4	206-44-0		<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
26		pyrene		204-927-3	129-00-0		<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<**LOD**
27		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
28		chrysene	601-048-00-0	205-923-4	218-01-9		<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<**LOD**
29		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
30		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<**LOD**
31		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
32		indeno[123-cd]pyrene		205-893-2	193-39-5		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
33		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
34		benzo[ghi]perylene		205-883-8	191-24-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
35		phenol	604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<**LOD**
											Total:	0.11 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: R22-TP105

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
R22-TP105
Sample Depth:
0.20 m
Moisture content:
61.9%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 61.9% No Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		8	mg/kg	1.32	10.563	mg/kg	0.00106 %		
2	barium { barium sulphide }	016-002-00-X	244-214-4	21109-95-5		39	mg/kg	1.233	48.106	mg/kg	0.00481 %		
3	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		0.8	mg/kg	2.775	2.22	mg/kg	0.000222 %		
4	boron { diboron trioxide }	005-008-00-8	215-125-8	1303-86-2		3.9	mg/kg	3.22	12.558	mg/kg	0.00126 %		
5	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		<0.5	mg/kg	1.142	<0.571	mg/kg	<0.0000571 %		<LOD
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		30	mg/kg	1.462	43.847	mg/kg	0.00438 %		
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1	mg/kg	1.923	<1.923	mg/kg	<0.000192 %		<LOD
8	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		11	mg/kg	1.126	12.385	mg/kg	0.00124 %		
9	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	19	mg/kg		19	mg/kg	0.0019 %		
10	manganese { manganese sulphate }	025-003-00-4	232-089-9	7785-87-7		265	mg/kg	2.749	728.369	mg/kg	0.0728 %		
11	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.17	mg/kg	1.353	<0.23	mg/kg	<0.000023 %		<LOD
12	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		<1	mg/kg	1.5	<1.5	mg/kg	<0.00015 %		<LOD
13	nickel { nickel sulfate }	028-009-00-5	232-104-9	7786-81-4		18	mg/kg	2.637	47.46	mg/kg	0.00475 %		
14	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1	mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<LOD

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
15		vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		51	mg/kg	1.785	91.044	mg/kg	0.0091 %		
16		zinc { zinc sulphate }	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]		61	mg/kg	2.469	150.627	mg/kg	0.0151 %		
17		pH			PH		8.03	pH		8.03	pH	8.03 pH		
18		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<**LOD**
19		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
20		acenaphthylene		205-917-1	208-96-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
21		acenaphthene		201-469-6	83-32-9		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
22		fluorene		201-695-5	86-73-7		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
23		phenanthrene		201-581-5	85-01-8		0.16	mg/kg		0.16	mg/kg	0.000016 %		
24		anthracene		204-371-1	120-12-7		<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<**LOD**
25		fluoranthene		205-912-4	206-44-0		0.5	mg/kg		0.5	mg/kg	0.00005 %		
26		pyrene		204-927-3	129-00-0		0.42	mg/kg		0.42	mg/kg	0.000042 %		
27		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		0.21	mg/kg		0.21	mg/kg	0.000021 %		
28		chrysene	601-048-00-0	205-923-4	218-01-9		0.29	mg/kg		0.29	mg/kg	0.000029 %		
29		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		0.26	mg/kg		0.26	mg/kg	0.000026 %		
30		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<**LOD**
31		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		0.21	mg/kg		0.21	mg/kg	0.000021 %		
32		indeno[123-cd]pyrene		205-893-2	193-39-5		0.16	mg/kg		0.16	mg/kg	0.000016 %		
33		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
34		benzo[ghi]perylene		205-883-8	191-24-2		0.13	mg/kg		0.13	mg/kg	0.000013 %		
35		phenol	604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<**LOD**
											Total:	0.118 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: R22-TP106

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
R22-TP106
Sample Depth:
1.00 m
Moisture content:
45.6%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 45.6% No Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		7 mg/kg	1.32	9.242 mg/kg	0.000924 %		
2	barium { barium sulphide }	016-002-00-X	244-214-4	21109-95-5		33 mg/kg	1.233	40.705 mg/kg	0.00407 %		
3	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		1.2 mg/kg	2.775	3.33 mg/kg	0.000333 %		
4	boron { diboron trioxide }	005-008-00-8	215-125-8	1303-86-2		11.2 mg/kg	3.22	36.063 mg/kg	0.00361 %		
5	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		<0.5 mg/kg	1.142	<0.571 mg/kg	<0.0000571 %		**<LOD**
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		39 mg/kg	1.462	57.001 mg/kg	0.0057 %		
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		**<LOD**
8	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		12 mg/kg	1.126	13.511 mg/kg	0.00135 %		
9	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	16 mg/kg		16 mg/kg	0.0016 %		
10	manganese { manganese sulphate }	025-003-00-4	232-089-9	7785-87-7		182 mg/kg	2.749	500.239 mg/kg	0.05 %		
11	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.17 mg/kg	1.353	<0.23 mg/kg	<0.000023 %		**<LOD**
12	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		2 mg/kg	1.5	3 mg/kg	0.0003 %		
13	nickel { nickel sulfate }	028-009-00-5	232-104-9	7786-81-4		25 mg/kg	2.637	65.917 mg/kg	0.00659 %		
14	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		**<LOD**

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
15		vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		69	mg/kg	1.785	123.178	mg/kg	0.0123 %		
16		zinc { zinc sulphate }	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]		60	mg/kg	2.469	148.158	mg/kg	0.0148 %		
17		pH			PH		9.02	pH		9.02	pH	9.02 pH		
18		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<**LOD**
19		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
20		acenaphthylene		205-917-1	208-96-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
21		acenaphthene		201-469-6	83-32-9		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
22		fluorene		201-695-5	86-73-7		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
23		phenanthrene		201-581-5	85-01-8		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
24		anthracene		204-371-1	120-12-7		<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<**LOD**
25		fluoranthene		205-912-4	206-44-0		<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
26		pyrene		204-927-3	129-00-0		<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<**LOD**
27		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
28		chrysene	601-048-00-0	205-923-4	218-01-9		<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<**LOD**
29		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
30		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<**LOD**
31		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
32		indeno[123-cd]pyrene		205-893-2	193-39-5		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
33		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
34		benzo[ghi]perylene		205-883-8	191-24-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
35		phenol	604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<**LOD**
											Total:	0.102 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: R22-TP201

