

Our Ref: BEK/19661/211115/CGL/P26

15 November 2021

FAO Paul Hunter  
**The Casey Group**  
Rydings Road  
Rochdale  
OL12 9PS

Dear Paul,

**Residential Development at Ilk Street and Alpine Street, Clayton- PLOT 26**

BEK Enviro (BEK) has been commissioned by The Casey Group (CG) to supervise and validate the remediation works required at the above site.

The approved remediation works are detailed in the BEK Report entitled 'Remediation Method Statement' (Report Ref BEK-19661-1 (Rev D)), dated December 2019.

Clean Cover System

The approved remediation requirement comprise the installation of a clean cover system in private gardens and soft landscaped areas as follows:

*'The gardens within Plots 26 to 62 will need to be capped with a minimum of 600 mm of clean suitable soils (minimum 450 mm topsoil overlying 150 mm subsoil). Any soft landscaped areas in the vicinity of Plots 26 to 62 will need to be capped with a minimum of 450 mm of clean suitable soils. Soils used in the capping system will need to be tested and assessed and ensure suitability for use. The soils will be placed on a geo-membrane to act as a marker layer and prevent mixing. Final capping thickness will also need to be validated.'*

To comply with the above recommendations, CG have imported subsoil from Shire Hill Quarry, Glossop. Source testing has been carried out by BEK to confirm suitability (SS-1 to SS-3). Subsoil source test data is presented in Annex A). To ensure consistency, BEK recovered an additional 6 validation samples (VS-SS1 to VS-SS6) of subsoil from the rear garden following formation of the capping layer. There is no formal requirement to test virgin quarried material. However, BEK will maintain a watch brief on the subsoil and take periodic samples at the discretion of our own engineers to ensure visual and chemical consistency of the material.

The topsoil has been sourced the topsoil from Frank O'Gara & Sons from Protos, Ince Marshes in Ellesmere Port. Source test data for the topsoil is presented in Annex A. To ensure consistency, BEK recovered additional validation samples (VS-TS1 to VS-TS10) of topsoil from the rear garden following formation of the capping layer. The most recent results (VS-TS8 to VS-TS10) are included within Annex B.



GEO-ENVIRONMENTAL CONSULTING ENGINEERS

**bEk Enviro Ltd**

Suite One | No 3 Mitton Road Business Park  
Mitton Road | Whalley | Lancashire | BB7 9YE

**01254 377622**

[mbuckley@bekenviron.co.uk](mailto:mbuckley@bekenviron.co.uk) | [bekenviron.co.uk](http://bekenviron.co.uk)

All imported samples recovered by BEK at the Ilk Street and Alpine Street, Clayton site were submitted to the UKAS accredited laboratories of Envirolab and chemically tested for a wide range of potential contaminants of concern. Copies of the chemical test results are presented in Annex B. All available chemical test results have been compared to approved assessment criteria (as presented in the Remediation Strategy) and BEK can confirm that the sub/topsoil is suitable for use in a residential garden.

Following placement of the validated soils by CG, an engineer from BEK carried out spot checks and can confirm that the capping layer for Plot 26 comprises in excess of 600 mm of suitably clean validated soils. The capping soils overly a geotextile membrane at the base. Photographs showing capping thickness are provided within Annex C.

BEK can confirm that the remediation works required for Plot 26 at the Residential Development at Ilk Street and Alpine Street, Clayton have been completed in accordance with the approved methodology.

I trust the above is satisfactory. Should you require anything further please do not hesitate to contact the undersigned.

Yours sincerely

**MICHAEL BUCKLEY**

*BSc (Hons) MSc MEnvSci CEnv*

## ANNEX A

### Source Test Data

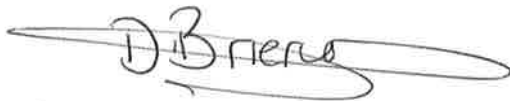
## FINAL ANALYTICAL TEST REPORT

**Envirolab Job Number:** 21/00719  
**Issue Number:** 1  
**Date:** 03 February, 2021

**Client:** BEK Enviro Ltd  
Suite One  
No 3 Mitton Road Business Park  
Mitton Road  
Whalley  
Lancashire  
BB7 9YE

**Project Manager:** Mick Buckley  
**Project Name:** Shire Hill Quarry - Source Test Data - Subsoil  
**Project Ref:** Not specified  
**Order No:** 6981/20685/J  
**Date Samples Received:** 26/01/21  
**Date Instructions Received:** 26/01/21  
**Date Analysis Completed:** 03/02/21

**Prepared by:**



Danielle Brierley  
Client Manager

**Approved by:**



Holly Neary-King  
Client Services Supervisor

Envirolab Job Number: 21/00719

Client Project Name: Shire Hill Quarry - Source Test Data - Subsoil

Client Project Ref: Not specified

| Lab Sample ID                                       | 21/00719/1 | 21/00719/2 | 21/00719/3 |  |  |  |  | Units | Limit of Detection | Method ref  |
|-----------------------------------------------------|------------|------------|------------|--|--|--|--|-------|--------------------|-------------|
| Client Sample No                                    |            |            |            |  |  |  |  |       |                    |             |
| Client Sample ID                                    | SS-1       | SS-2       | SS-3       |  |  |  |  |       |                    |             |
| Depth to Top                                        |            |            |            |  |  |  |  |       |                    |             |
| Depth To Bottom                                     |            |            |            |  |  |  |  |       |                    |             |
| Date Sampled                                        | 26-Jan-21  | 26-Jan-21  | 26-Jan-21  |  |  |  |  |       |                    |             |
| Sample Type                                         | Soil       | Soil       | Soil       |  |  |  |  |       |                    |             |
| Sample Matrix Code                                  | 2A         | 4A         | 4A         |  |  |  |  |       |                    |             |
| % Stones >10mm <sub>A</sub>                         | 28.3       | 26.8       | 25.0       |  |  |  |  | % w/w | 0.1                | A-T-044     |
| pH <sub>D</sub> <sup>M#</sup>                       | 5.36       | 5.27       | 6.01       |  |  |  |  | pH    | 0.01               | A-T-031s    |
| Sulphate (water sol 2:1) <sub>D</sub> <sup>M#</sup> | <0.01      | 0.02       | <0.01      |  |  |  |  | g/l   | 0.01               | A-T-026s    |
| Sulphate (acid soluble) <sub>D</sub> <sup>M#</sup>  | <200       | <200       | <200       |  |  |  |  | mg/kg | 200                | A-T-028s    |
| Cyanide (total) <sub>A</sub> <sup>M#</sup>          | <1         | <1         | <1         |  |  |  |  | mg/kg | 1                  | A-T-042sTCN |
| Phenols - Total by HPLC <sub>A</sub>                | <0.2       | <0.2       | <0.2       |  |  |  |  | mg/kg | 0.2                | A-T-050s    |
| Organic matter <sub>D</sub> <sup>M#</sup>           | 0.4        | 0.4        | 0.5        |  |  |  |  | % w/w | 0.1                | A-T-032 OM  |
| Arsenic <sub>D</sub> <sup>M#</sup>                  | <1         | <1         | <1         |  |  |  |  | mg/kg | 1                  | A-T-024s    |
| Boron (water soluble) <sub>D</sub>                  | <1.0       | <1.0       | <1.0       |  |  |  |  | mg/kg | 1                  | A-T-027s    |
| Cadmium <sub>D</sub> <sup>M#</sup>                  | <0.5       | <0.5       | <0.5       |  |  |  |  | mg/kg | 0.5                | A-T-024s    |
| Copper <sub>D</sub> <sup>M#</sup>                   | 2          | 1          | 4          |  |  |  |  | mg/kg | 1                  | A-T-024s    |
| Chromium <sub>D</sub> <sup>M#</sup>                 | 13         | 12         | 14         |  |  |  |  | mg/kg | 1                  | A-T-024s    |
| Chromium (hexavalent) <sub>D</sub>                  | <1         | <1         | <1         |  |  |  |  | mg/kg | 1                  | A-T-040s    |
| Lead <sub>D</sub> <sup>M#</sup>                     | 7          | 7          | 8          |  |  |  |  | mg/kg | 1                  | A-T-024s    |
| Mercury <sub>D</sub>                                | <0.17      | <0.17      | <0.17      |  |  |  |  | mg/kg | 0.17               | A-T-024s    |
| Nickel <sub>D</sub> <sup>M#</sup>                   | 13         | 12         | 15         |  |  |  |  | mg/kg | 1                  | A-T-024s    |
| Selenium <sub>D</sub> <sup>M#</sup>                 | <1         | <1         | <1         |  |  |  |  | mg/kg | 1                  | A-T-024s    |
| Zinc <sub>D</sub> <sup>M#</sup>                     | 45         | 42         | 47         |  |  |  |  | mg/kg | 5                  | A-T-024s    |

