

PROPOSED HOUSING  
AT  
100 NEATH ROAD  
RESLOVEN

CONTAMINATION STUDY  
REPORT

JUNE 2024

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Ystalyfera  
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Sa9 2Hy  
01639849279*

# **PROPOSED HOUSING DEVELOPMENT AT 100 NEATH ROAD RESOLVEN**

## **CONTAMINATION STUDY REPORT 2024**

**JUNE 2024**

22/007

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## PROPOSED HOUSING DEVELOPMENT AT 100 NEATH ROAD RESOLVEN

### CONTAMINATION STUDY REPORT 2024

#### 1.0 Brief

The brief for the study as instructed by the site owners and developers Crynant Plant Ltd was as follows,

- 1.1 To review planning condition no 6 of the approval consent Ref P2022/0491 given on the site by Neath Port Talbot CBC on 30<sup>th</sup> May 2022 in order to ascertain the scope of any additional site investigations needed.
- 1.2 To undertake further on-site intrusive investigations and sampling of materials to assess the extent, scale, nature and of any contamination that may be present.
- 1.3 To report on the investigation results and advice if any further remediation measures are needed as part of the housing development works.

# **PROPOSED HOUSING DEVELOPMENT AT 100 NEATH ROAD RESOLVEN**

## **CONTAMINATION STUDY REPORT 2024**

### **2.0 Basis of Report**

#### **2.1 General**

**2.1.0** A review of the site investigation desk study report of March 2022 prepared by atebConsult as part of the planning application study works undertaken pre planning approval and submitted as a part of the application.

**2.1.1** Supplementary site investigations consisting of trial pit excavations, sampling of material arising and laboratory testing to determine levels of a wide range of determinants, in accordance with current protocols for site investigation works.

#### **2.2 Survey methodology**

**2.2.1** Trial site excavations undertaken on site as per fig 1, followed by sampling of material and testing.

**2.2.2** Testing of materials and review of results against accepted threshold levels of determinants

**2.2.3** Drawing of conclusions and preparation of report

# **PROPOSED HOUSING DEVELOPMENT AT 100 NEATH ROAD RESOLVEN**

## **CONTAMINATION STUDY REPORT 2024**

### **3.0 Site Characteristics**

- 3.1** the development site comprises of a roughly rectangular parcel of land some 0.16Ha in extent and lies to the North of the B4434 highway [Neath Road] that runs through Resolven as shown on fig 1 and 2. The site center grid reference being 282331,202109.
- 3.2** Reference is made to the 2022 desk study report for background details on the site and its history.
- 3.3** At time of the supplementary study the site had been cleared of vegetation, so that it could be developed in a phased manner, with plot 1 at the western end of site being the first property to be built.

# NOTES

Area of Plot 1: 34M<sup>2</sup>  
 Area of Plot 2: 32.6M<sup>2</sup>  
 Area of Plot 3: 31.3M<sup>2</sup>  
 Area of Plot 4: 27.8M<sup>2</sup>  
 Area of Plot 5: 28.2M<sup>2</sup>  
 Total Area : 154M<sup>2</sup>

— Site Boundary  
 — Fence Line  
 — Between Plots



Fig 1.

Crynant Plant  
 Land At 100 Neath  
 Road, Resolven  
 Site Plan

Planning

DATE: 22/07/07  
 DRAWN BY: J. ADAMS  
 CHECKED BY: J. ADAMS  
 APPROVED BY: J. ADAMS

ateb Consult

ateb Consult  
 100 NEATH ROAD  
 RESOLVEN  
 SA11 1AA  
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22/07/07 101

# NOTES

SCALE PARAMETERS | WIDTH - 7800mm max.  
DEPTH - 12000mm max.  
HEIGHT - 8000mm max.

## SITE AREAS

PLOT 1 | 345m<sup>2</sup> | 0.0345 Hectares  
PLOT 2 | 334m<sup>2</sup> | 0.0334 Hectares  
PLOT 3 | 318m<sup>2</sup> | 0.0318 Hectares  
PLOT 4 | 290m<sup>2</sup> | 0.0290 Hectares  
PLOT 5 | 283m<sup>2</sup> | 0.0283 Hectares

TOTAL AREA | 1570m<sup>2</sup> | 0.157 Hectares



Crynant Plant &  
Construction LTD  
Land At Neath Road,  
Resolven  
Layout Plan

## Planning

RESOLVEN ROAD  
RESOLVEN, SW15  
The above information is for information only and does not constitute an offer of any financial product. It is not intended to be relied upon in making any investment decision. It is not intended to be a contract or a contract note. It is not intended to be a prospectus or a prospectus supplement. It is not intended to be a key information document or a key information supplement. It is not intended to be a prospectus or a prospectus supplement. It is not intended to be a key information document or a key information supplement.

