

038/5003/AG/cc

3<sup>rd</sup> June 2025

Mr J Scott  
Britology  
jonathan@britology.co.uk



Registered in England 07068066

Parkhill  
Wetherby  
West Yorkshire  
LS22 5DZ

T 01937 545 330

www.lithos.co.uk

Dear Jonathan

## Lower Edge Quarry – gas & groundwater monitoring results

We have undertaken the seventh of 12 monthly visits at Lower Edge Quarry to inform a landfill permit application, results of which are included in this letter.

This letter should be read in conjunction with the Factual Letter Report issued by Lithos on the 28<sup>th</sup> October 2024 (Ref. 017/5003/AG/cc) and the letter detailing the findings of the previous (sixth) monitoring visit (Ref. 034/5003/AG/cc), issued on the 6<sup>th</sup> May 2025.

## Background

The site is located off Lower Edge Road, approximately 5.3km southeast of Halifax town centre and currently comprises an active quarry operated by Rand & Asquith. We understand the quarry is partially infilled with “stone, shale and pockets of fly ash”, however, in places the existing quarry void is c. 20m deep.

Lithos supervised the drilling of 5 rotary openhole boreholes between the 7<sup>th</sup> and 15<sup>th</sup> October 2024, to allow for the installation of dual gas and groundwater monitoring wells around the perimeter of the site. A total of 12 monthly visits will be undertaken to aid the application of a landfill permit. Details of the monitoring wells are listed below.

| Monitoring well | Coordinates |          | Level   | Installation   | Response zone depths m bgl (m AOD) | Response zone lithology |
|-----------------|-------------|----------|---------|----------------|------------------------------------|-------------------------|
|                 | easting     | northing |         |                |                                    |                         |
| BH01            | 412845.1    | 421374.6 | 160.149 | 19mm HDPE pipe | 1.0 – 3.0 (159.15 – 157.15)        | Quarry Backfill         |
|                 |             |          |         | 50mm HDPE pipe | 18.0 – 22.0 (142.15 – 138.15)      | Quarry Backfill         |
| BH02            | 412729.9    | 421182.0 | 172.376 | 19mm HDPE pipe | 1.0 – 3.0 (171.38 – 169.38)        | Elland Flags            |
|                 |             |          |         | 50mm HDPE pipe | 18.0 – 22.0 (154.38 – 150.38)      | Elland Flags            |
| BH03            | 412813.4    | 421106.3 | 177.696 | 19mm HDPE pipe | 1.0 – 3.0 (176.70 – 174.70)        | Granular Residual Soils |
|                 |             |          |         | 50mm HDPE pipe | 28.0 – 32.0 (149.70 – 145.70)      | Elland Flags            |
| BH04            | 412940.4    | 421050.0 | 176.317 | 19mm HDPE pipe | 1.0 – 3.0 (175.32 – 173.32)        | Quarry Backfill         |
|                 |             |          |         | 50mm HDPE pipe | 36.0 – 40.0 (140.32 – 136.32)      | Possible Elland Flags   |
| BH05            | 413013.5    | 421099.8 | 173.108 | 19mm HDPE pipe | 1.0 – 3.0 (172.12 – 170.12)        | Elland Flags            |
|                 |             |          |         | 50mm HDPE pipe | 35.5 – 39.5 (137.61 – 133.61)      | Elland Flags            |

## Groundwater dip results

A total of seven groundwater visits have been undertaken to determine the level of groundwater within the boreholes.

Results of groundwater dips to date are summarised below:



| Date     | Visit       | Well | Groundwater level m bgl | Remarks                                                                   |
|----------|-------------|------|-------------------------|---------------------------------------------------------------------------|
| 31/10/24 | Initial dip | BH01 | 19.23                   | -                                                                         |
| 07/11/24 | Visit 1     |      | 20.30                   | Bailed 8 Litres to 21.34m bgl at 09:39. Re-dipped at 20.41m bgl at 14:45  |
| 04/12/24 | Visit 2     |      | 17.93                   | -                                                                         |
| 06/01/25 | Visit 3     |      | ND                      | -                                                                         |
| 10/02/25 | Visit 4     |      | ND                      | -                                                                         |
| 05/03/25 | Visit 5     |      | ND                      |                                                                           |
| 08/04/25 | Visit 6     |      | ND                      |                                                                           |
| 13/05/25 | Visit 7     |      | ND                      |                                                                           |
| 31/10/24 | Initial dip | BH02 | 20.68                   | -                                                                         |
| 07/11/24 | Visit 1     |      | 20.82                   | Bailed 11 litres to 22.05m bgl at 10:00. Re-dipped at 22.05m bgl at 14:40 |
| 04/12/24 | Visit 2     |      | 20.15                   | -                                                                         |
| 06/01/25 | Visit 3     |      | 20.01                   | -                                                                         |
| 10/02/25 | Visit 4     |      | 21.83                   | -                                                                         |
| 05/03/25 | Visit 5     |      | 20.29                   |                                                                           |
| 08/04/25 | Visit 6     |      | 20.48                   |                                                                           |
| 13/05/25 | Visit 7     |      | ND                      |                                                                           |
| 31/10/24 | Initial dip | BH03 | >30.00                  | -                                                                         |
| 07/11/24 | Visit 1     |      | 32.33                   | Bailed 2 litres to 32.61m bgl at 10:21. Re-dipped at 32.61m bgl at 14:38  |
| 04/12/24 | Visit 2     |      | 31.70                   | -                                                                         |
| 06/01/25 | Visit 3     |      | 29.66                   | -                                                                         |
| 10/02/25 | Visit 4     |      | 31.38                   | -                                                                         |
| 05/03/25 | Visit 5     |      | 31.29                   |                                                                           |
| 08/04/25 | Visit 6     |      | 31.26                   |                                                                           |
| 13/05/25 | Visit 7     |      | ND                      |                                                                           |
| 31/10/24 | Initial dip | BH04 | >30.00                  | -                                                                         |
| 07/11/24 | Visit 1     |      | 34.85                   | Bailed 33 litres to 37.49m bgl at 11:05. Re-dipped at 38.01m at 14:21.    |
| 04/12/24 | Visit 2     |      | 31.11                   | -                                                                         |
| 13/01/25 | Visit 3A    |      | 29.51                   | -                                                                         |
| 10/02/25 | Visit 4     |      | 31.16                   | -                                                                         |
| 05/03/25 | Visit 5     |      | 34.26                   |                                                                           |
| 08/04/25 | Visit 6     |      | 35.13                   |                                                                           |
| 13/05/25 | Visit 7     |      | ND                      |                                                                           |
| 31/10/24 | Initial dip | BH05 | 28.66                   | -                                                                         |
| 07/11/24 | Visit 1     |      | 29.08                   | Bailed 60 litres to 35.33m bgl at 14:15                                   |
| 04/12/24 | Visit 2     |      | 27.00                   | -                                                                         |
| 13/01/25 | Visit 3A    |      | 25.87                   | -                                                                         |
| 10/02/25 | Visit 4     |      | 27.69                   | -                                                                         |
| 05/03/25 | Visit 5     |      | 28.09                   |                                                                           |
| 08/04/25 | Visit 6     |      | 28.90                   |                                                                           |
| 13/05/25 | Visit 7     |      | 30.95                   |                                                                           |