Envirolab Job Number: 21/00719

Client Project Name: Shire Hill Quarry - Source Test Data - Subsoil

Client Project Ref: Not specified

| Lab Sample ID                                    | 21/00719/1 | 21/00719/2 | 21/00719/3 |  |  |  |  | Units | Limit of Detection | Method ref |
|--------------------------------------------------|------------|------------|------------|--|--|--|--|-------|--------------------|------------|
| Client Sample No                                 |            |            |            |  |  |  |  |       |                    |            |
| Client Sample ID                                 | SS-1       | SS-2       | SS-3       |  |  |  |  |       |                    |            |
| Depth to Top                                     |            |            |            |  |  |  |  |       |                    |            |
| Depth To Bottom                                  |            |            |            |  |  |  |  |       |                    |            |
| Date Sampled                                     | 26-Jan-21  | 26-Jan-21  | 26-Jan-21  |  |  |  |  |       |                    |            |
| Sample Type                                      | Soil       | Soil       | Soil       |  |  |  |  |       |                    |            |
| Sample Matrix Code                               | 2A         | 4A         | 4A         |  |  |  |  |       |                    |            |
| <b>PAH-16MS</b>                                  |            |            |            |  |  |  |  |       |                    |            |
| Acenaphthene <sub>A</sub> <sup>M#</sup>          | <0.01      | <0.01      | <0.01      |  |  |  |  | mg/kg | 0.01               | A-T-019s   |
| Acenaphthylene <sub>A</sub> <sup>M#</sup>        | <0.01      | <0.01      | <0.01      |  |  |  |  | mg/kg | 0.01               | A-T-019s   |
| Anthracene <sub>A</sub> <sup>M#</sup>            | <0.02      | <0.02      | <0.02      |  |  |  |  | mg/kg | 0.02               | A-T-019s   |
| Benzo(a)anthracene <sub>A</sub> <sup>M#</sup>    | <0.04      | <0.04      | <0.04      |  |  |  |  | mg/kg | 0.04               | A-T-019s   |
| Benzo(a)pyrene <sub>A</sub> <sup>M#</sup>        | <0.04      | <0.04      | 0.04       |  |  |  |  | mg/kg | 0.04               | A-T-019s   |
| Benzo(b)fluoranthene <sub>A</sub> <sup>M#</sup>  | <0.05      | <0.05      | <0.05      |  |  |  |  | mg/kg | 0.05               | A-T-019s   |
| Benzo(ghi)perylene <sub>A</sub> <sup>M#</sup>    | <0.05      | <0.05      | <0.05      |  |  |  |  | mg/kg | 0.05               | A-T-019s   |
| Benzo(k)fluoranthene <sub>A</sub> <sup>M#</sup>  | <0.07      | <0.07      | <0.07      |  |  |  |  | mg/kg | 0.07               | A-T-019s   |
| Chrysene <sub>A</sub> <sup>M#</sup>              | <0.06      | <0.06      | <0.06      |  |  |  |  | mg/kg | 0.06               | A-T-019s   |
| Dibenzo(ah)anthracene <sub>A</sub> <sup>M#</sup> | <0.04      | <0.04      | <0.04      |  |  |  |  | mg/kg | 0.04               | A-T-019s   |
| Fluoranthene <sub>A</sub> <sup>M#</sup>          | <0.08      | <0.08      | <0.08      |  |  |  |  | mg/kg | 0.08               | A-T-019s   |
| Fluorene <sub>A</sub> <sup>M#</sup>              | <0.01      | <0.01      | <0.01      |  |  |  |  | mg/kg | 0.01               | A-T-019s   |
| Indeno(123-cd)pyrene <sub>A</sub> <sup>M#</sup>  | <0.03      | <0.03      | <0.03      |  |  |  |  | mg/kg | 0.03               | A-T-019s   |
| Naphthalene <sub>A</sub> <sup>M#</sup>           | <0.03      | <0.03      | <0.03      |  |  |  |  | mg/kg | 0.03               | A-T-019s   |
| Phenanthrene <sub>A</sub> <sup>M#</sup>          | <0.03      | <0.03      | 0.03       |  |  |  |  | mg/kg | 0.03               | A-T-019s   |
| Pyrene <sub>A</sub> <sup>M#</sup>                | <0.07      | <0.07      | <0.07      |  |  |  |  | mg/kg | 0.07               | A-T-019s   |
| Total PAH-16MS <sub>A</sub> <sup>M#</sup>        | <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 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°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 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°C / 11550µS/cm @ 20°C 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

|                            |                                                                                                              |                                    |                 |
|----------------------------|--------------------------------------------------------------------------------------------------------------|------------------------------------|-----------------|
| <b>Client:</b>             | BEK Enviro Ltd, Suite One , No 3 Mitton Road Business Park , Mitton Road ,<br>Whalley , Lancashire , BB7 9YE | <b>Project No:</b>                 | 21/00719        |
| <b>Project:</b>            | Shire Hill Quarry - Source Test Data - Subsoil                                                               | <b>Date Received:</b>              | 26/01/2021 (am) |
| <b>Clients Project No:</b> |                                                                                                              | <b>Cool Box Temperatures (°C):</b> | 5.4             |

### 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.

## FINAL ANALYTICAL TEST REPORT

**Envirolab Job Number:** 21/04268  
**Issue Number:** 1  
**Date:** 06 May, 2021

**Client:** Frank O'Gara & Sons Ltd,  
Sorby Road,  
Northbank  
Irlam  
Manchester  
UK  
M44 5BA

**Project Manager:** John O'Gara/Keith Lewis  
**Project Name:** Protos, E'Port  
**Project Ref:** N/A  
**Order No:** PP57816  
**Date Samples Received:** 21/04/21  
**Date Instructions Received:** 22/04/21  
**Date Analysis Completed:** 05/05/21

**Prepared by:**



Melanie Marshall  
Laboratory Coordinator

**Approved by:**



Danielle Brierley  
Client Manager

Envirolab Job Number: 21/04268

Client Project Name: Protos, E'Port

Client Project Ref: N/A

| Lab Sample ID                                                 | 21/04268/1 | 21/04268/2 | 21/04268/3 |  |  |  |  | Units | Limit of Detection | Method ref  |
|---------------------------------------------------------------|------------|------------|------------|--|--|--|--|-------|--------------------|-------------|
| Client Sample No                                              |            |            |            |  |  |  |  |       |                    |             |
| Client Sample ID                                              | Topsoil 1  | Topsoil 2  | Topsoil 3  |  |  |  |  |       |                    |             |
| Depth to Top                                                  |            |            |            |  |  |  |  |       |                    |             |
| Depth To Bottom                                               |            |            |            |  |  |  |  |       |                    |             |
| Date Sampled                                                  | 21-Apr-21  | 21-Apr-21  | 21-Apr-21  |  |  |  |  |       |                    |             |
| Sample Type                                                   | Soil - ES  | Soil - ES  | Soil - ES  |  |  |  |  |       |                    |             |
| Sample Matrix Code                                            | 4AE        | 4AE        | 4AE        |  |  |  |  |       |                    |             |
| % Stones >10mm <sub>A</sub>                                   | 3.8        | 7.3        | <0.1       |  |  |  |  | % w/w | 0.1                | A-T-044     |
| pH <sub>D</sub> <sup>M#</sup>                                 | 6.73       | 6.60       | 6.74       |  |  |  |  | pH    | 0.01               | A-T-031s    |
| Ammonia / Ammoniacal Nitrogen as NH <sub>3</sub> <sub>D</sub> | 14.6       | 20.1       | 15.7       |  |  |  |  | mg/kg | 0.24               | A-T-033s    |
| Chloride (water sol 2:1) <sub>D</sub> <sup>M#</sup>           | <10        | <10        | <10        |  |  |  |  | mg/kg | 10                 | A-T-026s    |
| Sulphate (water sol 2:1) <sub>D</sub> <sup>M#</sup>           | <0.01      | <0.01      | <0.01      |  |  |  |  | g/l   | 0.01               | A-T-026s    |
| Sulphate (acid soluble) <sub>D</sub> <sup>M#</sup>            | 340        | 340        | 360        |  |  |  |  | mg/kg | 200                | A-T-028s    |
| Cyanide (free) <sub>A</sub> <sup>M#</sup>                     | <1         | <1         | <1         |  |  |  |  | mg/kg | 1                  | A-T-042sFCN |
| Arsenic <sub>D</sub> <sup>M#</sup>                            | 3          | 3          | 3          |  |  |  |  | mg/kg | 1                  | A-T-024s    |
| Cadmium <sub>D</sub> <sup>M#</sup>                            | <0.5       | <0.5       | <0.5       |  |  |  |  | mg/kg | 0.5                | A-T-024s    |
| Copper <sub>D</sub> <sup>M#</sup>                             | 13         | 12         | 13         |  |  |  |  | mg/kg | 1                  | A-T-024s    |
| Chromium <sub>D</sub> <sup>M#</sup>                           | 15         | 15         | 16         |  |  |  |  | mg/kg | 1                  | A-T-024s    |
| Lead <sub>D</sub> <sup>M#</sup>                               | 26         | 20         | 22         |  |  |  |  | mg/kg | 1                  | A-T-024s    |
| Mercury <sub>D</sub>                                          | <0.17      | <0.17      | <0.17      |  |  |  |  | mg/kg | 0.17               | A-T-024s    |
| Nickel <sub>D</sub> <sup>M#</sup>                             | 11         | 10         | 10         |  |  |  |  | mg/kg | 1                  | A-T-024s    |
| Selenium <sub>D</sub> <sup>M#</sup>                           | <1         | <1         | <1         |  |  |  |  | mg/kg | 1                  | A-T-024s    |
| Zinc <sub>D</sub> <sup>M#</sup>                               | 35         | 32         | 35         |  |  |  |  | mg/kg | 5                  | A-T-024s    |
| TPH total (>C6-C40) <sub>A</sub> <sup>M#</sup>                | 25         | 48         | 59         |  |  |  |  | mg/kg | 10                 | A-T-007s    |