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
R22-TP201
Sample Depth:
0.20 m
Moisture content:
27.7%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 27.7% No Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		3 mg/kg	1.32	3.961 mg/kg	0.000396 %		
2	barium { barium sulphide }	016-002-00-X	244-214-4	21109-95-5		47 mg/kg	1.233	57.974 mg/kg	0.0058 %		
3	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		<0.5 mg/kg	2.775	<1.388 mg/kg	<0.000139 %		<LOD
4	boron { diboron trioxide }	005-008-00-8	215-125-8	1303-86-2		<1 mg/kg	3.22	<3.22 mg/kg	<0.000322 %		<LOD
5	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		<0.5 mg/kg	1.142	<0.571 mg/kg	<0.0000571 %		<LOD
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		24 mg/kg	1.462	35.077 mg/kg	0.00351 %		
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
8	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		11 mg/kg	1.126	12.385 mg/kg	0.00124 %		
9	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	21 mg/kg		21 mg/kg	0.0021 %		
10	manganese { manganese sulphate }	025-003-00-4	232-089-9	7785-87-7		363 mg/kg	2.749	997.729 mg/kg	0.0998 %		
11	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.17 mg/kg	1.353	<0.23 mg/kg	<0.000023 %		<LOD
12	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		<1 mg/kg	1.5	<1.5 mg/kg	<0.00015 %		<LOD
13	nickel { nickel sulfate }	028-009-00-5	232-104-9	7786-81-4		12 mg/kg	2.637	31.64 mg/kg	0.00316 %		
14	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
15		vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		29	mg/kg	1.785	51.77	mg/kg	0.00518 %		
16		zinc { zinc sulphate }	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]		38	mg/kg	2.469	93.833	mg/kg	0.00938 %		
17		pH			PH		7.74	pH		7.74	pH	7.74 pH		
18		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<**LOD**
19		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
20		acenaphthylene		205-917-1	208-96-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
21		acenaphthene		201-469-6	83-32-9		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
22		fluorene		201-695-5	86-73-7		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
23		phenanthrene		201-581-5	85-01-8		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
24		anthracene		204-371-1	120-12-7		<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<**LOD**
25		fluoranthene		205-912-4	206-44-0		<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
26		pyrene		204-927-3	129-00-0		<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<**LOD**
27		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
28		chrysene	601-048-00-0	205-923-4	218-01-9		<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<**LOD**
29		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
30		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<**LOD**
31		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
32		indeno[123-cd]pyrene		205-893-2	193-39-5		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
33		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
34		benzo[ghi]perylene		205-883-8	191-24-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
35		phenol	604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<**LOD**
											Total:	0.132 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: R22-TP201[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:	
R22-TP201[2]	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:		
1.00 m	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number							
1	•	pH				8.07 pH		8.07 pH	8.07 pH		
				PH							
								Total:	0%		

Key

	User supplied data
•	Determinand defined or amended by HazWasteOnline (see Appendix A)

Classification of sample: R22-TP202

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:	
R22-TP202	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:		
0.20 m	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number							
1	●	pH				6.98 pH		6.98 pH	6.98 pH		
				PH							
								Total:	0%		

Key

	User supplied data
●	Determinand defined or amended by HazWasteOnline (see Appendix A)

Classification of sample: R22-TP202[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
R22-TP202[2]
Sample Depth:
0.50 m
Moisture content:
20.7%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 20.7% No Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		2	mg/kg	1.32	2.641	mg/kg	0.000264 %		
2	barium { barium sulphide }	016-002-00-X	244-214-4	21109-95-5		33	mg/kg	1.233	40.705	mg/kg	0.00407 %		
3	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		<0.5	mg/kg	2.775	<1.388	mg/kg	<0.000139 %		<LOD
4	boron { diboron trioxide }	005-008-00-8	215-125-8	1303-86-2		<1	mg/kg	3.22	<3.22	mg/kg	<0.000322 %		<LOD
5	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		<0.5	mg/kg	1.142	<0.571	mg/kg	<0.0000571 %		<LOD
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		25	mg/kg	1.462	36.539	mg/kg	0.00365 %		
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1	mg/kg	1.923	<1.923	mg/kg	<0.000192 %		<LOD
8	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		6	mg/kg	1.126	6.755	mg/kg	0.000676 %		
9	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	6	mg/kg		6	mg/kg	0.0006 %		
10	manganese { manganese sulphate }	025-003-00-4	232-089-9	7785-87-7		222	mg/kg	2.749	610.181	mg/kg	0.061 %		
11	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.17	mg/kg	1.353	<0.23	mg/kg	<0.000023 %		<LOD
12	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		<1	mg/kg	1.5	<1.5	mg/kg	<0.00015 %		<LOD
13	nickel { nickel sulfate }	028-009-00-5	232-104-9	7786-81-4		9	mg/kg	2.637	23.73	mg/kg	0.00237 %		
14	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1	mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<LOD

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
15		vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		28	mg/kg	1.785	49.985	mg/kg	0.005 %		
16		zinc { zinc sulphate }	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]		31	mg/kg	2.469	76.548	mg/kg	0.00765 %		
17		pH			PH		7.72	pH		7.72	pH	7.72 pH		
18		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<**LOD**
19		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
20		acenaphthylene		205-917-1	208-96-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
21		acenaphthene		201-469-6	83-32-9		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
22		fluorene		201-695-5	86-73-7		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
23		phenanthrene		201-581-5	85-01-8		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
24		anthracene		204-371-1	120-12-7		<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<**LOD**
25		fluoranthene		205-912-4	206-44-0		<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
26		pyrene		204-927-3	129-00-0		<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<**LOD**
27		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
28		chrysene	601-048-00-0	205-923-4	218-01-9		<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<**LOD**
29		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
30		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<**LOD**
31		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
32		indeno[123-cd]pyrene		205-893-2	193-39-5		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
33		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
34		benzo[ghi]perylene		205-883-8	191-24-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
35		phenol	604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<**LOD**
											Total:	0.0866 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: R22-TP202[3]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:	
R22-TP202[3]	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:		
1.00 m	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number							
1	●	pH				8.24 pH		8.24 pH	8.24 pH		
				PH							
								Total:	0%		