Due to recent unseasonably dry weather, all but BH05 were dry during the sixth monitoring visit undertaken on the 13<sup>th</sup> May 2025.

### Groundwater sampling

Monthly groundwater samples are required to aid the landfill permit application. To date, five rounds of groundwater sampling have been undertaken.

On each visit, purging of groundwater was undertaken using 13mm low flow waterra tubing prior to sampling. On completion of sampling, water samples were kept in cold storage until being collected by the laboratory. Groundwater levels and field observations made by the engineer during the fifth sampling visit are summarised in the table below.

| Monitoring well | Response zone (m)             | Groundwater level (m bgl) | Depth to base (m) | Sampling method                   | Comments                                     |
|-----------------|-------------------------------|---------------------------|-------------------|-----------------------------------|----------------------------------------------|
| BH01            | 18.0 – 22.0 (142.15 – 138.15) | ND                        | 20.76             | No sampling undertaken (well dry) | -                                            |
| BH02            | 18.0 – 22.0 (154.38 – 150.38) | ND                        | 21.28             |                                   | -                                            |
| BH03            | 28.0 – 32.0 (149.70 – 145.70) | ND                        | 31.76             |                                   | -                                            |
| BH04            | 36.0 – 40.0 (140.32 – 136.32) | ND                        | 39.50             |                                   | -                                            |
| BH05            | 35.5 – 39.5 (137.61 – 133.61) | 30.95                     | 37.50             | Low flow waterra                  | 40 litres of water purged prior to sampling. |

There was insufficient water in BHs 01 to 04 during visit 7 to obtain a representative water sample.

### Surface water sampling

A single water sample was taken from the base of the quarry during the seventh groundwater monitoring visit. Of the seven water sampling visits to date, a total of 3 surface water samples have been recovered.

### Laboratory testing

One sample of groundwater (BH05) and one sample of surface water (SW1) were sent to a UKAS accredited laboratory for analysis. Each sample was scheduled for a suite including:

- Metals (As, Cd, Cr, Cu, Pb, Hg, Ni, Se, Zn & B)
- Chloride
- Ammoniacal nitrogen
- Conductivity
- Dissolved organic carbon
- pH
- Total phenol
- Speciated TPH
- Speciated PAH

Laboratory results are appended to this letter and summarised in the Table on page 5. Lithos does not hold information regarding the critical concentrations, and therefore no values have been included.

### Gas monitoring results

A standard procedure was followed in accordance with CIRIA guidance; this procedure involved measurement, in the following order of:

- Atmospheric temperature, pressure and ambient oxygen concentration on site immediately prior to and on completion of monitoring
- Methane, oxygen and carbon dioxide concentrations and flow rates using a Gas Data GFM436 infra-red gas analyser
- Standing water level using a dipmeter

To date, seven monthly gas monitoring visits have been undertaken. The monitoring results from visit 7 of 12 are enclosed and summarised in the table below.

| Well |      | Response zone           | Range of methane concentrations (% v/v) | Range of carbon dioxide concentrations (% v/v) | Range of steady flow rates (litre/hour) |
|------|------|-------------------------|-----------------------------------------|------------------------------------------------|-----------------------------------------|
| BH01 | 50mm | Quarry backfill         | ND                                      | 0.1                                            | ND                                      |
|      | 19mm | Quarry backfill         | ND                                      | 0.1                                            | ND                                      |
| BH02 | 50mm | Elland Flags            | ND                                      | 0.1                                            | ND                                      |
|      | 19mm | Elland Flags            | ND                                      | 0.2                                            | ND                                      |
| BH03 | 50mm | Granular Residual Soils | ND                                      | 0.4                                            | ND                                      |
|      | 19mm | Elland Flags            | ND                                      | 0.4                                            | ND                                      |
| BH04 | 50mm | Quarry backfill         | ND                                      | 0.6                                            | ND                                      |
|      | 19mm | Possible Elland Flags   | ND                                      | 0.4                                            | 0.3                                     |
| BH05 | 50mm | Elland Flags            | ND                                      | 1.5                                            | ND                                      |
|      | 19mm | Elland Flags            | ND                                      | 0.2                                            | ND                                      |

Note: Atmospheric pressures varied between 1007mb and 1035mb. ND – None detected.

During the visit on the 13<sup>th</sup> May atmospheric pressure was rising from 997 to 1025 across the day.

Should you require any further information, please contact the undersigned.

Yours sincerely



Adam Gombocz  
Director  
**for and on behalf of**  
**LITHOS CONSULTING LIMITED**

Encl.