Envirolab Job Number: 21/04268

Client Project Name: Protos, E'Port

Client Project Ref: N/A

|                                                                 |            |            |            |  |  |  |  |       |                    |            |
|-----------------------------------------------------------------|------------|------------|------------|--|--|--|--|-------|--------------------|------------|
| Lab Sample ID                                                   | 21/04268/1 | 21/04268/2 | 21/04268/3 |  |  |  |  | Units | Limit of Detection | Method ref |
| Client Sample No                                                |            |            |            |  |  |  |  |       |                    |            |
| Client Sample ID                                                | Topsoil 1  | Topsoil 2  | Topsoil 3  |  |  |  |  |       |                    |            |
| Depth to Top                                                    |            |            |            |  |  |  |  |       |                    |            |
| Depth To Bottom                                                 |            |            |            |  |  |  |  |       |                    |            |
| Date Sampled                                                    | 21-Apr-21  | 21-Apr-21  | 21-Apr-21  |  |  |  |  |       |                    |            |
| Sample Type                                                     | Soil - ES  | Soil - ES  | Soil - ES  |  |  |  |  |       |                    |            |
| Sample Matrix Code                                              | 4AE        | 4AE        | 4AE        |  |  |  |  |       |                    |            |
| Asbestos in Soil (inc. matrix)                                  |            |            |            |  |  |  |  |       |                    |            |
| Asbestos in soil <sup>#</sup>                                   | NAD        | NAD        | NAD        |  |  |  |  |       |                    | A-T-045    |
| Asbestos ACM - Suitable for Water Absorption Test? <sub>D</sub> | N/A        | N/A        | N/A        |  |  |  |  |       |                    | A-T-045    |

Envirolab Job Number: 21/04268

Client Project Name: Protos, E'Port

Client Project Ref: N/A

| Lab Sample ID                                    | 21/04268/1 | 21/04268/2 | 21/04268/3 |  |  |  |  | Units | Limit of Detection | Method ref |
|--------------------------------------------------|------------|------------|------------|--|--|--|--|-------|--------------------|------------|
| Client Sample No                                 |            |            |            |  |  |  |  |       |                    |            |
| Client Sample ID                                 | Topsoil 1  | Topsoil 2  | Topsoil 3  |  |  |  |  |       |                    |            |
| Depth to Top                                     |            |            |            |  |  |  |  |       |                    |            |
| Depth To Bottom                                  |            |            |            |  |  |  |  |       |                    |            |
| Date Sampled                                     | 21-Apr-21  | 21-Apr-21  | 21-Apr-21  |  |  |  |  |       |                    |            |
| Sample Type                                      | Soil - ES  | Soil - ES  | Soil - ES  |  |  |  |  |       |                    |            |
| Sample Matrix Code                               | 4AE        | 4AE        | 4AE        |  |  |  |  |       |                    |            |
| PAH-16MS                                         |            |            |            |  |  |  |  |       |                    |            |
| Acenaphthene <sub>A</sub> <sup>M#</sup>          | <0.01      | <0.01      | <0.01      |  |  |  |  | mg/kg | 0.01               | A-T-019s   |
| Acenaphthylene <sub>A</sub> <sup>M#</sup>        | <0.01      | <0.01      | <0.01      |  |  |  |  | mg/kg | 0.01               | A-T-019s   |
| Anthracene <sub>A</sub> <sup>M#</sup>            | <0.02      | <0.02      | <0.02      |  |  |  |  | mg/kg | 0.02               | A-T-019s   |
| Benzo(a)anthracene <sub>A</sub> <sup>M#</sup>    | <0.04      | <0.04      | <0.04      |  |  |  |  | mg/kg | 0.04               | A-T-019s   |
| Benzo(a)pyrene <sub>A</sub> <sup>M#</sup>        | <0.04      | <0.04      | <0.04      |  |  |  |  | mg/kg | 0.04               | A-T-019s   |
| Benzo(b)fluoranthene <sub>A</sub> <sup>M#</sup>  | <0.05      | <0.05      | <0.05      |  |  |  |  | mg/kg | 0.05               | A-T-019s   |
| Benzo(ghi)perylene <sub>A</sub> <sup>M#</sup>    | <0.05      | <0.05      | <0.05      |  |  |  |  | mg/kg | 0.05               | A-T-019s   |
| Benzo(k)fluoranthene <sub>A</sub> <sup>M#</sup>  | <0.07      | <0.07      | <0.07      |  |  |  |  | mg/kg | 0.07               | A-T-019s   |
| Chrysene <sub>A</sub> <sup>M#</sup>              | <0.06      | <0.06      | <0.06      |  |  |  |  | mg/kg | 0.06               | A-T-019s   |
| Dibenzo(ah)anthracene <sub>A</sub> <sup>M#</sup> | <0.04      | <0.04      | <0.04      |  |  |  |  | mg/kg | 0.04               | A-T-019s   |
| Fluoranthene <sub>A</sub> <sup>M#</sup>          | <0.08      | <0.08      | <0.08      |  |  |  |  | mg/kg | 0.08               | A-T-019s   |
| Fluorene <sub>A</sub> <sup>M#</sup>              | <0.01      | <0.01      | <0.01      |  |  |  |  | mg/kg | 0.01               | A-T-019s   |
| Indeno(123-cd)pyrene <sub>A</sub> <sup>M#</sup>  | <0.03      | <0.03      | <0.03      |  |  |  |  | mg/kg | 0.03               | A-T-019s   |
| Naphthalene <sub>A</sub> <sup>M#</sup>           | <0.03      | <0.03      | <0.03      |  |  |  |  | mg/kg | 0.03               | A-T-019s   |
| Phenanthrene <sub>A</sub> <sup>M#</sup>          | <0.03      | <0.03      | <0.03      |  |  |  |  | mg/kg | 0.03               | A-T-019s   |
| Pyrene <sub>A</sub> <sup>M#</sup>                | <0.07      | <0.07      | <0.07      |  |  |  |  | mg/kg | 0.07               | A-T-019s   |
| Total PAH-16MS <sub>A</sub> <sup>M#</sup>        | <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 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°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 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°C / 11550µS/cm @ 20°C 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

|                            |                                                                            |                                    |                 |
|----------------------------|----------------------------------------------------------------------------|------------------------------------|-----------------|
| <b>Client:</b>             | Frank O'Gara & Sons Ltd, Sorby Road, Northbank, Irlam, Manchester, UK, M44 | <b>Project No:</b>                 | 21/04268        |
|                            | 5BA                                                                        | <b>Date Received:</b>              | 22/04/2021 (am) |
| <b>Project:</b>            | Protos, E'Port                                                             | <b>Cool Box Temperatures (°C):</b> | 14.9            |
| <b>Clients Project No:</b> | N/A                                                                        |                                    |                 |