Key

	User supplied data
●	Determinand defined or amended by HazWasteOnline (see Appendix A)

Classification of sample: R22-TP203

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
R22-TP203
Sample Depth:
0.20 m
Moisture content:
23.8%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 23.8% No Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		2 mg/kg	1.32	2.641 mg/kg	0.000264 %		
2	barium { barium sulphide }	016-002-00-X	244-214-4	21109-95-5		41 mg/kg	1.233	50.573 mg/kg	0.00506 %		
3	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		<0.5 mg/kg	2.775	<1.388 mg/kg	<0.000139 %		<LOD
4	boron { diboron trioxide }	005-008-00-8	215-125-8	1303-86-2		<1 mg/kg	3.22	<3.22 mg/kg	<0.000322 %		<LOD
5	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.6 mg/kg	1.142	0.685 mg/kg	0.0000685 %		
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		25 mg/kg	1.462	36.539 mg/kg	0.00365 %		
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
8	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		11 mg/kg	1.126	12.385 mg/kg	0.00124 %		
9	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	16 mg/kg		16 mg/kg	0.0016 %		
10	manganese { manganese sulphate }	025-003-00-4	232-089-9	7785-87-7		309 mg/kg	2.749	849.306 mg/kg	0.0849 %		
11	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.17 mg/kg	1.353	<0.23 mg/kg	<0.000023 %		<LOD
12	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		<1 mg/kg	1.5	<1.5 mg/kg	<0.00015 %		<LOD
13	nickel { nickel sulfate }	028-009-00-5	232-104-9	7786-81-4		12 mg/kg	2.637	31.64 mg/kg	0.00316 %		
14	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
15		vanadium { divanadium pentaoxide; vanadium pentoxide }				26	mg/kg	1.785	46.415	mg/kg	0.00464 %		
		023-001-00-8	215-239-8	1314-62-1									
16		zinc { zinc sulphate }				42	mg/kg	2.469	103.71	mg/kg	0.0104 %		
		030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
17		pH				7.44	pH		7.44	pH	7.44 pH		
				PH									
18		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<**LOD**
		006-007-00-5											
19		naphthalene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
20		acenaphthylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
			205-917-1	208-96-8									
21		acenaphthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
			201-469-6	83-32-9									
22		fluorene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
			201-695-5	86-73-7									
23		phenanthrene				0.12	mg/kg		0.12	mg/kg	0.000012 %		
			201-581-5	85-01-8									
24		anthracene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<**LOD**
			204-371-1	120-12-7									
25		fluoranthene				0.43	mg/kg		0.43	mg/kg	0.000043 %		
			205-912-4	206-44-0									
26		pyrene				0.35	mg/kg		0.35	mg/kg	0.000035 %		
			204-927-3	129-00-0									
27		benzo[a]anthracene				0.17	mg/kg		0.17	mg/kg	0.000017 %		
		601-033-00-9	200-280-6	56-55-3									
28		chrysene				0.18	mg/kg		0.18	mg/kg	0.000018 %		
		601-048-00-0	205-923-4	218-01-9									
29		benzo[b]fluoranthene				0.2	mg/kg		0.2	mg/kg	0.00002 %		
		601-034-00-4	205-911-9	205-99-2									
30		benzo[k]fluoranthene				<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
31		benzo[a]pyrene; benzo[def]chrysene				0.16	mg/kg		0.16	mg/kg	0.000016 %		
		601-032-00-3	200-028-5	50-32-8									
32		indeno[123-cd]pyrene				0.12	mg/kg		0.12	mg/kg	0.000012 %		
			205-893-2	193-39-5									
33		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
34		benzo[ghi]perylene				0.09	mg/kg		0.09	mg/kg	0.000009 %		
			205-883-8	191-24-2									
35		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.116 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: R22-TP203[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:	
R22-TP203[2]	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:		
0.50 m	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number							
1	●	pH				7.62 pH		7.62 pH	7.62 pH		
				PH							
								Total:	0%		

Key

	User supplied data
●	Determinand defined or amended by HazWasteOnline (see Appendix A)

Classification of sample: R22-TP204

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
R22-TP204
Sample Depth:
1 m
Moisture content:
37.4%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 37.4% No Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		8	mg/kg	1.32	10.563	mg/kg	0.00106 %		
2	barium { barium sulphide }	016-002-00-X	244-214-4	21109-95-5		50	mg/kg	1.233	61.675	mg/kg	0.00617 %		
3	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		1.5	mg/kg	2.775	4.163	mg/kg	0.000416 %		
4	boron { diboron trioxide }	005-008-00-8	215-125-8	1303-86-2		3.4	mg/kg	3.22	10.948	mg/kg	0.00109 %		
5	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.9	mg/kg	1.142	1.028	mg/kg	0.000103 %		
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		49	mg/kg	1.462	71.616	mg/kg	0.00716 %		
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1	mg/kg	1.923	<1.923	mg/kg	<0.000192 %		**<LOD**
8	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		14	mg/kg	1.126	15.762	mg/kg	0.00158 %		
9	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	15	mg/kg		15	mg/kg	0.0015 %		
10	manganese { manganese sulphate }	025-003-00-4	232-089-9	7785-87-7		238	mg/kg	2.749	654.158	mg/kg	0.0654 %		
11	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.17	mg/kg	1.353	0.23	mg/kg	0.000023 %		
12	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		<1	mg/kg	1.5	<1.5	mg/kg	<0.00015 %		**<LOD**
13	nickel { nickel sulfate }	028-009-00-5	232-104-9	7786-81-4		26	mg/kg	2.637	68.554	mg/kg	0.00686 %		
14	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1	mg/kg	1.405	1.405	mg/kg	0.000141 %		

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
15		vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		89	mg/kg	1.785	158.881	mg/kg	0.0159 %		
16		zinc { zinc sulphate }	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]		66	mg/kg	2.469	162.974	mg/kg	0.0163 %		
17		pH			PH		8.9	pH		8.9	pH	8.9 pH		
18		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<**LOD**
19		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
20		acenaphthylene		205-917-1	208-96-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
21		acenaphthene		201-469-6	83-32-9		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
22		fluorene		201-695-5	86-73-7		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
23		phenanthrene		201-581-5	85-01-8		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
24		anthracene		204-371-1	120-12-7		<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<**LOD**
25		fluoranthene		205-912-4	206-44-0		<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
26		pyrene		204-927-3	129-00-0		<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<**LOD**
27		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
28		chrysene	601-048-00-0	205-923-4	218-01-9		<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<**LOD**
29		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
30		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<**LOD**
31		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
32		indeno[123-cd]pyrene		205-893-2	193-39-5		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
33		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
34		benzo[ghi]perylene		205-883-8	191-24-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
35		phenol	604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<**LOD**
											Total:	0.124 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: R22-TP205