Gas & Groundwater monitoring data – visit 7  
Drawing 5003/6 BH location plan  
Borehole logs  
Chemical test results

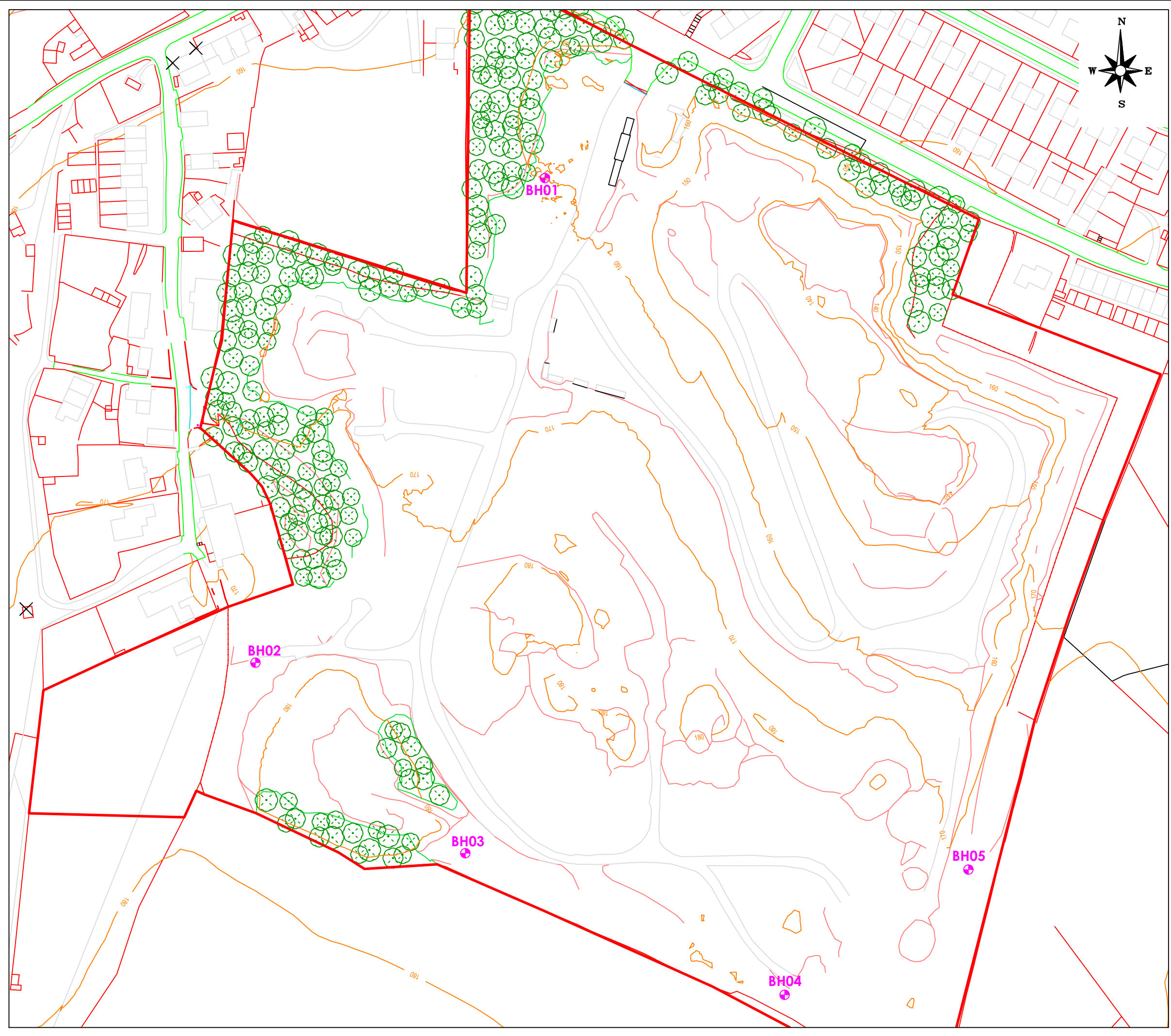
## SUMMARY OF GROUNDWATER TESTING – VISIT 7

| Expl Hole | pH  | As   | B     | Cd    | Cr    | Cu   | Pb    | Hg    | Ni   | Se   | Zn   | Cl <sup>-</sup> | Ammoniacal N | Conductivity | Dissolved Organic Carbon | Total Phenol | PAHs | TPH                              |
|-----------|-----|------|-------|-------|-------|------|-------|-------|------|------|------|-----------------|--------------|--------------|--------------------------|--------------|------|----------------------------------|
|           |     | ug/l | ug/l  | ug/l  | ug/l  | ug/l | ug/l  | ug/l  | ug/l | ug/l | ug/l | mg/l            | mg/l         | uS/cm        | mg/l                     | ug/l         | ug/l | C <sub>1</sub> – C <sub>40</sub> |
| SW1       | 7.7 | 0.57 | 308.6 | <0.03 | 0.32  | 1.5  | <0.09 | <0.01 | 1.9  | 19   | 130  | 30              | 0.51         | 1500         | 48                       | <0.5         | <0.2 | 33                               |
| BH05      | 7.5 | 1.2  | 157.9 | <0.03 | <0.25 | 11   | 10    | 0.06  | 3.1  | 0.78 | 160  | 94              | 1.6          | 3100         | 89                       | <0.5         | <0.2 | <10                              |