DATE 09/03/23  
SCALE 1:250  
PLOT NO. A3

ateb Consult

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22/007 102

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# **PROPOSED HOUSING DEVELOPMENT AT 100 NEATH ROAD RESOLVEN**

## **CONTAMINATION STUDY REPORT 2024**

### **4.0 Contamination Study**

#### **4.1 General**

- 4.1.1** Trial pits were excavated on site as shown on figure 3 on 19th April 2024 and samples taken at 0.15m and 0.45m depth. It is noted the trial pit locations were near earlier trial pits excavated in March 2023 as part of the initial site investigations and drainage porosity test investigations.
- 4.1.2** The samples were then taken to APEX Testing Solutions of Pyle Bridgend for analysis, with screening carried out for asbestos followed by a wide range of testing on accordance with current protocols. with the samples for trial pit 2 near the initial phase of development analyzed.

#### **4.2 Ground Conditions**

- 4.2.1** The trial pits revealed the ground conditions to be superficial deposits of mainly brown cohesive clays with occasional cobbles and boulders, thus confirming the results of earlier site investigations undertaken on the site area and reported on in section 3.7.1 of the March 2022 study report. No groundwater was encountered in the trial pits.

#### **4.3 Results**

- 4.3.1** The results of the testing undertaken are shown on the following APEX laboratory report,
- 4.3.2** With reference to the results the following conclusions are drawn.

- 1] the screening indicated no asbestos fibers present
- 2] the results of the testing carried out on determinants indicate only low levels of heavy metal and hydrocarbon contamination present on site, and the levels are below current accepted threshold levels and thus acceptable
- 3] The results also show that in respect of hydrocarbons the levels present of individual contaminants were below the limits of detection of the laboratory equipment and were thus negligible



Apex Testing Solutions Limited  
Sturmi Way  
Village Farm Industrial Estate  
Pyle  
Bridgend  
CF33 6BZ

Attention: Laura Davies

Unit 7-8 Hawarden Business Park  
Manor Road (off Manor Lane)  
Hawarden  
Deeside  
CH5 3US

Tel: (01244) 528777  
email: hawardencustomerservices@alsglobal.com  
Website: www.alsenvironmental.co.uk

## CERTIFICATE OF ANALYSIS

|                              |                                |
|------------------------------|--------------------------------|
| Date of report Generation:   | 30 April 2024                  |
| Customer:                    | Apex Testing Solutions Limited |
| Sample Delivery Group (SDG): | 240420-50                      |
| Your Reference:              | D24156                         |
| Location:                    | Land Adj to 100 Neath Rd       |
| Report No:                   |                                |
| Order Number:                |                                |

We received 2 samples on Saturday April 20, 2024 and 2 of these samples were scheduled for analysis which was completed on Tuesday April 30, 2024. Accredited laboratory tests are defined within the report, but opinions, interpretations and on-site data expressed herein are outside the scope of ISO 17025 accreditation.

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden.

All sample data is provided by the customer. The reported results relate to the sample supplied, and on the basis that this data is correct.

Incorrect sampling dates and/or sample information will affect the validity of results.

The customer is not permitted to reproduce this report except in full without the approval of the laboratory.

Approved By:

**Sonia McWhan**  
Operations Manager



ALS Laboratories (UK) Limited. Registered Office: Torrington Avenue, Coventry CV4 9GU. Registered in England and Wales No. 02391955.