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
R22-TP205
Sample Depth:
1.00 m
Moisture content:
37.5%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 37.5% No Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		12 mg/kg	1.32	15.844 mg/kg	0.00158 %		
2	barium { barium sulphide }	016-002-00-X	244-214-4	21109-95-5		44 mg/kg	1.233	54.274 mg/kg	0.00543 %		
3	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		1.3 mg/kg	2.775	3.608 mg/kg	0.000361 %		
4	boron { diboron trioxide }	005-008-00-8	215-125-8	1303-86-2		5.9 mg/kg	3.22	18.997 mg/kg	0.0019 %		
5	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.4 mg/kg	1.142	1.599 mg/kg	0.00016 %		
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		32 mg/kg	1.462	46.77 mg/kg	0.00468 %		
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		**<LOD**
8	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		7 mg/kg	1.126	7.881 mg/kg	0.000788 %		
9	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	28 mg/kg		28 mg/kg	0.0028 %		
10	manganese { manganese sulphate }	025-003-00-4	232-089-9	7785-87-7		332 mg/kg	2.749	912.523 mg/kg	0.0913 %		
11	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.17 mg/kg	1.353	<0.23 mg/kg	<0.000023 %		**<LOD**
12	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		<1 mg/kg	1.5	<1.5 mg/kg	<0.00015 %		**<LOD**
13	nickel { nickel sulfate }	028-009-00-5	232-104-9	7786-81-4		18 mg/kg	2.637	47.46 mg/kg	0.00475 %		
14	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		**<LOD**

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
15		vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		59	mg/kg	1.785	105.326	mg/kg	0.0105 %		
16		zinc { zinc sulphate }	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]		86	mg/kg	2.469	212.359	mg/kg	0.0212 %		
17		pH			PH		8.81	pH		8.81	pH	8.81 pH		
18		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<**LOD**
19		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
20		acenaphthylene		205-917-1	208-96-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
21		acenaphthene		201-469-6	83-32-9		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
22		fluorene		201-695-5	86-73-7		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
23		phenanthrene		201-581-5	85-01-8		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
24		anthracene		204-371-1	120-12-7		<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<**LOD**
25		fluoranthene		205-912-4	206-44-0		<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
26		pyrene		204-927-3	129-00-0		<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<**LOD**
27		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
28		chrysene	601-048-00-0	205-923-4	218-01-9		<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<**LOD**
29		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
30		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<**LOD**
31		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
32		indeno[123-cd]pyrene		205-893-2	193-39-5		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
33		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
34		benzo[ghi]perylene		205-883-8	191-24-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
35		phenol	604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<**LOD**
											Total:	0.146 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: R22-TP405

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
R22-TP405
Sample Depth:
1.00 m
Moisture content:
49.7%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 49.7% No Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		4 mg/kg	1.32	5.281 mg/kg	0.000528 %		
2	barium { barium sulphide }	016-002-00-X	244-214-4	21109-95-5		64 mg/kg	1.233	78.944 mg/kg	0.00789 %		
3	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		1.3 mg/kg	2.775	3.608 mg/kg	0.000361 %		
4	boron { diboron trioxide }	005-008-00-8	215-125-8	1303-86-2		8.7 mg/kg	3.22	28.013 mg/kg	0.0028 %		
5	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		<0.5 mg/kg	1.142	<0.571 mg/kg	<0.0000571 %		<**LOD**
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		47 mg/kg	1.462	68.693 mg/kg	0.00687 %		
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<**LOD**
8	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		11 mg/kg	1.126	12.385 mg/kg	0.00124 %		
9	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	12 mg/kg		12 mg/kg	0.0012 %		
10	manganese { manganese sulphate }	025-003-00-4	232-089-9	7785-87-7		453 mg/kg	2.749	1245.099 mg/kg	0.125 %		
11	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.17 mg/kg	1.353	<0.23 mg/kg	<0.000023 %		<**LOD**
12	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4 mg/kg	1.5	6.001 mg/kg	0.0006 %		
13	nickel { nickel sulfate }	028-009-00-5	232-104-9	7786-81-4		28 mg/kg	2.637	73.827 mg/kg	0.00738 %		
14	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
15		vanadium { divanadium pentaoxide; vanadium pentoxide }				85	mg/kg	1.785	151.741	mg/kg	0.0152 %		
		023-001-00-8	215-239-8	1314-62-1									
16		zinc { zinc sulphate }				58	mg/kg	2.469	143.219	mg/kg	0.0143 %		
		030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
17		pH				8.83	pH		8.83	pH	8.83 pH		
				PH									
18		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.183 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: R22-TP502