Visit 7

|                                       |  |                                                                                                             |                   |                                               |                            |                              |                       |                   |          |                                     |                 |                              |  |                                               |  |
|---------------------------------------|--|-------------------------------------------------------------------------------------------------------------|-------------------|-----------------------------------------------|----------------------------|------------------------------|-----------------------|-------------------|----------|-------------------------------------|-----------------|------------------------------|--|-----------------------------------------------|--|
| Job Title:                            |  |                                                                                                             |                   |                                               |                            |                              |                       |                   |          | Job No:                             |                 | <div>LITHOS CONSULTING</div> |  |                                               |  |
| Quarry at Rastrick, Brighouse         |  |                                                                                                             |                   |                                               |                            |                              |                       |                   |          | 5003                                |                 |                              |  |                                               |  |
| Client:                               |  |                                                                                                             |                   |                                               |                            |                              |                       |                   |          | Sheet :                             |                 |                              |  |                                               |  |
| Britology                             |  |                                                                                                             |                   |                                               |                            |                              |                       |                   |          | 8 of 8                              |                 |                              |  |                                               |  |
| Date:                                 |  | Arrival Time:                                                                                               |                   | Depart Time:                                  |                            | Operator:                    |                       |                   |          |                                     |                 |                              |  |                                               |  |
| 13/05/2025                            |  | 08:00                                                                                                       |                   | 11:00                                         |                            | George Costley & Liam Barton |                       |                   |          |                                     |                 |                              |  |                                               |  |
| Gas Monitoring Results:               |  |                                                                                                             |                   |                                               |                            |                              |                       |                   |          |                                     |                 |                              |  |                                               |  |
| Ambient Concentration (% Volume):     |  |                                                                                                             |                   | CH <sub>4</sub> :                             | ND                         | CO <sub>2</sub> :            | ND                    | O <sub>2</sub> :  | 21.2     |                                     |                 |                              |  |                                               |  |
|                                       |  |                                                                                                             |                   |                                               |                            |                              |                       |                   |          |                                     |                 |                              |  |                                               |  |
| Monitoring Point                      |  | Groundwater level                                                                                           | Concentrations    |                                               |                            |                              |                       | Gas Flow Rates    |          |                                     | Bottom of well  | Remarks                      |  |                                               |  |
|                                       |  |                                                                                                             | Initial / Highest |                                               | Steady concentrations      |                              | Lowest concn          | Initial / Maximum | Steady   | Time to fall from highest to steady |                 |                              |  |                                               |  |
|                                       |  |                                                                                                             | CH <sub>4</sub>   | CO <sub>2</sub>                               | CH <sub>4</sub>            | CO <sub>2</sub>              | O <sub>2</sub>        |                   |          |                                     |                 |                              |  |                                               |  |
|                                       |  | (m) bgl                                                                                                     | % v/v             | (%)                                           | % v/v                      | (%)                          | (%)                   | litre/hr          | litre/hr | secs                                |                 |                              |  |                                               |  |
| BH01 (50mm)                           |  | ND                                                                                                          | ND                | 0.1                                           | ND                         | 0.1                          | 20.7                  | ND                | ND       | 120.0                               | 20.76           |                              |  |                                               |  |
| BH02 (50mm)                           |  | ND                                                                                                          | ND                | 0.1                                           | ND                         | 0.1                          | 21.0                  | 0.1               | ND       | 120.0                               | 21.28           |                              |  |                                               |  |
| BH03 (50mm)                           |  | ND                                                                                                          | ND                | 0.4                                           | ND                         | 0.4                          | 20.2                  | ND                | ND       | 120.0                               | 31.76           |                              |  |                                               |  |
| BH04 (50mm)                           |  | ND                                                                                                          | ND                | 0.6                                           | ND                         | 0.6                          | 19.7                  | ND                | ND       | 120.0                               | 39.50           |                              |  |                                               |  |
| BH05 (50mm)                           |  | 30.95                                                                                                       | ND                | 1.5                                           | ND                         | 1.5                          | 9.1                   | 0.3               | ND       | 120.0                               | 37.50           |                              |  |                                               |  |
| BH01 (19mm)                           |  | ND                                                                                                          | ND                | 0.1                                           | ND                         | 0.1                          | 21.0                  | ND                | ND       | 120.0                               | 2.80            |                              |  |                                               |  |
| BH02 (19mm)                           |  | ND                                                                                                          | ND                | 0.2                                           | ND                         | 0.2                          | 20.8                  | ND                | ND       | 120.0                               | 2.69            |                              |  |                                               |  |
| BH03 (19mm)                           |  | ND                                                                                                          | ND                | 0.4                                           | ND                         | 0.4                          | 20.6                  | ND                | ND       | 120.0                               | 2.84            |                              |  |                                               |  |
| BH04 (19mm)                           |  | ND                                                                                                          | ND                | 0.4                                           | ND                         | 0.4                          | 20.8                  | 0.3               | 0.3      | 120.0                               | 2.54            |                              |  |                                               |  |
| BH05 (19mm)                           |  | ND                                                                                                          | ND                | 0.2                                           | ND                         | 0.2                          | 20.5                  | ND                | ND       | 120.0                               | 2.82            |                              |  |                                               |  |
| Equipment Used:                       |  |                                                                                                             |                   |                                               |                            |                              | Next Calibration Date |                   |          | Key                                 |                 |                              |  |                                               |  |
| Gas Data GFM436 Infrared Gas Analyser |  |                                                                                                             |                   |                                               |                            |                              | 27/03/2025            |                   |          | ND                                  |                 |                              |  | None Detected                                 |  |
| Geotechnical Instruments Dipmeter     |  |                                                                                                             |                   |                                               |                            |                              |                       |                   |          | NR                                  |                 |                              |  | Not Recorded                                  |  |
|                                       |  |                                                                                                             |                   |                                               |                            |                              |                       |                   |          | 1.0                                 |                 |                              |  | Recorded value does not breach trigger levels |  |
|                                       |  |                                                                                                             |                   |                                               |                            |                              |                       |                   |          | 5.0                                 |                 |                              |  | Recorded value breaches trigger level 1       |  |
|                                       |  |                                                                                                             |                   |                                               |                            |                              |                       |                   |          | 10.0                                |                 |                              |  | Recorded value breaches trigger level 2       |  |
|                                       |  | Site Data:                                                                                                  |                   | Weather Station Data (Ganton Weather Station) |                            |                              |                       |                   |          |                                     |                 |                              |  |                                               |  |
|                                       |  | Temp (°C):                                                                                                  | 12.3 > 17.8       |                                               | Barometric Pressure Trend: |                              |                       | Rising            |          |                                     |                 |                              |  |                                               |  |
| Time:                                 |  | 08:00                                                                                                       | 09:30             | 11:00                                         | 00:00                      | 06:00                        | 08:00                 | 09:30             | 11:00    | 13:00                               | Trigger level 1 |                              |  |                                               |  |
| Pressure (mb):                        |  | 997                                                                                                         | 998               | 999                                           | 1022                       | 1023                         | 1024                  | 1025              | 1025     | 1025                                | Trigger level 2 |                              |  |                                               |  |
|                                       |  | Weather Conditions:                                                                                         |                   | Sunny, Cool                                   |                            |                              |                       |                   |          |                                     |                 |                              |  |                                               |  |
|                                       |  | Surface Ground Conditions:                                                                                  |                   | Dry                                           |                            |                              |                       |                   |          |                                     |                 |                              |  |                                               |  |
| Remarks:                              |  | Ganton Weather station is located approximately 2 miles south from the site (Quarry at Rastrick, Brighouse) |                   |                                               |                            |                              |                       |                   |          |                                     |                 |                              |  |                                               |  |