Version: 3.6 Version Issued: 30/04/2024



# CERTIFICATE OF ANALYSIS

Validated

SDG: 240420-50  
Client Ref.: D24156

Report Number: 727300  
Location: Land Adj to 100 Neath Rd

Superseded Report:

| Results Legend<br><div><div>X</div> Test</div> <div><div>N</div> No Determination Possible</div><br>Sample Types -<br>S - Soil/Solid<br>UNS - Unspecified Solid<br>GW - Ground Water<br>SW - Surface Water<br>LE - Land Leachate<br>PL - Prepared Leachate<br>PR - Process Water<br>SA - Saline Water<br>TE - Trade Effluent<br>TS - Treated Sewage<br>US - Untreated Sewage<br>RE - Recreational Water<br>DW - Drinking Water<br>Non-regulatory<br>UNL - Unspecified Liquid<br>SL - Sludge<br>G - Gas<br>OTH - Other | Lab Sample No(s)          |                     | 29682220                     |                         | 29682225                     |                         |                  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|---------------------|------------------------------|-------------------------|------------------------------|-------------------------|------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Customer Sample Reference |                     | Sample 1                     |                         | Sample 2                     |                         |                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | AGS Reference             |                     |                              |                         |                              |                         |                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Depth (m)                 |                     | 0.00 - 0.00                  |                         | 0.00 - 0.00                  |                         |                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Container                 |                     | 1kg TUB with Handle (ALE260) | 250g Amber Jar (ALE215) | 1kg TUB with Handle (ALE260) | 250g Amber Jar (ALE210) | 60g VOC (ALE215) |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Sample Type               |                     | S                            | S                       | S                            | S                       | S                |
| Anions by Kone (soil)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | All                       | NDPs: 0<br>Tests: 2 | X                            |                         | X                            |                         |                  |
| Asbestos ID in Solid Samples                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | All                       | NDPs: 0<br>Tests: 2 | X                            |                         | X                            |                         |                  |
| Cyanide Comp/Free/Total/Thiocyanate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | All                       | NDPs: 0<br>Tests: 2 | X                            |                         | X                            |                         |                  |
| Easily Liberated Sulphide                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | All                       | NDPs: 0<br>Tests: 2 | X                            |                         | X                            |                         |                  |
| EPH CWG GC (S)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | All                       | NDPs: 0<br>Tests: 2 | X                            |                         | X                            |                         |                  |
| GRO by GC-FID (S)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | All                       | NDPs: 0<br>Tests: 2 |                              | X                       |                              | X                       |                  |
| Hexavalent Chromium (s)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | All                       | NDPs: 0<br>Tests: 2 | X                            |                         | X                            |                         |                  |
| Metals in solid samples by OES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | All                       | NDPs: 0<br>Tests: 2 | X                            |                         | X                            |                         |                  |
| PAH by GCMS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | All                       | NDPs: 0<br>Tests: 2 | X                            |                         | X                            |                         |                  |
| pH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | All                       | NDPs: 0<br>Tests: 2 | X                            |                         | X                            |                         |                  |
| Phenols by HPLC (S)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | All                       | NDPs: 0<br>Tests: 2 | X                            |                         | X                            |                         |                  |
| Sample description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | All                       | NDPs: 0<br>Tests: 2 | X                            |                         | X                            |                         |                  |
| Total Sulphur                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | All                       | NDPs: 0<br>Tests: 2 | X                            |                         | X                            |                         |                  |
| TPH CWG GC (S)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | All                       | NDPs: 0<br>Tests: 2 | X                            |                         | X                            |                         |                  |
| VOC MS (S)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | All                       | NDPs: 0<br>Tests: 2 |                              | X                       |                              | X                       |                  |



## CERTIFICATE OF ANALYSIS

Validated

SDG: 240420-50  
Client Ref.: D24156

Report Number: 727300

Superseded Report:

Location: Land Adj to 100 Neath Rd

### Sample Descriptions

#### Grain Sizes

|           |          |      |                 |        |             |        |            |             |       |
|-----------|----------|------|-----------------|--------|-------------|--------|------------|-------------|-------|
| very fine | <0.063mm | fine | 0.063mm - 0.1mm | medium | 0.1mm - 2mm | coarse | 2mm - 10mm | very coarse | >10mm |
|-----------|----------|------|-----------------|--------|-------------|--------|------------|-------------|-------|

| Lab Sample No(s) | Customer Sample Ref. | Depth (m)   | Colour      | Description     | Inclusions | Inclusions 2 |
|------------------|----------------------|-------------|-------------|-----------------|------------|--------------|
| 29682220         | Sample 1             | 0.00 - 0.00 | Light Brown | Sandy Clay Loam | Stones     | Vegetation   |
| 29682225         | Sample 2             | 0.00 - 0.00 | Light Brown | Sandy Clay Loam | Stones     | Vegetation   |

These descriptions are only intended to act as a cross check if sample identities are questioned, and to provide a log of sample matrices with respect to MCERTS validation. They are not intended as full geological descriptions.