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
R22-TP502
Sample Depth:
1.00 m
Moisture content:
28.3%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 28.3% No Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		3 mg/kg	1.32	3.961 mg/kg	0.000396 %		
2	barium { barium sulphide }	016-002-00-X	244-214-4	21109-95-5		40 mg/kg	1.233	49.34 mg/kg	0.00493 %		
3	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		0.7 mg/kg	2.775	1.943 mg/kg	0.000194 %		
4	boron { diboron trioxide }	005-008-00-8	215-125-8	1303-86-2		<1 mg/kg	3.22	<3.22 mg/kg	<0.000322 %		<LOD
5	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		<0.5 mg/kg	1.142	<0.571 mg/kg	<0.0000571 %		<LOD
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		41 mg/kg	1.462	59.924 mg/kg	0.00599 %		
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
8	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		14 mg/kg	1.126	15.762 mg/kg	0.00158 %		
9	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	10 mg/kg		10 mg/kg	0.001 %		
10	manganese { manganese sulphate }	025-003-00-4	232-089-9	7785-87-7		86 mg/kg	2.749	236.376 mg/kg	0.0236 %		
11	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.17 mg/kg	1.353	<0.23 mg/kg	<0.000023 %		<LOD
12	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		<1 mg/kg	1.5	<1.5 mg/kg	<0.00015 %		<LOD
13	nickel { nickel sulfate }	028-009-00-5	232-104-9	7786-81-4		17 mg/kg	2.637	44.824 mg/kg	0.00448 %		
14	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
15		vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		41	mg/kg	1.785	73.193	mg/kg	0.00732 %		
16		zinc { zinc sulphate }	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]		50	mg/kg	2.469	123.465	mg/kg	0.0123 %		
17		pH			PH		8.22	pH		8.22	pH	8.22 pH		
18		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<**LOD**
19		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
20		acenaphthylene		205-917-1	208-96-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
21		acenaphthene		201-469-6	83-32-9		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
22		fluorene		201-695-5	86-73-7		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
23		phenanthrene		201-581-5	85-01-8		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
24		anthracene		204-371-1	120-12-7		<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<**LOD**
25		fluoranthene		205-912-4	206-44-0		<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
26		pyrene		204-927-3	129-00-0		<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<**LOD**
27		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
28		chrysene	601-048-00-0	205-923-4	218-01-9		<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<**LOD**
29		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
30		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<**LOD**
31		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
32		indeno[123-cd]pyrene		205-893-2	193-39-5		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
33		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
34		benzo[ghi]perylene		205-883-8	191-24-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
35		phenol	604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<**LOD**
											Total:	0.063 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: R22-TP503a

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
R22-TP503a
Sample Depth:
0.20 m
Moisture content:
38.5%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 38.5% No Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		18 mg/kg	1.32	23.766 mg/kg	0.00238 %		
2	barium { barium sulphide }	016-002-00-X	244-214-4	21109-95-5		37 mg/kg	1.233	45.639 mg/kg	0.00456 %		
3	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		0.9 mg/kg	2.775	2.498 mg/kg	0.00025 %		
4	boron { diboron trioxide }	005-008-00-8	215-125-8	1303-86-2		2.8 mg/kg	3.22	9.016 mg/kg	0.000902 %		
5	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.8 mg/kg	1.142	0.914 mg/kg	0.0000914 %		
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		25 mg/kg	1.462	36.539 mg/kg	0.00365 %		
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		**<LOD**
8	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		9 mg/kg	1.126	10.133 mg/kg	0.00101 %		
9	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	20 mg/kg		20 mg/kg	0.002 %		
10	manganese { manganese sulphate }	025-003-00-4	232-089-9	7785-87-7		406 mg/kg	2.749	1115.917 mg/kg	0.112 %		
11	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.78 mg/kg	1.353	1.056 mg/kg	0.000106 %		
12	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		<1 mg/kg	1.5	<1.5 mg/kg	<0.00015 %		**<LOD**
13	nickel { nickel sulfate }	028-009-00-5	232-104-9	7786-81-4		16 mg/kg	2.637	42.187 mg/kg	0.00422 %		
14	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		**<LOD**

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
15		vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		45	mg/kg	1.785	80.333	mg/kg	0.00803 %		
16		zinc { zinc sulphate }	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]		47	mg/kg	2.469	116.057	mg/kg	0.0116 %		
17		pH			PH		7.87	pH		7.87	pH	7.87 pH		
18		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<**LOD**
19		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
20		acenaphthylene		205-917-1	208-96-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
21		acenaphthene		201-469-6	83-32-9		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
22		fluorene		201-695-5	86-73-7		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
23		phenanthrene		201-581-5	85-01-8		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
24		anthracene		204-371-1	120-12-7		<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<**LOD**
25		fluoranthene		205-912-4	206-44-0		<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
26		pyrene		204-927-3	129-00-0		<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<**LOD**
27		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
28		chrysene	601-048-00-0	205-923-4	218-01-9		<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<**LOD**
29		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
30		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<**LOD**
31		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
32		indeno[123-cd]pyrene		205-893-2	193-39-5		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
33		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
34		benzo[ghi]perylene		205-883-8	191-24-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
35		phenol	604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<**LOD**
											Total:	0.151 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: R22-TP504

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
R22-TP504
Sample Depth:
1.00 m
Moisture content:
39.6%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 39.6% No Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		10 mg/kg	1.32	13.203 mg/kg	0.00132 %		
2	barium { barium sulphide }	016-002-00-X	244-214-4	21109-95-5		59 mg/kg	1.233	72.776 mg/kg	0.00728 %		
3	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		2 mg/kg	2.775	5.551 mg/kg	0.000555 %		
4	boron { diboron trioxide }	005-008-00-8	215-125-8	1303-86-2		2.2 mg/kg	3.22	7.084 mg/kg	0.000708 %		
5	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.4 mg/kg	1.142	1.599 mg/kg	0.00016 %		
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		58 mg/kg	1.462	84.77 mg/kg	0.00848 %		
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
8	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		16 mg/kg	1.126	18.014 mg/kg	0.0018 %		
9	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	23 mg/kg		23 mg/kg	0.0023 %		
10	manganese { manganese sulphate }	025-003-00-4	232-089-9	7785-87-7		435 mg/kg	2.749	1195.625 mg/kg	0.12 %		
11	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		1.1 mg/kg	1.353	1.489 mg/kg	0.000149 %		
12	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		<1 mg/kg	1.5	<1.5 mg/kg	<0.00015 %		<LOD
13	nickel { nickel sulfate }	028-009-00-5	232-104-9	7786-81-4		38 mg/kg	2.637	100.194 mg/kg	0.01 %		
14	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
15		vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		103	mg/kg	1.785	183.874	mg/kg	0.0184 %		
16		zinc { zinc sulphate }	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]		103	mg/kg	2.469	254.338	mg/kg	0.0254 %		
17		pH			PH		8.62	pH		8.62	pH	8.62 pH		
18		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<**LOD**
19		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
20		acenaphthylene		205-917-1	208-96-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
21		acenaphthene		201-469-6	83-32-9		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
22		fluorene		201-695-5	86-73-7		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
23		phenanthrene		201-581-5	85-01-8		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
24		anthracene		204-371-1	120-12-7		<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<**LOD**
25		fluoranthene		205-912-4	206-44-0		<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
26		pyrene		204-927-3	129-00-0		<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<**LOD**
27		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
28		chrysene	601-048-00-0	205-923-4	218-01-9		<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<**LOD**
29		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
30		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<**LOD**
31		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
32		indeno[123-cd]pyrene		205-893-2	193-39-5		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
33		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
34		benzo[ghi]perylene		205-883-8	191-24-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
35		phenol	604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<**LOD**
											Total:	0.197 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: R22-TP505