NOTES

 BOREHOLE LOCATION

 APPROXIMATE SITE BOUNDARY

EXPLORATORY HOLE LOCATIONS HAVE BEEN SURVEYED  
IN (COORDINATES & GROUND LEVEL) ON COMPLETION

| REV. | DESCRIPTION | DATE |
|------|-------------|------|
|      |             |      |



info@lithos.co.uk  
www.lithos.co.uk  
Tel 01937 545330

CLIENT

BRITOLGY

JOB TITLE

QUARRY NEAR  
RASTRICK,  
BRIGHOUSE

DRAWING TITLE

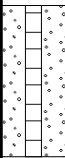
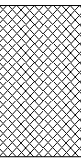
EXPLORATORY HOLE LOCATIONS

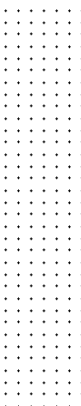
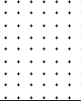
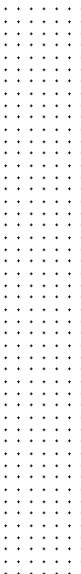
|         |     |      |            |              |                                      |
|---------|-----|------|------------|--------------|--------------------------------------|
| DRAWN   | LEW | DATE | 16 10 2025 | STATUS       | FOR COMMENT <input type="checkbox"/> |
| CHECKED | AG  | DATE | 16 10 2025 | FOR APPROVAL | <input type="checkbox"/>             |
|         |     |      |            | DRAFT        | <input type="checkbox"/>             |
|         |     |      |            | FINAL        | <input checked="" type="checkbox"/>  |

|       |        |       |    |             |        |          |  |
|-------|--------|-------|----|-------------|--------|----------|--|
| SCALE | 1:1500 | SHEET | A3 | DRAWING NO. | 5003/6 | REVISION |  |
|-------|--------|-------|----|-------------|--------|----------|--|

|                                                                                                                  |               |                             |      |         | <h1>Borehole Log</h1>          |           |                                | Borehole No.<br><b>BH01</b><br>Sheet 1 of 2                                                                            |                                                                                       |  |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-----------------------------|------|---------|--------------------------------|-----------|--------------------------------|------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--|--|
| Project Name: Quarry at Rastrick                                                                                                                                                                 |               |                             |      |         | Project No.<br>5003            |           | Co-ords: 412845.06 - 421374.61 |                                                                                                                        | Hole Type<br>PH                                                                       |  |  |
| Location: Rastrick                                                                                                                                                                               |               |                             |      |         | Level: 160.15                  |           | Scale<br>1:100                 |                                                                                                                        | Logged By<br>CC                                                                       |  |  |
| Client: Britology                                                                                                                                                                                |               |                             |      |         | Dates: 15/10/2024 - 15/10/2024 |           |                                |                                                                                                                        |                                                                                       |  |  |
| Well                                                                                                                                                                                             | Water Strikes | Samples and In Situ Testing |      |         | Depth (m)                      | Level (m) | Legend                         | Stratum Description                                                                                                    |                                                                                       |  |  |
|                                                                                                                                                                                                  |               | Depth (m)                   | Type | Results |                                |           |                                |                                                                                                                        |                                                                                       |  |  |
|                                                                                                                                                                                                  |               |                             |      |         |                                |           |                                | MADE GROUND: Light brown QUARRY BACKFILL. Recovered as sandstone with occasional flecks of mudstone. (QUARRY BACKFILL) |                                                                                       |  |  |
|                                                                                                                                                                                                  |               |                             |      |         |                                |           |                                |                                                                                                                        | 1                                                                                     |  |  |
|                                                                                                                                                                                                  |               |                             |      |         |                                |           |                                |                                                                                                                        | 2                                                                                     |  |  |
|                                                                                                                                                                                                  |               |                             |      |         |                                |           |                                |                                                                                                                        | 3                                                                                     |  |  |
|                                                                                                                                                                                                  |               |                             |      |         |                                |           |                                |                                                                                                                        | 4                                                                                     |  |  |
|                                                                                                                                                                                                  |               |                             |      |         |                                |           |                                |                                                                                                                        | 5                                                                                     |  |  |
|                                                                                                                                                                                                  |               |                             |      |         |                                |           |                                |                                                                                                                        | 6                                                                                     |  |  |
|                                                                                                                                                                                                  |               |                             |      |         |                                |           |                                |                                                                                                                        | 7                                                                                     |  |  |
|                                                                                                                                                                                                  |               |                             |      |         |                                |           |                                |                                                                                                                        | 8                                                                                     |  |  |
|                                                                                                                                                                                                  |               |                             |      |         |                                |           |                                |                                                                                                                        | 9                                                                                     |  |  |
|                                                                                                                                                                                                  |               |                             |      |         |                                |           |                                |                                                                                                                        | 10                                                                                    |  |  |
|                                                                                                                                                                                                  |               |                             |      |         |                                |           |                                |                                                                                                                        | 11                                                                                    |  |  |
|                                                                                                                                                                                                  |               |                             |      |         |                                |           |                                |                                                                                                                        | 12                                                                                    |  |  |
|                                                                                                                                                                                                  |               |                             |      |         |                                |           |                                |                                                                                                                        | 13                                                                                    |  |  |
|                                                                                                                                                                                                  |               |                             |      |         |                                |           |                                |                                                                                                                        | 14                                                                                    |  |  |
|                                                                                                                                                                                                  |               |                             |      |         |                                |           |                                |                                                                                                                        | 15                                                                                    |  |  |
|                                                                                                                                                                                                  |               |                             |      |         |                                |           |                                |                                                                                                                        | 16                                                                                    |  |  |
|                                                                                                                                                                                                  |               |                             |      |         |                                |           |                                |                                                                                                                        | 17                                                                                    |  |  |
|                                                                                                                                                                                                  |               |                             |      |         |                                |           |                                |                                                                                                                        | 18                                                                                    |  |  |
|                                                                                                                                                                                                  |               |                             |      |         |                                |           |                                |                                                                                                                        | 19                                                                                    |  |  |
|                                                                                                                                                                                                  |               |                             |      |         |                                |           |                                |                                                                                                                        | 20                                                                                    |  |  |
| Continued on next sheet                                                                                                                                                                          |               |                             |      |         |                                |           |                                |                                                                                                                        |                                                                                       |  |  |
| Remarks<br>1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was not encountered. 3. Exploratory hole surveyed in (level and co-ordinates) on completion. |               |                             |      |         |                                |           |                                |                                                                                                                        |  |  |  |