We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample.

Other coarse granular materials such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.



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### PAH by GCMS

| PAH by GC/MS                  |                      | Results Legend | Customer Sample Ref. | Sample 1                                                                | Sample 2                  |                                                                                                                                                                  |                             |                          |                            |
|-------------------------------|----------------------|----------------|----------------------|-------------------------------------------------------------------------|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--------------------------|----------------------------|
| #                             | ISO18285 accredited. | M              | mCERTS accredited.   | aq                                                                      | Aqueous / settled sample. | dis.flt                                                                                                                                                          | Disolved / filtered sample. | tot.unfilt               | Total / unfiltered sample. |
|                               |                      |                |                      | Subcontracted - refer to subcontractor report for accreditation status. |                           | % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery |                             | Trigger breach confirmed |                            |
|                               |                      |                |                      | 1-4-16 Sample deviation (see appendix)                                  |                           |                                                                                                                                                                  |                             |                          |                            |
| Component                     | LOD/Units            | Method         | Depth (m)            | Sample Type                                                             | Date Sampled              | Sample Time                                                                                                                                                      | Date Received               | SDG Ref                  | Lab Sample No.(s)          |
|                               |                      |                |                      |                                                                         |                           |                                                                                                                                                                  |                             |                          | AGS Reference              |
| Naphthalene-d8 % recovery**   | %                    | TM218          | 0.00 - 0.00          | Soil/Solid (S)                                                          | 19/04/2024                |                                                                                                                                                                  | 0.00 - 0.00                 | Soil/Solid (S)           | 19/04/2024                 |
| Acenaphthene-d10 % recovery** | %                    | TM218          | 20/04/2024           |                                                                         |                           |                                                                                                                                                                  | 20/04/2024                  |                          |                            |
| Phenanthrene-d10 % recovery** | %                    | TM218          | 240420-50            |                                                                         |                           |                                                                                                                                                                  | 240420-50                   |                          |                            |
| Chrysene-d12 % recovery**     | %                    | TM218          | 29682220             |                                                                         |                           |                                                                                                                                                                  | 29682225                    |                          |                            |
| Perylene-d12 % recovery**     | %                    | TM218          |                      |                                                                         |                           |                                                                                                                                                                  |                             |                          |                            |
| Naphthalene                   | <9 µg/kg             | TM218          | <9                   | M                                                                       |                           |                                                                                                                                                                  | <9                          | M                        |                            |
| Acenaphthylene                | <12 µg/kg            | TM218          | <12                  | M                                                                       |                           |                                                                                                                                                                  | <12                         | M                        |                            |
| Acenaphthene                  | <8 µg/kg             | TM218          | <8                   | M                                                                       |                           |                                                                                                                                                                  | <8                          | M                        |                            |
| Fluorene                      | <10 µg/kg            | TM218          | <10                  | M                                                                       |                           |                                                                                                                                                                  | <10                         | M                        |                            |
| Phenanthrene                  | <15 µg/kg            | TM218          | <15                  | M                                                                       |                           |                                                                                                                                                                  | <15                         | M                        |                            |
| Anthracene                    | <16 µg/kg            | TM218          | <16                  | M                                                                       |                           |                                                                                                                                                                  | <16                         | M                        |                            |
| Fluoranthene                  | <17 µg/kg            | TM218          | <17                  | M                                                                       |                           |                                                                                                                                                                  | <17                         | M                        |                            |
| Pyrene                        | <15 µg/kg            | TM218          | <15                  | M                                                                       |                           |                                                                                                                                                                  | <15                         | M                        |                            |
| Benz(a)anthracene             | <14 µg/kg            | TM218          | <14                  | M                                                                       |                           |                                                                                                                                                                  | <14                         | M                        |                            |
| Chrysene                      | <10 µg/kg            | TM218          | <10                  | M                                                                       |                           |                                                                                                                                                                  | <10                         | M                        |                            |
| Benzo(b)fluoranthene          | <15 µg/kg            | TM218          | <15                  | M                                                                       |                           |                                                                                                                                                                  | 18.2                        | M                        |                            |
| Benzo(k)fluoranthene          | <14 µg/kg            | TM218          | <14                  | M                                                                       |                           |                                                                                                                                                                  | <14                         | M                        |                            |
| Benzo(a)pyrene                | <15 µg/kg            | TM218          | <15                  | M                                                                       |                           |                                                                                                                                                                  | <15                         | M                        |                            |
| Indeno(1,2,3-cd)pyrene        | <18 µg/kg            | TM218          | <18                  | M                                                                       |                           |                                                                                                                                                                  | <18                         | M                        |                            |
| Dibenzo(a,h)anthracene        | <23 µg/kg            | TM218          | <23                  | M                                                                       |                           |                                                                                                                                                                  | <23                         | M                        |                            |
| Benzo(g,h,i)perylene          | <24 µg/kg            | TM218          | <24                  | M                                                                       |                           |                                                                                                                                                                  | <24                         | M                        |                            |
| PAH, Total Detected USEPA 16  | <118 µg/kg           | TM218          | <118                 |                                                                         |                           |                                                                                                                                                                  | <118                        |                          |                            |