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
R22-TP505
Sample Depth:
1.00 m
Moisture content:
43.5%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 43.5% No Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		18 mg/kg	1.32	23.766 mg/kg	0.00238 %		
2	barium { barium sulphide }	016-002-00-X	244-214-4	21109-95-5		46 mg/kg	1.233	56.741 mg/kg	0.00567 %		
3	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		1.5 mg/kg	2.775	4.163 mg/kg	0.000416 %		
4	boron { diboron trioxide }	005-008-00-8	215-125-8	1303-86-2		5.4 mg/kg	3.22	17.387 mg/kg	0.00174 %		
5	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.7 mg/kg	1.142	0.8 mg/kg	0.00008 %		
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		49 mg/kg	1.462	71.616 mg/kg	0.00716 %		
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		**<LOD**
8	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		14 mg/kg	1.126	15.762 mg/kg	0.00158 %		
9	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	17 mg/kg		17 mg/kg	0.0017 %		
10	manganese { manganese sulphate }	025-003-00-4	232-089-9	7785-87-7		216 mg/kg	2.749	593.69 mg/kg	0.0594 %		
11	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.4 mg/kg	1.353	0.541 mg/kg	0.0000541 %		
12	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		<1 mg/kg	1.5	<1.5 mg/kg	<0.00015 %		**<LOD**
13	nickel { nickel sulfate }	028-009-00-5	232-104-9	7786-81-4		27 mg/kg	2.637	71.19 mg/kg	0.00712 %		
14	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1 mg/kg	1.405	1.405 mg/kg	0.000141 %		

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
15		vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		85	mg/kg	1.785	151.741	mg/kg	0.0152 %		
16		zinc { zinc sulphate }	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]		75	mg/kg	2.469	185.197	mg/kg	0.0185 %		
17		pH			PH		8.07	pH		8.07	pH	8.07 pH		
18		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<**LOD**
19		TPH (C6 to C40) petroleum group			TPH		<1	mg/kg		<1	mg/kg	<0.0001 %		<**LOD**
20		benzene	601-020-00-8	200-753-7	71-43-2		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
21		toluene	601-021-00-3	203-625-9	108-88-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
22		ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
23		xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
24		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
25		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
26		acenaphthylene		205-917-1	208-96-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
27		acenaphthene		201-469-6	83-32-9		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
28		fluorene		201-695-5	86-73-7		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
29		phenanthrene		201-581-5	85-01-8		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
30		anthracene		204-371-1	120-12-7		<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<**LOD**
31		fluoranthene		205-912-4	206-44-0		<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
32		pyrene		204-927-3	129-00-0		<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<**LOD**
33		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
34		chrysene	601-048-00-0	205-923-4	218-01-9		<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<**LOD**
35		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
36		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<**LOD**
37		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
38		indeno[123-cd]pyrene		205-893-2	193-39-5		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
39		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
40		benzo[ghi]perylene		205-883-8	191-24-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
41		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
42		polychlorobiphenyls; PCB				<0.007	mg/kg		<0.007	mg/kg	<0.0000007 %		<**LOD**
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.122 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: R22-TP508

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
R22-TP508
Sample Depth:
0.50 m
Moisture content:
33.5%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 33.5% No Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		7 mg/kg	1.32	9.242 mg/kg	0.000924 %		
2	barium { barium sulphide }	016-002-00-X	244-214-4	21109-95-5		67 mg/kg	1.233	82.644 mg/kg	0.00826 %		
3	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		1.2 mg/kg	2.775	3.33 mg/kg	0.000333 %		
4	boron { diboron trioxide }	005-008-00-8	215-125-8	1303-86-2		7.6 mg/kg	3.22	24.471 mg/kg	0.00245 %		
5	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		<0.5 mg/kg	1.142	<0.571 mg/kg	<0.0000571 %		**<LOD**
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		42 mg/kg	1.462	61.385 mg/kg	0.00614 %		
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		**<LOD**
8	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		19 mg/kg	1.126	21.392 mg/kg	0.00214 %		
9	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	30 mg/kg		30 mg/kg	0.003 %		
10	manganese { manganese sulphate }	025-003-00-4	232-089-9	7785-87-7		252 mg/kg	2.749	692.638 mg/kg	0.0693 %		
11	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.17 mg/kg	1.353	<0.23 mg/kg	<0.000023 %		**<LOD**
12	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		<1 mg/kg	1.5	<1.5 mg/kg	<0.00015 %		**<LOD**
13	nickel { nickel sulfate }	028-009-00-5	232-104-9	7786-81-4		23 mg/kg	2.637	60.644 mg/kg	0.00606 %		
14	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		**<LOD**

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
15		vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		68	mg/kg	1.785	121.393	mg/kg	0.0121 %		
16		zinc { zinc sulphate }	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]		83	mg/kg	2.469	204.952	mg/kg	0.0205 %		
17		pH			PH		8.03	pH		8.03	pH	8.03 pH		
18		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<**LOD**
19		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
20		acenaphthylene		205-917-1	208-96-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
21		acenaphthene		201-469-6	83-32-9		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
22		fluorene		201-695-5	86-73-7		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
23		phenanthrene		201-581-5	85-01-8		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
24		anthracene		204-371-1	120-12-7		<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<**LOD**
25		fluoranthene		205-912-4	206-44-0		<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
26		pyrene		204-927-3	129-00-0		<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<**LOD**
27		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
28		chrysene	601-048-00-0	205-923-4	218-01-9		<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<**LOD**
29		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		0.09	mg/kg		0.09	mg/kg	0.000009 %		
30		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<**LOD**
31		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
32		indeno[123-cd]pyrene		205-893-2	193-39-5		0.06	mg/kg		0.06	mg/kg	0.000006 %		
33		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
34		benzo[ghi]perylene		205-883-8	191-24-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
35		phenol	604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<**LOD**
											Total:	0.132 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: R22-TP510