### 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.

## ANNEX B

### Validation Chemical Test Results

## FINAL ANALYTICAL TEST REPORT

**Envirolab Job Number:** 21/09690  
**Issue Number:** 1

**Date:** 17 September, 2021

**Client:** BEK Enviro Ltd  
Suite One  
No 3 Mitton Road Business Park  
Mitton Road  
Whalley  
Lancashire  
BB7 9YE

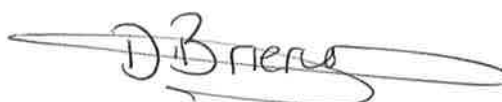
**Project Manager:** Mick Buckley  
**Project Name:** Ilk Street, Clayton  
**Project Ref:** Not specified  
**Order No:** 7221-19661-M  
**Date Samples Received:** 07/09/21  
**Date Instructions Received:** 07/09/21  
**Date Analysis Completed:** 17/09/21

**Prepared by:**



Richard Wong  
Client Manager

**Approved by:**



Danielle Brierley  
Client Manager

Envirolab Job Number: 21/09690

Client Project Name: Ilk Street, Clayton

Client Project Ref: Not specified

| Lab Sample ID                                       | 21/09690/1 | 21/09690/2 | 21/09690/3 | 21/09690/4 | 21/09690/5 | 21/09690/6 |  | Units | Limit of Detection | Method ref  |
|-----------------------------------------------------|------------|------------|------------|------------|------------|------------|--|-------|--------------------|-------------|
| Client Sample No                                    |            |            |            |            |            |            |  |       |                    |             |
| Client Sample ID                                    | VS-SS1     | VS-SS2     | VS-SS3     | VS-SS4     | VS-SS5     | VS-SS6     |  |       |                    |             |
| Depth to Top                                        |            |            |            |            |            |            |  |       |                    |             |
| Depth To Bottom                                     |            |            |            |            |            |            |  |       |                    |             |
| Date Sampled                                        | 06-Sep-21  | 06-Sep-21  | 06-Sep-21  | 06-Sep-21  | 06-Sep-21  | 06-Sep-21  |  |       |                    |             |
| Sample Type                                         | Solid      | Solid      | Solid      | Solid      | Solid      | Solid      |  |       |                    |             |
| Sample Matrix Code                                  | 7          | 7          | 7          | 7          | 7          | 7          |  |       |                    |             |
| % Stones >10mm <sub>A</sub>                         | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       |  | % w/w | 0.1                | A-T-044     |
| pH <sub>D</sub> <sup>M#</sup>                       | 7.21       | 6.80       | 6.83       | 6.50       | 6.60       | 6.72       |  | pH    | 0.01               | A-T-031s    |
| Sulphate (water sol 2:1) <sub>D</sub> <sup>M#</sup> | <0.01      | 0.03       | 0.08       | 0.09       | 0.08       | 0.05       |  | g/l   | 0.01               | A-T-026s    |
| Sulphate (acid soluble) <sub>D</sub> <sup>M#</sup>  | 1000       | 850        | 880        | 1100       | 880        | 730        |  | mg/kg | 200                | A-T-028s    |
| Cyanide (total) <sub>A</sub> <sup>M#</sup>          | <1         | <1         | <1         | <1         | <1         | <1         |  | mg/kg | 1                  | A-T-042sTCN |
| Phenols - Total by HPLC <sub>A</sub>                | <0.2       | <0.2       | <0.2       | <0.2       | <0.2       | <0.2       |  | mg/kg | 0.2                | A-T-050s    |
| Organic matter <sub>D</sub> <sup>M#</sup>           | 5.4        | 5.7        | 4.1        | 4.4        | 4.2        | 4.6        |  | % w/w | 0.1                | A-T-032 OM  |
| Arsenic <sub>D</sub> <sup>M#</sup>                  | 6          | 9          | 4          | 2          | 2          | 6          |  | mg/kg | 1                  | A-T-024s    |
| Boron (water soluble) <sub>D</sub>                  | <1.0       | <1.0       | <1.0       | <1.0       | <1.0       | <1.0       |  | mg/kg | 1                  | A-T-027s    |
| Cadmium <sub>D</sub> <sup>M#</sup>                  | 1.6        | 1.4        | 1.3        | 1.3        | 1.4        | 1.4        |  | mg/kg | 0.5                | A-T-024s    |
| Copper <sub>D</sub> <sup>M#</sup>                   | 56         | 51         | 45         | 49         | 52         | 52         |  | mg/kg | 1                  | A-T-024s    |
| Chromium <sub>D</sub> <sup>M#</sup>                 | 28         | 33         | 25         | 26         | 28         | 24         |  | mg/kg | 1                  | A-T-024s    |
| Chromium (hexavalent) <sub>D</sub>                  | <1         | <1         | <1         | <1         | <1         | <1         |  | mg/kg | 1                  | A-T-040s    |
| Lead <sub>D</sub> <sup>M#</sup>                     | 38         | 30         | 27         | 34         | 33         | 29         |  | mg/kg | 1                  | A-T-024s    |
| Mercury <sub>D</sub>                                | <0.17      | <0.17      | <0.17      | <0.17      | <0.17      | <0.17      |  | mg/kg | 0.17               | A-T-024s    |
| Nickel <sub>D</sub> <sup>M#</sup>                   | 51         | 59         | 45         | 47         | 49         | 46         |  | mg/kg | 1                  | A-T-024s    |
| Selenium <sub>D</sub> <sup>M#</sup>                 | <1         | <1         | <1         | <1         | <1         | <1         |  | mg/kg | 1                  | A-T-024s    |
| Zinc <sub>D</sub> <sup>M#</sup>                     | 109        | 119        | 96         | 95         | 98         | 100        |  | mg/kg | 5                  | A-T-024s    |

Envirolab Job Number: 21/09690

Client Project Name: Ilk Street, Clayton

Client Project Ref: Not specified

|                                                                 |            |            |            |            |            |            |  |       |                    |            |
|-----------------------------------------------------------------|------------|------------|------------|------------|------------|------------|--|-------|--------------------|------------|
| Lab Sample ID                                                   | 21/09690/1 | 21/09690/2 | 21/09690/3 | 21/09690/4 | 21/09690/5 | 21/09690/6 |  | Units | Limit of Detection | Method ref |
| Client Sample No                                                |            |            |            |            |            |            |  |       |                    |            |
| Client Sample ID                                                | VS-SS1     | VS-SS2     | VS-SS3     | VS-SS4     | VS-SS5     | VS-SS6     |  |       |                    |            |
| Depth to Top                                                    |            |            |            |            |            |            |  |       |                    |            |
| Depth To Bottom                                                 |            |            |            |            |            |            |  |       |                    |            |
| Date Sampled                                                    | 06-Sep-21  | 06-Sep-21  | 06-Sep-21  | 06-Sep-21  | 06-Sep-21  | 06-Sep-21  |  |       |                    |            |
| Sample Type                                                     | Solid      | Solid      | Solid      | Solid      | Solid      | Solid      |  |       |                    |            |
| Sample Matrix Code                                              | 7          | 7          | 7          | 7          | 7          | 7          |  |       |                    |            |
| Asbestos in Soil (inc. matrix)                                  |            |            |            |            |            |            |  |       |                    |            |
| Asbestos in soil <sup>#</sup>                                   | NAD        | NAD        | NAD        | NAD        | NAD        | NAD        |  |       |                    | A-T-045    |
| Asbestos ACM - Suitable for Water Absorption Test? <sub>D</sub> | N/A        | N/A        | N/A        | N/A        | N/A        | N/A        |  |       |                    | A-T-045    |