|                                                                                                                                                                                                  |                  |                             |      |         |                                |              |                                                                                   |                                             |                                                                                       |  |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|-----------------------------|------|---------|--------------------------------|--------------|-----------------------------------------------------------------------------------|---------------------------------------------|---------------------------------------------------------------------------------------|--|--|
|                                                                                                                  |                  |                             |      |         | <h1>Borehole Log</h1>          |              |                                                                                   | Borehole No.<br><b>BH01</b><br>Sheet 2 of 2 |                                                                                       |  |  |
| Project Name: Quarry at Rastrick                                                                                                                                                                 |                  |                             |      |         | Project No.<br>5003            |              | Co-ords: 412845.06 - 421374.61                                                    |                                             | Hole Type<br>PH                                                                       |  |  |
| Location: Rastrick                                                                                                                                                                               |                  |                             |      |         | Level: 160.15                  |              | Scale<br>1:100                                                                    |                                             | Logged By<br>CC                                                                       |  |  |
| Client: Britology                                                                                                                                                                                |                  |                             |      |         | Dates: 15/10/2024 - 15/10/2024 |              |                                                                                   |                                             |                                                                                       |  |  |
| Well                                                                                                                                                                                             | Water<br>Strikes | Samples and In Situ Testing |      |         | Depth<br>(m)                   | Level<br>(m) | Legend                                                                            | Stratum Description                         |                                                                                       |  |  |
|                                                                                                                                                                                                  |                  | Depth (m)                   | Type | Results |                                |              |                                                                                   |                                             |                                                                                       |  |  |
|                                                                                                                 |                  |                             |      |         | 22.00                          | 138.15       |  | End of borehole at 22.00 m                  | 21                                                                                    |  |  |
|                                                                                                                                                                                                  |                  |                             |      |         |                                |              |                                                                                   |                                             | 22                                                                                    |  |  |
|                                                                                                                                                                                                  |                  |                             |      |         |                                |              |                                                                                   |                                             | 23                                                                                    |  |  |
|                                                                                                                                                                                                  |                  |                             |      |         |                                |              |                                                                                   |                                             | 24                                                                                    |  |  |
|                                                                                                                                                                                                  |                  |                             |      |         |                                |              |                                                                                   |                                             | 25                                                                                    |  |  |
|                                                                                                                                                                                                  |                  |                             |      |         |                                |              |                                                                                   |                                             | 26                                                                                    |  |  |
|                                                                                                                                                                                                  |                  |                             |      |         |                                |              |                                                                                   |                                             | 27                                                                                    |  |  |
|                                                                                                                                                                                                  |                  |                             |      |         |                                |              |                                                                                   |                                             | 28                                                                                    |  |  |
|                                                                                                                                                                                                  |                  |                             |      |         |                                |              |                                                                                   |                                             | 29                                                                                    |  |  |
|                                                                                                                                                                                                  |                  |                             |      |         |                                |              |                                                                                   |                                             | 30                                                                                    |  |  |
|                                                                                                                                                                                                  |                  |                             |      |         |                                |              |                                                                                   |                                             | 31                                                                                    |  |  |
|                                                                                                                                                                                                  |                  |                             |      |         |                                |              |                                                                                   |                                             | 32                                                                                    |  |  |
|                                                                                                                                                                                                  |                  |                             |      |         |                                |              |                                                                                   |                                             | 33                                                                                    |  |  |
|                                                                                                                                                                                                  |                  |                             |      |         |                                |              |                                                                                   |                                             | 34                                                                                    |  |  |
|                                                                                                                                                                                                  |                  |                             |      |         |                                |              |                                                                                   |                                             | 35                                                                                    |  |  |
|                                                                                                                                                                                                  |                  |                             |      |         |                                |              |                                                                                   |                                             | 36                                                                                    |  |  |
|                                                                                                                                                                                                  |                  |                             |      |         |                                |              |                                                                                   |                                             | 37                                                                                    |  |  |
|                                                                                                                                                                                                  |                  |                             |      |         |                                |              |                                                                                   |                                             | 38                                                                                    |  |  |
|                                                                                                                                                                                                  |                  |                             |      |         |                                |              |                                                                                   |                                             | 39                                                                                    |  |  |
|                                                                                                                                                                                                  |                  |                             |      |         |                                |              |                                                                                   |                                             | 40                                                                                    |  |  |
| Remarks<br>1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was not encountered. 3. Exploratory hole surveyed in (level and co-ordinates) on completion. |                  |                             |      |         |                                |              |                                                                                   |                                             |  |  |  |