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
R22-TP510
Sample Depth:
0.20 m
Moisture content:
35.8%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 35.8% No Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		10 mg/kg	1.32	13.203 mg/kg	0.00132 %		
2	barium { barium sulphide }	016-002-00-X	244-214-4	21109-95-5		35 mg/kg	1.233	43.172 mg/kg	0.00432 %		
3	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		1.1 mg/kg	2.775	3.053 mg/kg	0.000305 %		
4	boron { diboron trioxide }	005-008-00-8	215-125-8	1303-86-2		3.5 mg/kg	3.22	11.27 mg/kg	0.00113 %		
5	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		<0.5 mg/kg	1.142	<0.571 mg/kg	<0.0000571 %		<**LOD**
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		35 mg/kg	1.462	51.154 mg/kg	0.00512 %		
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<**LOD**
8	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		13 mg/kg	1.126	14.637 mg/kg	0.00146 %		
9	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	17 mg/kg		17 mg/kg	0.0017 %		
10	manganese { manganese sulphate }	025-003-00-4	232-089-9	7785-87-7		345 mg/kg	2.749	948.255 mg/kg	0.0948 %		
11	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.17 mg/kg	1.353	<0.23 mg/kg	<0.000023 %		<**LOD**
12	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		<1 mg/kg	1.5	<1.5 mg/kg	<0.00015 %		<**LOD**
13	nickel { nickel sulfate }	028-009-00-5	232-104-9	7786-81-4		19 mg/kg	2.637	50.097 mg/kg	0.00501 %		
14	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<**LOD**

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
15		vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		61	mg/kg	1.785	108.896	mg/kg	0.0109 %		
16		zinc { zinc sulphate }	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]		56	mg/kg	2.469	138.281	mg/kg	0.0138 %		
17		pH			PH		7.88	pH		7.88	pH	7.88 pH		
18		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<**LOD**
19		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
20		acenaphthylene		205-917-1	208-96-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
21		acenaphthene		201-469-6	83-32-9		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
22		fluorene		201-695-5	86-73-7		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
23		phenanthrene		201-581-5	85-01-8		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
24		anthracene		204-371-1	120-12-7		<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<**LOD**
25		fluoranthene		205-912-4	206-44-0		<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
26		pyrene		204-927-3	129-00-0		<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<**LOD**
27		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
28		chrysene	601-048-00-0	205-923-4	218-01-9		<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<**LOD**
29		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
30		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<**LOD**
31		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
32		indeno[123-cd]pyrene		205-893-2	193-39-5		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
33		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
34		benzo[ghi]perylene		205-883-8	191-24-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
35		phenol	604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<**LOD**
											Total:	0.141 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Appendix A: Classifier defined and non GB MCL determinands

- **barium sulphide** (EC Number: 244-214-4, CAS Number: 21109-95-5)

GB MCL index number: 016-002-00-X
Description/Comments:
Additional Hazard Statement(s): EUH031 >= 0.8 %
Reason for additional Hazards Statement(s):
20 Nov 2021 - EUH031 >= 0.8 % hazard statement sourced from: WM3, Table C12.2

- **chromium(III) oxide (worst case)** (EC Number: 215-160-9, CAS Number: 1308-38-9)

Description/Comments: Data from C&L Inventory Database
Data source: https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/33806
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4; H332 , Acute Tox. 4; H302 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315 , Resp. Sens. 1; H334 , Skin Sens. 1; H317 , Repr. 1B; H360FD , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

- **lead compounds with the exception of those specified elsewhere in this Annex (worst case)**

GB MCL index number: 082-001-00-6
Description/Comments: Worst Case: IARC considers lead compounds Group 2A; Probably carcinogenic to humans; Lead REACH Consortium, following MCL protocols, considers lead compounds from smelting industries, flue dust and similar to be Carcinogenic category 1A
Additional Hazard Statement(s): Carc. 1A; H350
Reason for additional Hazards Statement(s):
20 Nov 2021 - Carc. 1A; H350 hazard statement sourced from: IARC Group 2A (Sup 7, 87) 2006; Lead REACH Consortium www.reach-lead.eu/substanceinformation.html (worst case lead compounds). Review date 29/09/2015

- **pH** (CAS Number: PH)

Description/Comments: Appendix C4
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: None.

- **salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex**

GB MCL index number: 006-007-00-5
Description/Comments: Conversion factor based on a worst case compound: sodium cyanide
Additional Hazard Statement(s): EUH032 >= 0.2 %
Reason for additional Hazards Statement(s):
20 Nov 2021 - EUH032 >= 0.2 % hazard statement sourced from: WM3, Table C12.2

- **TPH (C6 to C40) petroleum group** (CAS Number: TPH)

Description/Comments: Hazard statements taken from WM3 1st Edition 2015; Risk phrases: WM2 3rd Edition 2013
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: Flam. Liq. 3; H226 , Asp. Tox. 1; H304 , STOT RE 2; H373 , Muta. 1B; H340 , Carc. 1B; H350 , Repr. 2; H361d , Aquatic Chronic 2; H411

- **ethylbenzene** (EC Number: 202-849-4, CAS Number: 100-41-4)

GB MCL index number: 601-023-00-4
Description/Comments:
Additional Hazard Statement(s): Carc. 2; H351
Reason for additional Hazards Statement(s):
20 Nov 2021 - Carc. 2; H351 hazard statement sourced from: IARC Group 2B (77) 2000

- **acenaphthylene** (EC Number: 205-917-1, CAS Number: 208-96-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4; H302 , Acute Tox. 1; H330 , Acute Tox. 1; H310 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315

- **acenaphthene** (EC Number: 201-469-6, CAS Number: 83-32-9)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410 , Aquatic Chronic 2; H411

fluorene (EC Number: 201-695-5, CAS Number: 86-73-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

phenanthrene (EC Number: 201-581-5, CAS Number: 85-01-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Acute Tox. 4; H302 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Carc. 2; H351 , Skin Sens. 1; H317 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410 , Skin Irrit. 2; H315

anthracene (EC Number: 204-371-1, CAS Number: 120-12-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315 , Skin Sens. 1; H317 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

fluoranthene (EC Number: 205-912-4, CAS Number: 206-44-0)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Acute Tox. 4; H302 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

pyrene (EC Number: 204-927-3, CAS Number: 129-00-0)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 2014
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

indeno[123-cd]pyrene (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Carc. 2; H351

benzo[ghi]perylene (EC Number: 205-883-8, CAS Number: 191-24-2)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 23 Jul 2015
Hazard Statements: Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

polychlorobiphenyls; PCB (EC Number: 215-648-1, CAS Number: 1336-36-3)