## CERTIFICATE OF ANALYSIS

[illegible]





## CERTIFICATE OF ANALYSIS

Validated

SDG: 240420-50  
Client Ref.: D24156

Report Number: 727300  
Location: Land Adj to 100 Neath Rd

Superseded Report:

### Table of Results - Appendix

| Method No | Description                                                                                                                             |
|-----------|-----------------------------------------------------------------------------------------------------------------------------------------|
| PM024     | Soil preparation including homogenisation, moisture, screens of soils for Asbestos Containing Material                                  |
| TM048     | Identification of Asbestos in Bulk Material                                                                                             |
| TM062 (S) | Determination of Phenols in Soils by HPLC                                                                                               |
| TM089     | Determination of Gasoline Range Hydrocarbons (GRO) by Headspace GC-FID (C4-C12)                                                         |
| TM116     | Determination of Volatile Organic Compounds by Headspace / GC-MS                                                                        |
| TM132     | ELTRA CS800 Operators Guide                                                                                                             |
| TM133     | Determination of pH in Soil and Water using the GLpH pH Meter                                                                           |
| TM151     | Determination of Hexavalent Chromium using Kone analyser                                                                                |
| TM153     | Determination of Total Cyanide, Free (Easily Liberatable) Cyanide and Thiocyanate using the Skalar SANS+ System Segmented Flow Analyser |
| TM180     | The Determination Of Easily Liberated Sulphide In Soil Samples by Ion Selective Electrode Technique                                     |
| TM181     | Determination of Routine Metals in Soil by iCap 6500 Duo ICP-OES                                                                        |
| TM218     | The determination of PAH in soil samples by GC-MS                                                                                       |
| TM243     | Mixed Anions In Soils By Kone                                                                                                           |
| TM414     | Determination of Speciated Extractable Petroleum Hydrocarbons in Soils by GCxGC-FID                                                     |

NA = not applicable.

Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden (Method codes TM).

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SDG: 240420-50  
Client Ref.: D24156

Report Number: 727300

**Superseded Report:**

Location: Land Adj to 100 Neath Rd

## Test Completion Dates

| <div> <div>Lab Sample No(s)</div> <div>Customer Sample Ref.</div> <div>AGS Ref.</div> <div>Depth</div> <div>Type</div> </div> | 29682220       | 29682225       |
|-------------------------------------------------------------------------------------------------------------------------------|----------------|----------------|
|                                                                                                                               | Sample 1       | Sample 2       |
|                                                                                                                               |                |                |
|                                                                                                                               | 0.00 - 0.00    | 0.00 - 0.00    |
|                                                                                                                               | Soil/Solid (S) | Soil/Solid (S) |
| Anions by Kone (soil)                                                                                                         | 25-Apr-2024    | 25-Apr-2024    |
| Asbestos ID in Solid Samples                                                                                                  | 24-Apr-2024    | 24-Apr-2024    |
| Cyanide Comp/Free/Total/Thiocyanate                                                                                           | 25-Apr-2024    | 25-Apr-2024    |
| Easily Liberated Sulphide                                                                                                     | 25-Apr-2024    | 25-Apr-2024    |
| EPH CWG GC (S)                                                                                                                | 24-Apr-2024    | 30-Apr-2024    |
| GRO by GC-FID (S)                                                                                                             | 24-Apr-2024    | 24-Apr-2024    |
| Hexavalent Chromium (s)                                                                                                       | 24-Apr-2024    | 24-Apr-2024    |
| Metals in solid samples by OES                                                                                                | 26-Apr-2024    | 26-Apr-2024    |
| PAH by GCMS                                                                                                                   | 25-Apr-2024    | 29-Apr-2024    |
| pH                                                                                                                            | 24-Apr-2024    | 24-Apr-2024    |
| Phenols by HPLC (S)                                                                                                           | 25-Apr-2024    | 25-Apr-2024    |
| Sample description                                                                                                            | 23-Apr-2024    | 23-Apr-2024    |
| Total Sulphur                                                                                                                 | 26-Apr-2024    | 26-Apr-2024    |
| TPH CWG GC (S)                                                                                                                | 24-Apr-2024    | 30-Apr-2024    |
| VOC MS (S)                                                                                                                    | 26-Apr-2024    | 25-Apr-2024    |