Envirolab Job Number: 21/09690

Client Project Name: Ilk Street, Clayton

Client Project Ref: Not specified

| Lab Sample ID                                    | 21/09690/1 | 21/09690/2 | 21/09690/3 | 21/09690/4 | 21/09690/5 | 21/09690/6 |  | Units | Limit of Detection | Method ref |
|--------------------------------------------------|------------|------------|------------|------------|------------|------------|--|-------|--------------------|------------|
| Client Sample No                                 |            |            |            |            |            |            |  |       |                    |            |
| Client Sample ID                                 | VS-SS1     | VS-SS2     | VS-SS3     | VS-SS4     | VS-SS5     | VS-SS6     |  |       |                    |            |
| Depth to Top                                     |            |            |            |            |            |            |  |       |                    |            |
| Depth To Bottom                                  |            |            |            |            |            |            |  |       |                    |            |
| Date Sampled                                     | 06-Sep-21  | 06-Sep-21  | 06-Sep-21  | 06-Sep-21  | 06-Sep-21  | 06-Sep-21  |  |       |                    |            |
| Sample Type                                      | Solid      | Solid      | Solid      | Solid      | Solid      | Solid      |  |       |                    |            |
| Sample Matrix Code                               | 7          | 7          | 7          | 7          | 7          | 7          |  |       |                    |            |
| PAH-16MS                                         |            |            |            |            |            |            |  |       |                    |            |
| Acenaphthene <sub>A</sub> <sup>M#</sup>          | <0.01      | <0.01      | <0.01      | <0.01      | <0.01      | 0.02       |  | mg/kg | 0.01               | A-T-019s   |
| Acenaphthylene <sub>A</sub> <sup>M#</sup>        | <0.01      | <0.01      | <0.01      | <0.01      | <0.01      | <0.01      |  | mg/kg | 0.01               | A-T-019s   |
| Anthracene <sub>A</sub> <sup>M#</sup>            | <0.02      | <0.02      | <0.02      | <0.02      | <0.02      | 0.02       |  | mg/kg | 0.02               | A-T-019s   |
| Benzo(a)anthracene <sub>A</sub> <sup>M#</sup>    | <0.04      | <0.04      | <0.04      | <0.04      | <0.04      | 0.15       |  | mg/kg | 0.04               | A-T-019s   |
| Benzo(a)pyrene <sub>A</sub> <sup>M#</sup>        | <0.04      | <0.04      | <0.04      | <0.04      | <0.04      | 0.18       |  | mg/kg | 0.04               | A-T-019s   |
| Benzo(b)fluoranthene <sub>A</sub> <sup>M#</sup>  | <0.05      | <0.05      | <0.05      | <0.05      | <0.05      | 0.18       |  | mg/kg | 0.05               | A-T-019s   |
| Benzo(ghi)perylene <sub>A</sub> <sup>M#</sup>    | <0.05      | <0.05      | <0.05      | <0.05      | <0.05      | 0.09       |  | mg/kg | 0.05               | A-T-019s   |
| Benzo(k)fluoranthene <sub>A</sub> <sup>M#</sup>  | <0.07      | <0.07      | <0.07      | <0.07      | <0.07      | <0.07      |  | mg/kg | 0.07               | A-T-019s   |
| Chrysene <sub>A</sub> <sup>M#</sup>              | <0.06      | <0.06      | <0.06      | <0.06      | <0.06      | 0.20       |  | mg/kg | 0.06               | A-T-019s   |
| Dibenzo(ah)anthracene <sub>A</sub> <sup>M#</sup> | <0.04      | <0.04      | <0.04      | <0.04      | <0.04      | <0.04      |  | mg/kg | 0.04               | A-T-019s   |
| Fluoranthene <sub>A</sub> <sup>M#</sup>          | <0.08      | <0.08      | <0.08      | <0.08      | <0.08      | 0.26       |  | mg/kg | 0.08               | A-T-019s   |
| Fluorene <sub>A</sub> <sup>M#</sup>              | <0.01      | <0.01      | <0.01      | <0.01      | <0.01      | 0.01       |  | mg/kg | 0.01               | A-T-019s   |
| Indeno(123-cd)pyrene <sub>A</sub> <sup>M#</sup>  | <0.03      | <0.03      | <0.03      | <0.03      | <0.03      | 0.10       |  | mg/kg | 0.03               | A-T-019s   |
| Naphthalene <sub>A</sub> <sup>M#</sup>           | <0.03      | <0.03      | <0.03      | <0.03      | <0.03      | <0.03      |  | mg/kg | 0.03               | A-T-019s   |
| Phenanthrene <sub>A</sub> <sup>M#</sup>          | 0.08       | 0.07       | 0.06       | 0.06       | 0.06       | 0.13       |  | mg/kg | 0.03               | A-T-019s   |
| Pyrene <sub>A</sub> <sup>M#</sup>                | <0.07      | <0.07      | <0.07      | <0.07      | <0.07      | 0.25       |  | mg/kg | 0.07               | A-T-019s   |
| Total PAH-16MS <sub>A</sub> <sup>M#</sup>        | 0.08       | <0.08      | <0.08      | <0.08      | <0.08      | 1.59       |  | mg/kg | 0.01               | A-T-019s   |

Envirolab Job Number: 21/09690

Client Project Name: Ilk Street, Clayton

Client Project Ref: Not specified

| Lab Sample ID                                  | 21/09690/1 | 21/09690/2 | 21/09690/3 | 21/09690/4 | 21/09690/5 | 21/09690/6 |  | Units | Limit of Detection | Method ref |
|------------------------------------------------|------------|------------|------------|------------|------------|------------|--|-------|--------------------|------------|
| Client Sample No                               |            |            |            |            |            |            |  |       |                    |            |
| Client Sample ID                               | VS-SS1     | VS-SS2     | VS-SS3     | VS-SS4     | VS-SS5     | VS-SS6     |  |       |                    |            |
| Depth to Top                                   |            |            |            |            |            |            |  |       |                    |            |
| Depth To Bottom                                |            |            |            |            |            |            |  |       |                    |            |
| Date Sampled                                   | 06-Sep-21  | 06-Sep-21  | 06-Sep-21  | 06-Sep-21  | 06-Sep-21  | 06-Sep-21  |  |       |                    |            |
| Sample Type                                    | Solid      | Solid      | Solid      | Solid      | Solid      | Solid      |  |       |                    |            |
| Sample Matrix Code                             | 7          | 7          | 7          | 7          | 7          | 7          |  |       |                    |            |
| TPH CWG                                        |            |            |            |            |            |            |  |       |                    |            |
| Ali >C5-C6 <sub>A</sub> <sup>#</sup>           | <0.05      | <0.05      | <0.05      | <0.05      | <0.05      | <0.05      |  | mg/kg | 0.01               | A-T-022s   |
| Ali >C6-C8 <sub>A</sub> <sup>#</sup>           | <0.05      | <0.05      | <0.05      | <0.05      | <0.05      | <0.05      |  | mg/kg | 0.01               | A-T-022s   |
| Ali >C8-C10 <sub>A</sub>                       | 5          | 5          | 4          | 4          | 4          | 2          |  | mg/kg | 1                  | A-T-055s   |
| Ali >C10-C12 <sub>A</sub> <sup>M#</sup>        | 13         | 15         | 14         | 14         | 12         | 5          |  | mg/kg | 1                  | A-T-055s   |
| Ali >C12-C16 <sub>A</sub> <sup>M#</sup>        | 29         | 39         | 34         | 37         | 32         | 13         |  | mg/kg | 1                  | A-T-055s   |
| Ali >C16-C21 <sub>A</sub> <sup>M#</sup>        | 26         | 37         | 32         | 34         | 30         | 10         |  | mg/kg | 1                  | A-T-055s   |
| Ali >C21-C35 <sub>A</sub> <sup>M#</sup>        | 36         | 45         | 44         | 43         | 40         | 20         |  | mg/kg | 1                  | A-T-055s   |
| Total Aliphatics <sub>A</sub>                  | 109        | 140        | 129        | 131        | 119        | 50         |  | mg/kg | 1                  | A-T-055s   |
| Aro >C5-C7 <sub>A</sub> <sup>#</sup>           | <0.05      | <0.05      | <0.05      | <0.05      | <0.05      | <0.05      |  | mg/kg | 0.01               | A-T-022s   |
| Aro >C7-C8 <sub>A</sub> <sup>#</sup>           | <0.05      | <0.05      | <0.05      | <0.05      | <0.05      | <0.05      |  | mg/kg | 0.01               | A-T-022s   |
| Aro >C8-C10 <sub>A</sub>                       | 2          | 2          | 2          | 2          | 2          | 1          |  | mg/kg | 1                  | A-T-055s   |
| Aro >C10-C12 <sub>A</sub>                      | 4          | 4          | 4          | 4          | 3          | 2          |  | mg/kg | 1                  | A-T-055s   |
| Aro >C12-C16 <sub>A</sub>                      | 8          | 10         | 9          | 9          | 8          | 4          |  | mg/kg | 1                  | A-T-055s   |
| Aro >C16-C21 <sub>A</sub> <sup>M#</sup>        | 7          | 9          | 8          | 8          | 7          | 5          |  | mg/kg | 1                  | A-T-055s   |
| Aro >C21-C35 <sub>A</sub> <sup>M#</sup>        | 8          | 12         | 11         | 11         | 10         | 21         |  | mg/kg | 1                  | A-T-055s   |
| Total Aromatics <sub>A</sub>                   | 30         | 38         | 36         | 35         | 31         | 34         |  | mg/kg | 1                  | A-T-055s   |
| TPH (Ali & Aro >C5-C35) <sub>A</sub>           | 140        | 178        | 164        | 166        | 150        | 84         |  | mg/kg | 1                  | A-T-055s   |
| BTEX - Benzene <sub>A</sub> <sup>#</sup>       | <0.05      | <0.05      | <0.05      | <0.05      | <0.05      | <0.05      |  | mg/kg | 0.01               | A-T-022s   |
| BTEX - Toluene <sub>A</sub> <sup>#</sup>       | <0.05      | <0.05      | <0.05      | <0.05      | <0.05      | <0.05      |  | mg/kg | 0.01               | A-T-022s   |
| BTEX - Ethyl Benzene <sub>A</sub> <sup>#</sup> | <0.05      | <0.05      | <0.05      | <0.05      | <0.05      | <0.05      |  | mg/kg | 0.01               | A-T-022s   |
| BTEX - m & p Xylene <sub>A</sub> <sup>#</sup>  | <0.05      | <0.05      | <0.05      | <0.05      | <0.05      | <0.05      |  | mg/kg | 0.01               | A-T-022s   |
| BTEX - o Xylene <sub>A</sub> <sup>#</sup>      | <0.05      | <0.05      | <0.05      | <0.05      | <0.05      | <0.05      |  | mg/kg | 0.01               | A-T-022s   |
| MTBE <sub>A</sub> <sup>#</sup>                 | <0.05      | <0.05      | <0.05      | <0.05      | <0.05      | <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 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°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 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°C / 11550µS/cm @ 20°C 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, 9 = INCINERATOR ASH.

