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

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 20/07251
Issue Number: 1 **Date:** 14 September, 2020

Client: Professional Remediation Ltd
Unit 9,
Rising Bridge Business & Enterprise Village,
Blackburn Road,
Haslingden,
Lancashire,
BB5 2AL

Project Manager: Emily Tweed/Jane Crossley/T. Procter
Project Name: Interchange 26, Oakenshaw
Project Ref: 21249
Order No: 21249/TP/11605
Date Samples Received: 27/08/20
Date Instructions Received: 01/09/20
Date Analysis Completed: 10/09/20

Prepared by:

Richard Wong
Client Manager

Approved by:

Holly Neary-King
Client Services Supervisor

UKAS TESTING
1247

Envirolab Job Number: 20/07251

Client Project Name: Interchange 26, Oakenshaw

Client Project Ref: 21249

Lab Sample ID	20/07251/1	20/07251/2	20/07251/3					Units	Limit of Detection	Method ref
Client Sample No	FBN	FBC	FBS							
Client Sample ID	Filter beds N	Filter beds C	Filter beds S							
Depth to Top	1.20	1.10	1.20							
Depth To Bottom										
Date Sampled	26-Aug-20	26-Aug-20	26-Aug-20							
Sample Type	Water - EW	Water - EW	Water - EW							
Sample Matrix Code	N/A	N/A	N/A							
pH (w)$_A^\#$	7.90	7.75	7.96					pH	0.01	A-T-031w
Total Suspended Solids (w)$_A^\#$	39	<10	<10					mg/l	10	A-T-036w
Arsenic (dissolved)$_A^\#$	2	1	2					µg/l	1	A-T-025w
Cadmium (dissolved)$_A^\#$	<0.2	<0.2	<0.2					µg/l	0.2	A-T-025w
Copper (dissolved)$_A^\#$	10	11	5					µg/l	1	A-T-025w
Chromium (dissolved)$_A^\#$	3	2	2					µg/l	1	A-T-025w
Lead (dissolved)$_A^\#$	<1	<1	<1					µg/l	1	A-T-025w
Mercury (dissolved)$_A^\#$	<0.1	<0.1	<0.1					µg/l	0.1	A-T-025w
Nickel (dissolved)$_A^\#$	2	1	3					µg/l	1	A-T-025w
Selenium (dissolved)$_A^\#$	<1	<1	<1					µg/l	1	A-T-025w
Zinc (dissolved)$_A^\#$	3	2	3					µg/l	1	A-T-025w

Envirolab Job Number: 20/07251

Client Project Name: Interchange 26, Oakenshaw

Client Project Ref: 21249

Lab Sample ID	20/07251/1	20/07251/2	20/07251/3					Units	Limit of Detection	Method ref
Client Sample No	FBN	FBC	FBS							
Client Sample ID	Filter beds N	Filter beds C	Filter beds S							
Depth to Top	1.20	1.10	1.20							
Depth To Bottom										
Date Sampled	26-Aug-20	26-Aug-20	26-Aug-20							
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)$_A^{\#}$	<0.01	<0.01	<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)$_A^{\#}$	<0.01	<0.01	<0.01					µg/l	0.01	A-T-019w

Envirolab Job Number: 20/07251

Client Project Name: Interchange 26, Oakenshaw

Client Project Ref: 21249

Lab Sample ID	20/07251/1	20/07251/2	20/07251/3					Units	Limit of Detection	Method ref
Client Sample No	FBN	FBC	FBS							
Client Sample ID	Filter beds N	Filter beds C	Filter beds S							
Depth to Top	1.20	1.10	1.20							
Depth To Bottom										
Date Sampled	26-Aug-20	26-Aug-20	26-Aug-20							
Sample Type	Water - EW	Water - EW	Water - EW							
Sample Matrix Code	N/A	N/A	N/A							
TPH CWG (w)										
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	A-T-055w
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	A-T-055w
TPH (Ali & Aro >C5-C35) $(w)_A$	<10	<10	<10					µg/l	10	A-T-055w
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 with the same delivery, will be disposed of six weeks after 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 the scope of our accreditation.
If results are in italic font they are associated with an AQC failure, these are not accredited and are 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.
The Client Sample No, Client Sample ID, Depth to Top, Depth to Bottom and Date Sampled were all provided by the client.

Soil chemical analysis:
All results are reported as dry weight (<40℃).
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 analysis of water by method A-T-007:
Free and visible oils are excluded from the sample used for analysis so that the reported result represents the dissolved phase only.

Electrical Conductivity of water by Method A-T-037:
Results greater than 12900µS/cm @ 25℃ / 11550µS/cm @ 20℃ fall outside the calibration range and as such are unaccredited.

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.

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.
Samples with Matrix Code 7 & 8 are not predominantly a SAND/LOAM/CLAY mix and are not covered by our BSEN 17025 or MCERTS accreditations, with the exception of bulk asbestos which are BSEN 17025 accredited.
Secondary Matrix Codes:
A = contains stones, B = contains construction rubble, C = contains visible hydrocarbons, D = contains glass/metal, E = contains roots/twigs.

Key:
IS indicates Insufficient Sample for analysis.
US indicates Unsuitable Sample for analysis.
NDP indicates No Determination Possible.
NAD indicates No Asbestos Detected.
N/A indicates Not Applicable.
Superscript # indicates method accredited to ISO 17025.
Superscript "M" indicates method accredited to MCERTS.
Subscript "A" indicates analysis performed on the sample as received.
Subscript "D" indicates analysis performed on the dried sample, crushed to pass a 2mm sieve

Please contact us if you need 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: Professional Remediation Ltd, Unit 9,, Rising Bridge Business & Enterprise Village,, Blackburn Road,, Haslingden,, Lancashire,, BB5 2AL

Project: Interchange 26, Oakenshaw

Clients Project No: 21249

Project No: 20/07251

Date Received: 01/09/2020 (am)

Cool Box Temperatures (°C): 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.