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### Appendix

1. Results are expressed on a dry weight basis (dried at 35°C) for all soil analyses except for the following: NRA and CEN Leach tests, flash point LOI, pH, ammonium as NH<sub>4</sub> by the BRE method, VOC TICs and SVOC TICs.

2. If sufficient sample is received a sub sample will be retained free of charge for 15 days after analysis is completed (e-mailed) for all sample types unless the sample is destroyed on testing. The prepared soil sub sample that is analysed for asbestos will be retained for a period of 6 months after the analysis date. All bulk samples will be retained for a period of 6 months after the analysis date. All samples received and not scheduled will be disposed of 15 days after the date of receipt unless we are instructed to the contrary. Once the initial period has expired, a storage charge will be applied for each month or part thereof until the client cancels the request for sample storage. ALS reserve the right to charge for samples received and stored but not analysed.

3. With respect to turnaround, we will always endeavour to meet client requirements wherever possible, but turnaround times cannot be absolutely guaranteed due to so many variables beyond our control.

4. We take responsibility for any test performed by sub-contractors (marked with an asterisk). We endeavour to use UKAS/MCERTS Accredited Laboratories, who either complete a quality questionnaire or are audited by ourselves. For some determinands there are no UKAS/MCERTS Accredited Laboratories, in this instance a laboratory with a known track record will be utilised.

5. If no separate volatile sample is supplied by the client, or if a headspace or sediment is present in the volatile sample, the integrity of the data may be compromised. This will be flagged up as an invalid VOC on the test schedule and the result marked as deviating on the test certificate.

6. NDP - No determination possible due to insufficient/unsuitable sample.

7. Results relate only to the items tested.

8. LoDs (Limit of Detection) for wet tests reported on a dry weight basis are not corrected for moisture content.

9. **Surrogate recoveries** - Surrogates are added to your sample to monitor recovery of the test requested. A % recovery is reported, results are not corrected for the recovery measured. Typical recoveries for organics tests are 70-130%. Recoveries in soils are affected by organic rich or clay rich matrices. Waters can be affected by remediation fluids or high amounts of sediment. Test results are only ever reported if all of the associated quality checks pass; it is assumed that all recoveries outside of the values above are due to matrix affect.

10. Stones/debris are not routinely removed. We always endeavour to take a representative sub sample from the received sample.

11. In certain circumstances the method detection limit may be elevated due to the sample being outside the calibration range. Other factors that may contribute to this include possible interferences. In both cases the sample would be diluted which would cause the method detection limit to be raised.

12. For dried and crushed preparations of soils volatile loss may occur e.g volatile mercury

13. For leachate preparations other than Zero Headspace Extraction (ZHE) volatile loss may occur.

14. For the BSEN 12457-3 two batch process to allow the cumulative release to be calculated, the volume of the leachate produced is measured and filtered for all tests. We therefore cannot carry out any unfiltered analysis. The tests affected include volatiles GCFID/GCMS and all subcontracted analysis.

15. Analysis and identification of specific compounds using GCFID is by retention time only, and we routinely calibrate and quantify for benzene, toluene, ethylbenzenes and xylenes (BTEX). For total volatiles in the C5-C12 range, the total area of the chromatogram is integrated and expressed as ug/kg or ug/l. Although this analysis is commonly used for the quantification of gasoline range organics (GRO), the system will also detect other compounds such as chlorinated solvents, and this may lead to a falsely high result with respect to hydrocarbons only. It is not possible to specifically identify these non-hydrocarbons, as standards are not routinely run for any other compounds, and for more definitive identification, volatiles by GCMS should be utilised.