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

|                            |                                                                                                              |                                    |                 |
|----------------------------|--------------------------------------------------------------------------------------------------------------|------------------------------------|-----------------|
| <b>Client:</b>             | BEK Enviro Ltd, Suite One , No 3 Mitton Road Business Park , Mitton Road ,<br>Whalley , Lancashire , BB7 9YE | <b>Project No:</b>                 | 21/09690        |
| <b>Project:</b>            | Ilk Street, Clayton                                                                                          | <b>Date Received:</b>              | 07/09/2021 (am) |
| <b>Clients Project No:</b> |                                                                                                              | <b>Cool Box Temperatures (°C):</b> | 20.6            |

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  $5 \pm 3^{\circ}\text{C}$ ), 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          | 21/09690/1 | 21/09690/2 | 21/09690/3 | 21/09690/4 | 21/09690/5 | 21/09690/6 |
|------------------------|------------|------------|------------|------------|------------|------------|
| Client Sample No       |            |            |            |            |            |            |
| Client Sample ID/Depth | VS-SS1     | VS-SS2     | VS-SS3     | VS-SS4     | VS-SS5     | VS-SS6     |
| Date Sampled           | 06/09/21   | 06/09/21   | 06/09/21   | 06/09/21   | 06/09/21   | 06/09/21   |
| A-T-019s               | 14/09/2021 | 14/09/2021 | 14/09/2021 | 14/09/2021 | 14/09/2021 | 14/09/2021 |
| A-T-022s               | 16/09/2021 | 16/09/2021 | 16/09/2021 | 16/09/2021 | 16/09/2021 | 16/09/2021 |
| A-T-024s               | 17/09/2021 | 17/09/2021 | 17/09/2021 | 17/09/2021 | 17/09/2021 | 17/09/2021 |
| A-T-026s               | 16/09/2021 | 16/09/2021 | 16/09/2021 | 16/09/2021 | 16/09/2021 | 16/09/2021 |
| A-T-027s               | 16/09/2021 | 16/09/2021 | 16/09/2021 | 16/09/2021 | 16/09/2021 | 16/09/2021 |
| A-T-028s               | 17/09/2021 | 17/09/2021 | 17/09/2021 | 17/09/2021 | 17/09/2021 | 17/09/2021 |
| A-T-031s               | 16/09/2021 | 16/09/2021 | 16/09/2021 | 16/09/2021 | 16/09/2021 | 16/09/2021 |
| A-T-032 OM             | 16/09/2021 | 16/09/2021 | 16/09/2021 | 16/09/2021 | 16/09/2021 | 16/09/2021 |
| A-T-040s               | 16/09/2021 | 16/09/2021 | 16/09/2021 | 16/09/2021 | 16/09/2021 | 16/09/2021 |
| A-T-042sTCN            | 10/09/2021 | 10/09/2021 | 10/09/2021 | 10/09/2021 | 10/09/2021 | 10/09/2021 |
| A-T-044                | 15/09/2021 | 15/09/2021 | 15/09/2021 | 15/09/2021 | 15/09/2021 | 15/09/2021 |
| A-T-045                | 09/09/2021 | 09/09/2021 | 09/09/2021 | 09/09/2021 | 09/09/2021 | 09/09/2021 |
| A-T-050s               | 11/09/2021 | 11/09/2021 | 11/09/2021 | 11/09/2021 | 11/09/2021 | 11/09/2021 |
| A-T-055s               | 16/09/2021 | 16/09/2021 | 16/09/2021 | 16/09/2021 | 16/09/2021 | 16/09/2021 |

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**

## FINAL ANALYTICAL TEST REPORT

**Envirolab Job Number:** 21/10947  
**Issue Number:** 1

**Date:** 18 October, 2021

**Client:** BEK Enviro Ltd  
Suite One  
No 3 Mitton Road Business Park  
Mitton Road  
Whalley  
Lancashire  
BB7 9YE

**Project Manager:** Mick Buckley  
**Project Name:** Ilk Street, Clayton  
**Project Ref:** N/A  
**Order No:** 7265-19661-J  
**Date Samples Received:** 07/10/21  
**Date Instructions Received:** 08/10/21  
**Date Analysis Completed:** 18/10/21