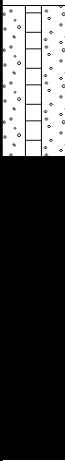
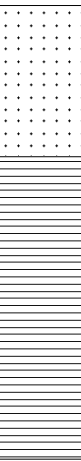
|    |                                                                                     |                             |      |         | <h1>Borehole Log</h1> |           |                                                                                   | Borehole No.<br><b>BH02</b><br>Sheet 1 of 2                                         |                                                       |    |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------|------|---------|-----------------------|-----------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------|----|
| Project Name: Quarry at Rastrick                                                   |                                                                                     |                             |      |         | Project No.<br>5003   |           | Co-ords: 412729.92 - 421181.99                                                    |                                                                                     | Hole Type<br>PH                                       |    |
| Location: Rastrick                                                                 |                                                                                     |                             |      |         |                       |           | Level: 172.40                                                                     |                                                                                     | Scale<br>1:100                                        |    |
| Client: Britology                                                                  |                                                                                     |                             |      |         |                       |           | Dates: 07/10/2024 - 07/10/2024                                                    |                                                                                     | Logged By<br>CC                                       |    |
| Well                                                                               | Water Strikes                                                                       | Samples and In Situ Testing |      |         | Depth (m)             | Level (m) | Legend                                                                            | Stratum Description                                                                 |                                                       |    |
|                                                                                    |                                                                                     | Depth (m)                   | Type | Results |                       |           |                                                                                   |                                                                                     |                                                       |    |
|  |  |                             |      |         | 1.50                  | 170.90    |  | Overburden.<br>(GRANULAR RESIDUAL SOIL)                                             | 1                                                     |    |
|                                                                                    |                                                                                     |                             |      |         |                       |           |                                                                                   |    | Light brown SANDSTONE.<br>(ELLAND FLAGS)              | 2  |
|                                                                                    |                                                                                     |                             |      |         |                       |           |                                                                                   |                                                                                     |                                                       | 3  |
|                                                                                    |                                                                                     |                             |      |         |                       |           |                                                                                   |                                                                                     |                                                       | 4  |
|                                                                                    |                                                                                     |                             |      |         |                       |           |                                                                                   |                                                                                     |                                                       | 5  |
|                                                                                    |                                                                                     |                             |      |         |                       |           |                                                                                   |                                                                                     |                                                       | 6  |
|                                                                                    |                                                                                     |                             |      |         |                       | 7.00      | 165.40                                                                            |  | Interbedded SANDSTONE and MUDSTONE.<br>(ELLAND FLAGS) | 7  |
|                                                                                    |                                                                                     |                             |      |         |                       | 8.40      | 164.00                                                                            |  | Light brown SANDSTONE.<br>(ELLAND FLAGS)              | 8  |
|                                                                                    |                                                                                     |                             |      |         |                       |           |                                                                                   |                                                                                     |                                                       | 9  |
|                                                                                    |                                                                                     |                             |      |         |                       |           |                                                                                   |                                                                                     |                                                       | 10 |
|                                                                                    |                                                                                     |                             |      |         |                       |           |                                                                                   | 11                                                                                  |                                                       |    |
|                                                                                    |                                                                                     |                             |      |         |                       |           |                                                                                   | 12                                                                                  |                                                       |    |
|                                                                                    |                                                                                     |                             |      |         |                       |           |                                                                                   | 13                                                                                  |                                                       |    |
|                                                                                    |                                                                                     |                             |      |         |                       |           |                                                                                   | 14                                                                                  |                                                       |    |
|                                                                                    |                                                                                     |                             |      |         |                       |           |                                                                                   | 15                                                                                  |                                                       |    |
|                                                                                    |                                                                                     |                             |      |         |                       |           |                                                                                   | 16                                                                                  |                                                       |    |
|                                                                                    |                                                                                     |                             |      |         |                       |           |                                                                                   | 17                                                                                  |                                                       |    |
|                                                                                    |                                                                                     |                             |      |         |                       |           |                                                                                   | 18                                                                                  |                                                       |    |
|                                                                                    |                                                                                     |                             |      |         |                       |           |                                                                                   | 19                                                                                  |                                                       |    |
|                                                                                    |                                                                                     |                             |      |         |                       |           |                                                                                   | 20                                                                                  |                                                       |    |

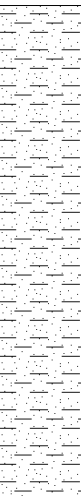
Continued on next sheet

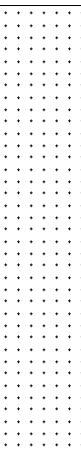
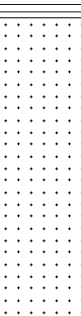
Remarks

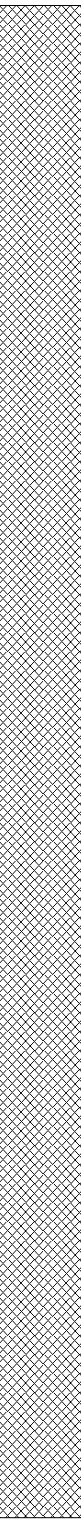
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater encountered between 17.3m and 20.3m depth. 3. Flush returns were lost from 12.4m and 15.4m depth. 4. Exploratory hole surveyed in (level and co-ordinates) on completion.