16. We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample. Other coarse granular material such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

17 Data retention. All records, communications and reports pertaining to the analysis are archived for seven years from the date of issue of the final report.

### General

18. **Tentatively Identified Compounds (TICs)** are non-target peaks in VOC and SVOC analysis. All non-target peaks detected with a concentration above the LoD are subjected to a mass spectral library search. Non-target peaks with a library search confidence of >75% are reported based on the best mass spectral library match. When a non-target peak with a library search confidence of <75% is detected it is reported as "mixed hydrocarbons". Non-target compounds identified from the scan data are semi-quantified relative to one of the deuterated internal standards, under the same chromatographic conditions as the target compounds. This result is reported as a semi-quantitative value and reported as Tentatively Identified Compounds (TICs). TICs are outside the scope of UKAS accreditation and are not moisture corrected.

#### 19. Sample Deviations

If a sample is classed as deviated then the associated results may be compromised.

|    |                                                                             |
|----|-----------------------------------------------------------------------------|
| 1  | Container with Headspace provided for volatiles analysis                    |
| 2  | Incorrect container received                                                |
| 3  | Deviation from method                                                       |
| 4  | Matrix interference                                                         |
| ♦  | Sample holding time exceeded in laboratory                                  |
| @  | Sample holding time exceeded due to late arrival of instructions or samples |
| \$ | Sampled on date not provided                                                |

#### 20. Asbestos

When requested, the individual sub sample scheduled will be analysed in house for the presence of asbestos fibres and asbestos containing material by our documented in house method TM048 based on HSG 248 (2021), which is accredited to ISO17025. If a specific asbestos fibre type is not found this will be reported as "Not detected". If no asbestos fibre types are found all will be reported as "Not detected" and the sub sample analysed deemed to be clear of asbestos. If an asbestos fibre type is found it will be reported as detected (for each fibre type found). Testing can be carried out on asbestos positive samples, but, due to Health and Safety considerations, may be replaced by alternative tests or reported as No Determination Possible (NDP). The quantity of asbestos present is not determined unless specifically requested.

#### Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials and soils are obtained from supplied bulk materials and soils which have been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2021).

The results for identification of asbestos in soils are obtained from a homogenised sub sample which has been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining.

| Asbestos Type           | Common Name    |
|-------------------------|----------------|
| Chrysotile              | White Asbestos |
| Amosite                 | Brown Asbestos |
| Crocidolite             | Blue Asbestos  |
| Fibrous Actinolite      | -              |
| Fibrous Anorthophyllite | -              |
| Fibrous Tremolite       | -              |

#### Visual Estimation Of Fibre Content

Estimation of fibre content is not permitted as part of our UKAS accredited test other than: - Trace - Where only one or two asbestos fibres were identified.

#### Respirable Fibres

Respirable fibres are defined as fibres of <3 µm diameter, longer than 5 µm and with aspect ratios of at least 3:1 that can be inhaled into the lower regions of the lung and are generally acknowledged to be most important predictor of hazard and risk for cancers of the lung.

Further guidance on typical asbestos fibre content of manufactured products can be found in HSG 264.

The identification of asbestos containing materials and soils falls within our schedule of tests for which we hold UKAS accreditation, however opinions, interpretations and all other information contained in the report are outside the scope of UKAS accreditation.

## **PROPOSED HOUSING DEVELOPMENT AT 100 NEATH ROAD RESOLVEN**

### **CONTAMINATION STUDY REPORT 2024**

#### **5.0 Conclusions**

- 5.1** It concluded that the superficial start over the site has only low levels of contaminants present and all below current threshold and action levels.
- 5.2** It is thus concluded is generally uncontaminated and the site development thus does not pose a risk to human health, controlled waters, surface and ground waters or to adjoining land and property.
- 5.3** Thus it is concluded no further measures are needed in respect of contamination levels.
- 5.4** With regards to site development however the material present cannot be classed as a topsoil medium, and thus it is recommended than 450mm of clean topsoil is imported and laid over garden areas and grassed areas to provide a suitable growing medium and cover.