GB MCL index number: 602-039-00-4
Description/Comments: Worst Case: IARC considers PCB Group 1; Carcinogenic to humans;

POP specific threshold from ATP1 (Regulation 756/2010/EU) to POPs Regulation (Regulation 850/2004/EC). Where applicable, the calculation method laid down in European standards EN 12766-1 and EN 12766-2 shall be applied.
Additional Hazard Statement(s): Carc. 1A; H350
Reason for additional Hazards Statement(s):
20 Nov 2021 - Carc. 1A; H350 hazard statement sourced from: IARC Group 1 (23, Sup 7, 100C) 2012

Appendix B: Rationale for selection of metal species

arsenic {arsenic trioxide}

Reasonable case CLP species based on hazard statements/molecular weight and most common (stable) oxide of arsenic. Industrial sources include: smelting; main precursor to other arsenic compounds

barium {barium sulphide}

No significant quantities of Cr(VI) to form worst case species (barium chromate) therefore second worst case species chosen instead.

beryllium {beryllium oxide}

Reasonable case CLP species based on hazard statements/molecular weight. Industrial sources include: most common (non alloy) form, used in ceramics

boron {diboron trioxide}

Reasonable case CLP species based on hazard statements/ molecular weight, physical form and low solubility. Industrial sources include: fluxing agent for glass/enamels; additive for fibre optics, borosilicate glass

cadmium {cadmium oxide}

Reasonable case CLP species based on hazard statements/molecular weight, very low solubility in water. Industrial sources include: electroplating baths, electrodes for storage batteries, catalysts, ceramic glazes, phosphors, pigments and nematocides. Worst case compounds in CLP: cadmium sulphate, chloride, fluoride & iodide not expected as either very soluble and/or compound's industrial usage not related to site history

chromium in chromium(III) compounds {chromium(III) oxide (worst case)}

Reasonable case species based on hazard statements/molecular weight. Industrial sources include: tanning, pigment in paint, inks and glass

chromium in chromium(VI) compounds {chromium(VI) oxide}

Worst case CLP species based on hazard statements/molecular weight. Industrial sources include: production stainless steel, electroplating, wood preservation, anti-corrosion agents or coatings, pigments

copper {dicopper oxide; copper (I) oxide}

Reasonable case CLP species based on hazard statements/molecular weight and insolubility in water. Industrial sources include: oxidised copper metal, brake pads, pigments, antifouling paints, fungicide. Worse case copper sulphate is very soluble and likely to have been leached away if ever present and/or not enough soluble sulphate detected

lead {lead compounds with the exception of those specified elsewhere in this Annex (worst case)}

No significant quantities of Cr(VI) to form worst case species (lead chromate) therefore second worst case species chosen instead.

manganese {manganese sulphate}

Worst case CLP species based on hazard statements/molecular weight

mercury {mercury dichloride}

Worst case CLP species based on hazard statements/molecular weight

molybdenum {molybdenum(VI) oxide}

Worst case CLP species based on hazard statements/molecular weight

nickel {nickel sulfate}

No significant quantities of Cr(VI) to form worst case species (nickel chromate) therefore second worst case species chosen instead.

selenium {selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex}

Harmonised group entry used as most reasonable case. Pigment cadmium sulphoselenide not likely to be present in this soil. No evidence for the other CLP entries: sodium selenite, nickel II selenite and nickel selenide, to be present in this soil

vanadium {divanadium pentaoxide; vanadium pentoxide}

Worst case CLP species based on hazard statements/molecular weight

zinc {zinc sulphate}

No significant quantities of Cr(VI) to form worst case species (zinc chromate) therefore second worst case species chosen instead.

cyanides {salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex}

Harmonised group entry used as most reasonable case as complex cyanides and those specified elsewhere in the annex are not likely to be present in this soil: [Note conversion factor based on a worst case compound: sodium cyanide]

Appendix C: Version

HazWasteOnline Classification Engine: WM3 1st Edition v1.2.GB - Oct 2021
HazWasteOnline Classification Engine Version: 2024.80.5988.11077 (20 Mar 2024)
HazWasteOnline Database: 2024.80.5988.11077 (20 Mar 2024)

This classification utilises the following guidance and legislation:
WM3 v1.2.GB - Waste Classification - 1st Edition v1.2.GB - Oct 2021
CLP Regulation - Regulation 1272/2008/EC of 16 December 2008
1st ATP - Regulation 790/2009/EC of 10 August 2009
2nd ATP - Regulation 286/2011/EC of 10 March 2011
3rd ATP - Regulation 618/2012/EU of 10 July 2012
4th ATP - Regulation 487/2013/EU of 8 May 2013
Correction to 1st ATP - Regulation 758/2013/EU of 7 August 2013
5th ATP - Regulation 944/2013/EU of 2 October 2013
6th ATP - Regulation 605/2014/EU of 5 June 2014
WFD Annex III replacement - Regulation 1357/2014/EU of 18 December 2014
Revised List of Waste 2014 - Decision 2014/955/EU of 18 December 2014
7th ATP - Regulation 2015/1221/EU of 24 July 2015
8th ATP - Regulation (EU) 2016/918 of 19 May 2016
9th ATP - Regulation (EU) 2016/1179 of 19 July 2016
10th ATP - Regulation (EU) 2017/776 of 4 May 2017
HP14 amendment - Regulation (EU) 2017/997 of 8 June 2017
13th ATP - Regulation (EU) 2018/1480 of 4 October 2018
14th ATP - Regulation (EU) 2020/217 of 4 October 2019
15th ATP - Regulation (EU) 2020/1182 of 19 May 2020
The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use)(Amendment etc.) (EU Exit) Regulations 2020 - UK: 2020 No. 1567 of 16th December 2020
The Waste and Environmental Permitting etc. (Legislative Functions and Amendment etc.) (EU Exit) Regulations 2020 - UK: 2020 No. 1540 of 16th December 2020
GB MCL List - version 1.1 of 09 June 2021
GB MCL List v2.0 - version 2.0 of 20th October 2023
GB MCL List v4.0 - version 4.0 of 2nd March 2024



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