**Prepared by:**



Sophie France  
Client Service Manager

**Approved by:**



Richard Wong  
Client Manager

Envirolab Job Number: 21/10947

Client Project Name: Ilk Street, Clayton

Client Project Ref: N/A

| Lab Sample ID                                       | 21/10947/1 | 21/10947/2 | 21/10947/3 |  |  |  |  | Units | Limit of Detection | Method ref  |
|-----------------------------------------------------|------------|------------|------------|--|--|--|--|-------|--------------------|-------------|
| Client Sample No                                    |            |            |            |  |  |  |  |       |                    |             |
| Client Sample ID                                    | VS-TS-8    | VS-TS-9    | VS-TS-10   |  |  |  |  |       |                    |             |
| Depth to Top                                        |            |            |            |  |  |  |  |       |                    |             |
| Depth To Bottom                                     |            |            |            |  |  |  |  |       |                    |             |
| Date Sampled                                        | 06-Oct-21  | 06-Oct-21  | 06-Oct-21  |  |  |  |  |       |                    |             |
| Sample Type                                         | Soil       | Soil       | Soil       |  |  |  |  |       |                    |             |
| Sample Matrix Code                                  | 6AE        | 6AE        | 6AE        |  |  |  |  |       |                    |             |
| % Stones >10mm <sub>A</sub>                         | 0.6        | 0.9        | 0.6        |  |  |  |  | % w/w | 0.1                | A-T-044     |
| pH <sub>D</sub> <sup>M#</sup>                       | 7.13       | 7.22       | 7.18       |  |  |  |  | pH    | 0.01               | A-T-031s    |
| Sulphate (water sol 2:1) <sub>D</sub> <sup>M#</sup> | <0.01      | <0.01      | <0.01      |  |  |  |  | g/l   | 0.01               | A-T-026s    |
| Sulphate (acid soluble) <sub>D</sub> <sup>M#</sup>  | 770        | 750        | 890        |  |  |  |  | mg/kg | 200                | A-T-028s    |
| Cyanide (total) <sub>A</sub> <sup>M#</sup>          | <1         | <1         | <1         |  |  |  |  | mg/kg | 1                  | A-T-042sTCN |
| Phenols - Total by HPLC <sub>A</sub>                | <0.2       | <0.2       | <0.2       |  |  |  |  | mg/kg | 0.2                | A-T-050s    |
| Organic matter <sub>D</sub> <sup>M#</sup>           | 7.9        | 11.0       | 12.0       |  |  |  |  | % w/w | 0.1                | A-T-032 OM  |
| Arsenic <sub>D</sub> <sup>M#</sup>                  | 15         | 14         | 17         |  |  |  |  | mg/kg | 1                  | A-T-024s    |
| Boron (water soluble) <sub>D</sub>                  | <1.0       | <1.0       | <1.0       |  |  |  |  | mg/kg | 1                  | A-T-027s    |
| Cadmium <sub>D</sub> <sup>M#</sup>                  | 0.8        | 0.8        | 0.9        |  |  |  |  | mg/kg | 0.5                | A-T-024s    |
| Copper <sub>D</sub> <sup>M#</sup>                   | 52         | 48         | 56         |  |  |  |  | mg/kg | 1                  | A-T-024s    |
| Chromium <sub>D</sub> <sup>M#</sup>                 | 17         | 17         | 18         |  |  |  |  | mg/kg | 1                  | A-T-024s    |
| Chromium (hexavalent) <sub>D</sub>                  | <1         | <1         | <1         |  |  |  |  | mg/kg | 1                  | A-T-040s    |
| Lead <sub>D</sub> <sup>M#</sup>                     | 83         | 82         | 89         |  |  |  |  | mg/kg | 1                  | A-T-024s    |
| Mercury <sub>D</sub>                                | 0.30       | 0.18       | <0.17      |  |  |  |  | mg/kg | 0.17               | A-T-024s    |
| Nickel <sub>D</sub> <sup>M#</sup>                   | 14         | 15         | 16         |  |  |  |  | mg/kg | 1                  | A-T-024s    |
| Selenium <sub>D</sub> <sup>M#</sup>                 | <1         | 2          | <1         |  |  |  |  | mg/kg | 1                  | A-T-024s    |
| Zinc <sub>D</sub> <sup>M#</sup>                     | 72         | 70         | 80         |  |  |  |  | mg/kg | 5                  | A-T-024s    |

Envirolab Job Number: 21/10947

Client Project Name: Ilk Street, Clayton

Client Project Ref: N/A

|                                                                 |            |            |            |  |  |  |  |       |                    |            |
|-----------------------------------------------------------------|------------|------------|------------|--|--|--|--|-------|--------------------|------------|
| Lab Sample ID                                                   | 21/10947/1 | 21/10947/2 | 21/10947/3 |  |  |  |  | Units | Limit of Detection | Method ref |
| Client Sample No                                                |            |            |            |  |  |  |  |       |                    |            |
| Client Sample ID                                                | VS-TS-8    | VS-TS-9    | VS-TS-10   |  |  |  |  |       |                    |            |
| Depth to Top                                                    |            |            |            |  |  |  |  |       |                    |            |
| Depth To Bottom                                                 |            |            |            |  |  |  |  |       |                    |            |
| Date Sampled                                                    | 06-Oct-21  | 06-Oct-21  | 06-Oct-21  |  |  |  |  |       |                    |            |
| Sample Type                                                     | Soil       | Soil       | Soil       |  |  |  |  |       |                    |            |
| Sample Matrix Code                                              | 6AE        | 6AE        | 6AE        |  |  |  |  |       |                    |            |
| Asbestos in Soil (inc. matrix)                                  |            |            |            |  |  |  |  |       |                    |            |
| Asbestos in soil <sup>#</sup>                                   | NAD        | NAD        | NAD        |  |  |  |  |       |                    | A-T-045    |
| Asbestos ACM - Suitable for Water Absorption Test? <sub>D</sub> | N/A        | N/A        | N/A        |  |  |  |  |       |                    | A-T-045    |

Envirolab Job Number: 21/10947

Client Project Name: Ilk Street, Clayton

Client Project Ref: N/A

| Lab Sample ID                                    | 21/10947/1 | 21/10947/2 | 21/10947/3 |  |  |  |  | Units | Limit of Detection | Method ref |
|--------------------------------------------------|------------|------------|------------|--|--|--|--|-------|--------------------|------------|
| Client Sample No                                 |            |            |            |  |  |  |  |       |                    |            |
| Client Sample ID                                 | VS-TS-8    | VS-TS-9    | VS-TS-10   |  |  |  |  |       |                    |            |
| Depth to Top                                     |            |            |            |  |  |  |  |       |                    |            |
| Depth To Bottom                                  |            |            |            |  |  |  |  |       |                    |            |
| Date Sampled                                     | 06-Oct-21  | 06-Oct-21  | 06-Oct-21  |  |  |  |  |       |                    |            |
| Sample Type                                      | Soil       | Soil       | Soil       |  |  |  |  |       |                    |            |
| Sample Matrix Code                               | 6AE        | 6AE        | 6AE        |  |  |  |  |       |                    |            |
| PAH-16MS                                         |            |            |            |  |  |  |  |       |                    |            |
| Acenaphthene <sub>A</sub> <sup>M#</sup>          | 0.07       | 0.10       | 0.06       |  |  |  |  | mg/kg | 0.01               | A-T-019s   |
| Acenaphthylene <sub>A</sub> <sup>M#</sup>        | <0.01      | <0.01      | <0.01      |  |  |  |  | mg/kg | 0.01               | A-T-019s   |
| Anthracene <sub>A</sub> <sup>M#</sup>            | 0.10       | 0.15       | 0.07       |  |  |  |  | mg/kg | 0.02               | A-T-019s   |
| Benzo(a)anthracene <sub>A</sub> <sup>M#</sup>    | 0.45       | 0.57       | 0.33       |  |  |  |  | mg/kg | 0.04               | A-T-019s   |
| Benzo(a)pyrene <sub>A</sub> <sup>M#</sup>        | 0.55       | 0.54       | 0.36       |  |  |  |  | mg/kg | 0.04               | A-T-019s   |
| Benzo(b)fluoranthene <sub>A</sub> <sup>M#</sup>  | 0.59       | 0.60       | 0.42       |  |  |  |  | mg/kg | 0.05               | A-T-019s   |
| Benzo(ghi)perylene <sub>A</sub> <sup>M#</sup>    | 0.28       | 0.25       | 0.17       |  |  |  |  | mg/kg | 0.05               | A-T-019s   |
| Benzo(k)fluoranthene <sub>A</sub> <sup>M#</sup>  | 0.25       | 0.24       | 0.15       |  |  |  |  | mg/kg | 0.07               | A-T-019s   |
| Chrysene <sub>A</sub> <sup>M#</sup>              | 0.62       | 0.67       | 0.45       |  |  |  |  | mg/kg | 0.06               | A-T-019s   |
| Dibenzo(ah)anthracene <sub>A</sub> <sup>M#</sup> | <0.04      | <0.04      | <0.04      |  |  |  |  | mg/kg | 0.04               | A-T-019s   |
| Fluoranthene <sub>A</sub> <sup>M#</sup>          | 0.87       | 1.12       | 0.67       |  |  |  |  | mg/kg | 0.08               | A-T-019s   |
| Fluorene <sub>A</sub> <sup>M#</sup>              | 0.04       | 0.04       | 0.03       |  |  |  |  | mg/kg | 0.01               | A-T-019s   |
| Indeno(123-cd)pyrene <sub>A</sub> <sup>M#</sup>  | 0.32       | 0.31       | 0.21       |  |  |  |  | mg/kg | 0.03               | A-T-019s   |
| Naphthalene <sub>A</sub> <sup>M#</sup>           | <0.03      | <0.03      | <0.03      |  |  |  |  | mg/kg | 0.03               | A-T-019s   |
| Phenanthrene <sub>A</sub> <sup>M#</sup>          | 0.42       | 0.65       | 0.29       |  |  |  |  | mg/kg | 0.03               | A-T-019s   |
| Pyrene <sub>A</sub> <sup>M#</sup>                | 0.83       | 1.01       | 0.63       |  |  |  |  | mg/kg | 0.07               | A-T-019s   |
| Total PAH-16MS <sub>A</sub> <sup>M#</sup>        | 5.39       | 6.25       | 3.84       |  |  |  |  | mg/kg | 0.01               | A-T-019s   |

Envirolab Job Number: 21/10947

Client Project Name: Ilk Street, Clayton

Client Project Ref: N/A

| Lab Sample ID                                  | 21/10947/1 | 21/10947/2 | 21/10947/3 |  |  |  |  | Units | Limit of Detection | Method ref |
|------------------------------------------------|------------|------------|------------|--|--|--|--|-------|--------------------|------------|
| Client Sample No                               |            |            |            |  |  |  |  |       |                    |            |
| Client Sample ID                               | VS-TS-8    | VS-TS-9    | VS-TS-10   |  |  |  |  |       |                    |            |
| Depth to Top                                   |            |            |            |  |  |  |  |       |                    |            |
| Depth To Bottom                                |            |            |            |  |  |  |  |       |                    |            |
| Date Sampled                                   | 06-Oct-21  | 06-Oct-21  | 06-Oct-21  |  |  |  |  |       |                    |            |
| Sample Type                                    | Soil       | Soil       | Soil       |  |  |  |  |       |                    |            |
| Sample Matrix Code                             | 6AE        | 6AE        | 6AE        |  |  |  |  |       |                    |            |
| TPH CWG                                        |            |            |            |  |  |  |  |       |                    |            |
| Ali >C5-C6 <sub>A</sub> <sup>#</sup>           | <0.01      | <0.01      | <0.01      |  |  |  |  | mg/kg | 0.01               | A-T-022s   |
| Ali >C6-C8 <sub>A</sub> <sup>#</sup>           | <0.01      | <0.01      | <0.01      |  |  |  |  | mg/kg | 0.01               | A-T-022s   |
| Ali >C8-C10 <sub>A</sub>                       | <1         | <1         | <1         |  |  |  |  | mg/kg | 1                  | A-T-055s   |
| Ali >C10-C12 <sub>A</sub> <sup>M#</sup>        | <1         | <1         | <1         |  |  |  |  | mg/kg | 1                  | A-T-055s   |
| Ali >C12-C16 <sub>A</sub> <sup>M#</sup>        | <1         | <1         | <1         |  |  |  |  | mg/kg | 1                  | A-T-055s   |
| Ali >C16-C21 <sub>A</sub> <sup>M#</sup>        | 1          | 1          | 1          |  |  |  |  | mg/kg | 1                  | A-T-055s   |
| Ali >C21-C35 <sub>A</sub> <sup>M#</sup>        | 18         | 19         | 18         |  |  |  |  | mg/kg | 1                  | A-T-055s   |
| Total Aliphatics <sub>A</sub>                  | 20         | 21         | 20         |  |  |  |  | mg/kg | 1                  | A-T-055s   |
| Aro >C5-C7 <sub>A</sub> <sup>#</sup>           | <0.01      | <0.01      | <0.01      |  |  |  |  | mg/kg | 0.01               | A-T-022s   |
| Aro >C7-C8 <sub>A</sub> <sup>#</sup>           | <0.01      | <0.01      | <0.01      |  |  |  |  | mg/kg | 0.01               | A-T-022s   |
| Aro >C8-C10 <sub>A</sub>                       | 3          | 3          | 1          |  |  |  |  | mg/kg | 1                  | A-T-055s   |
| Aro >C10-C12 <sub>A</sub>                      | <1         | <1         | <1         |  |  |  |  | mg/kg | 1                  | A-T-055s   |
| Aro >C12-C16 <sub>A</sub>                      | 3          | 3          | 3          |  |  |  |  | mg/kg | 1                  | A-T-055s   |
| Aro >C16-C21 <sub>A</sub> <sup>M#</sup>        | 8          | 7          | 7          |  |  |  |  | mg/kg | 1                  | A-T-055s   |
| Aro >C21-C35 <sub>A</sub> <sup>M#</sup>        | 39         | 33         | 36         |  |  |  |  | mg/kg | 1                  | A-T-055s   |
| Total Aromatics <sub>A</sub>                   | 53         | 46         | 47         |  |  |  |  | mg/kg | 1                  | A-T-055s   |
| TPH (Ali & Aro >C5-C35) <sub>A</sub>           | 73         | 67         | 67         |  |  |  |  | mg/kg | 1                  | A-T-055s   |
| BTEX - Benzene <sub>A</sub> <sup>#</sup>       | <0.01      | <0.01      | <0.01      |  |  |  |  | mg/kg | 0.01               | A-T-022s   |
| BTEX - Toluene <sub>A</sub> <sup>#</sup>       | <0.01      | <0.01      | <0.01      |  |  |  |  | mg/kg | 0.01               | A-T-022s   |
| BTEX - Ethyl Benzene <sub>A</sub> <sup>#</sup> | <0.01      | <0.01      | <0.01      |  |  |  |  | mg/kg | 0.01               | A-T-022s   |
| BTEX - m & p Xylene <sub>A</sub> <sup>#</sup>  | <0.01      | <0.01      | <0.01      |  |  |  |  | mg/kg | 0.01               | A-T-022s   |
| BTEX - o Xylene <sub>A</sub> <sup>#</sup>      | <0.01      | <0.01      | <0.01      |  |  |  |  | mg/kg | 0.01               | A-T-022s   |
| MTBE <sub>A</sub> <sup>#</sup>                 | <0.01      | <0.01      | <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 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°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 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°C / 11550µS/cm @ 20°C 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, 9 = INCINERATOR ASH.

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

|                            |                                                                                                              |                                    |                 |
|----------------------------|--------------------------------------------------------------------------------------------------------------|------------------------------------|-----------------|
| <b>Client:</b>             | BEK Enviro Ltd, Suite One , No 3 Mitton Road Business Park , Mitton Road ,<br>Whalley , Lancashire , BB7 9YE | <b>Project No:</b>                 | 21/10947        |
| <b>Project:</b>            | Ilk Street, Clayton                                                                                          | <b>Date Received:</b>              | 08/10/2021 (am) |
| <b>Clients Project No:</b> | N/A                                                                                                          | <b>Cool Box Temperatures (°C):</b> | 16.0            |

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  $5 \pm 3^{\circ}\text{C}$ ), 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          | 21/10947/1 | 21/10947/2 | 21/10947/3 |
|------------------------|------------|------------|------------|
| Client Sample No       |            |            |            |
| Client Sample ID/Depth | VS-TS-8    | VS-TS-9    | VS-TS-10   |
| Date Sampled           | 06/10/21   | 06/10/21   | 06/10/21   |
| A-T-019s               | 12/10/2021 | 12/10/2021 | 12/10/2021 |
| A-T-022s               | 14/10/2021 | 14/10/2021 | 14/10/2021 |
| A-T-024s               | 15/10/2021 | 15/10/2021 | 15/10/2021 |
| A-T-026s               | 14/10/2021 | 14/10/2021 | 14/10/2021 |
| A-T-027s               | 14/10/2021 | 14/10/2021 | 14/10/2021 |
| A-T-028s               | 15/10/2021 | 15/10/2021 | 15/10/2021 |
| A-T-031s               | 18/10/2021 | 18/10/2021 | 18/10/2021 |
| A-T-032 OM             | 17/10/2021 | 17/10/2021 | 17/10/2021 |
| A-T-040s               | 14/10/2021 | 14/10/2021 | 14/10/2021 |
| A-T-042sTCN            | 15/10/2021 | 15/10/2021 | 15/10/2021 |
| A-T-044                | 13/10/2021 | 13/10/2021 | 13/10/2021 |
| A-T-045                | 12/10/2021 | 12/10/2021 | 12/10/2021 |
| A-T-050s               | 13/10/2021 | 13/10/2021 | 13/10/2021 |
| A-T-055s               | 14/10/2021 | 14/10/2021 | 14/10/2021 |

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**

## ANNEX C

### Validation Photographs



GEO-ENVIRONMENTAL CONSULTING ENGINEERS

**bEk Enviro Ltd**

Suite One | No 3 Mitton Road Business Park  
Mitton Road | Whalley | Lancashire | BB7 9YE

**01254 377622**

[mbuckley@bekenenviro.co.uk](mailto:mbuckley@bekenenviro.co.uk) | [bekenenviro.co.uk](http://bekenenviro.co.uk)



Photograph 1: Validation of Garden Capping Thickness



Photograph 2: Validation of Garden Capping Thickness



GEO-ENVIRONMENTAL CONSULTING ENGINEERS

**bEk Enviro Ltd**

Suite One | No 3 Mitton Road Business Park  
Mitton Road | Whalley | Lancashire | BB7 9YE

**01254 377622**

[mbuckley@bekenviro.co.uk](mailto:mbuckley@bekenviro.co.uk) | [bekenviro.co.uk](http://bekenviro.co.uk)



Photograph 3: Validation of Geotextile Membrane