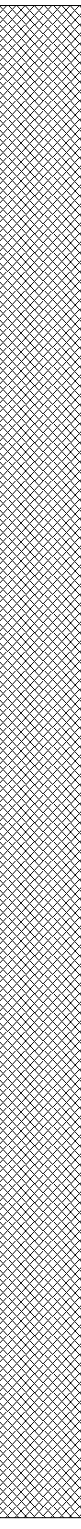
|                                                                                                                                                                                                                                                                    |               |                             |      |         |                                |           |                                                                                   |                                             |                 |  |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-----------------------------|------|---------|--------------------------------|-----------|-----------------------------------------------------------------------------------|---------------------------------------------|-----------------|--|--|
|                                                                                                                                                                                    |               |                             |      |         | <h1>Borehole Log</h1>          |           |                                                                                   | Borehole No.<br><b>BH02</b><br>Sheet 2 of 2 |                 |  |  |
| Project Name: Quarry at Rastrick                                                                                                                                                                                                                                   |               |                             |      |         | Project No.<br>5003            |           | Co-ords: 412729.92 - 421181.99                                                    |                                             | Hole Type<br>PH |  |  |
| Location: Rastrick                                                                                                                                                                                                                                                 |               |                             |      |         | Level: 172.40                  |           | Scale<br>1:100                                                                    |                                             | Logged By<br>CC |  |  |
| Client: Britology                                                                                                                                                                                                                                                  |               |                             |      |         | Dates: 07/10/2024 - 07/10/2024 |           |                                                                                   |                                             |                 |  |  |
| Well                                                                                                                                                                                                                                                               | Water Strikes | Samples and In Situ Testing |      |         | Depth (m)                      | Level (m) | Legend                                                                            | Stratum Description                         |                 |  |  |
|                                                                                                                                                                                                                                                                    |               | Depth (m)                   | Type | Results |                                |           |                                                                                   |                                             |                 |  |  |
|                                                                                                                                                                                   |               |                             |      |         | 22.00                          | 150.40    |  | Dark grey MUDSTONE.<br>(ELLAND FLAGS)       |                 |  |  |
|                                                                                                                                                                                                                                                                    |               |                             |      |         | 26.00                          | 146.40    |                                                                                   |                                             |                 |  |  |
|                                                                                                                                                                                                                                                                    |               |                             |      |         |                                |           |                                                                                   | End of borehole at 26.00 m                  |                 |  |  |
| Remarks                                                                                                                                                                                                                                                            |               |                             |      |         |                                |           |                                                                                   |                                             |                 |  |  |
| 1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater encountered between 17.3m and 20.3m depth. 3. Flush returns were lost from 12.4m and 15.4m depth. 4. Exploratory hole surveyed in (level and co-ordinates) on completion. |               |                             |      |         |                                |           |                                                                                   |                                             |                 |  |  |
|                                                                                                                                                                               |               |                             |      |         |                                |           |                                                                                   |                                             |                 |  |  |

|                                                                                                                                                                                                  |                                                                                    |                             |      |         |                                |           |                                                                                   |                                             |                                                                                       |  |  |    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-----------------------------|------|---------|--------------------------------|-----------|-----------------------------------------------------------------------------------|---------------------------------------------|---------------------------------------------------------------------------------------|--|--|----|
|                                                                                                                  |                                                                                    |                             |      |         | <h1>Borehole Log</h1>          |           |                                                                                   | Borehole No.<br><b>BH03</b><br>Sheet 1 of 2 |                                                                                       |  |  |    |
| Project Name: Quarry at Rastrick                                                                                                                                                                 |                                                                                    |                             |      |         | Project No.<br>5003            |           | Co-ords: 412813.40 - 421106.28                                                    |                                             | Hole Type<br>PH                                                                       |  |  |    |
| Location: Rastrick                                                                                                                                                                               |                                                                                    |                             |      |         | Level: 177.70                  |           | Scale<br>1:100                                                                    |                                             | Logged By<br>CC                                                                       |  |  |    |
| Client: Britology                                                                                                                                                                                |                                                                                    |                             |      |         | Dates: 08/10/2024 - 09/10/2024 |           |                                                                                   |                                             |                                                                                       |  |  |    |
| Well                                                                                                                                                                                             | Water Strikes                                                                      | Samples and In Situ Testing |      |         | Depth (m)                      | Level (m) | Legend                                                                            | Stratum Description                         |                                                                                       |  |  |    |
|                                                                                                                                                                                                  |                                                                                    | Depth (m)                   | Type | Results |                                |           |                                                                                   |                                             |                                                                                       |  |  |    |
|                                                                                                                |  |                             |      |         | 6.50                           | 171.20    |  | Overbuden.<br>(GRANULAR RESIDUAL SOIL)      | 1                                                                                     |  |  |    |
|                                                                                                                                                                                                  |                                                                                    |                             |      |         |                                |           |                                                                                   |                                             | 2                                                                                     |  |  |    |
|                                                                                                                                                                                                  |                                                                                    |                             |      |         |                                |           |                                                                                   |                                             |                                                                                       |  |  | 3  |
|                                                                                                                                                                                                  |                                                                                    |                             |      |         |                                |           |                                                                                   |                                             |                                                                                       |  |  | 4  |
|                                                                                                                                                                                                  |                                                                                    |                             |      |         |                                |           |                                                                                   |                                             |                                                                                       |  |  | 5  |
|                                                                                                                                                                                                  |                                                                                    |                             |      |         |                                |           |                                                                                   |                                             |                                                                                       |  |  | 6  |
|                                                                                                                                                                                                  |                                                                                    |                             |      |         |                                |           |                                                                                   |                                             |                                                                                       |  |  | 7  |
|                                                                                                                                                                                                  |                                                                                    |                             |      |         |                                |           |                                                                                   |                                             |                                                                                       |  |  | 8  |
|                                                                                                                                                                                                  |                                                                                    |                             |      |         |                                |           |                                                                                   |                                             |                                                                                       |  |  | 9  |
|                                                                                                                                                                                                  |                                                                                    |                             |      |         |                                |           |                                                                                   |                                             |                                                                                       |  |  | 10 |
|                                                                                                                                                                                                  |                                                                                    |                             |      |         |                                |           |                                                                                   |                                             |                                                                                       |  |  | 11 |
|                                                                                                                                                                                                  |                                                                                    |                             |      |         |                                |           |                                                                                   |                                             |                                                                                       |  |  | 12 |
|                                                                                                                                                                                                  |                                                                                    |                             |      |         |                                |           |                                                                                   |                                             |                                                                                       |  |  | 13 |
|                                                                                                                                                                                                  |                                                                                    |                             |      |         |                                |           |                                                                                   |                                             |                                                                                       |  |  | 14 |
|                                                                                                                                                                                                  |                                                                                    |                             |      |         |                                |           |                                                                                   |                                             |                                                                                       |  |  | 15 |
|                                                                                                                                                                                                  |                                                                                    |                             |      |         |                                |           |                                                                                   |                                             |                                                                                       |  |  | 16 |
|                                                                                                                                                                                                  |                                                                                    |                             |      |         |                                |           |                                                                                   |                                             |                                                                                       |  |  | 17 |
|                                                                                                                                                                                                  |                                                                                    |                             |      |         |                                |           |                                                                                   |                                             |                                                                                       |  |  | 18 |
|                                                                                                                                                                                                  |                                                                                    |                             |      |         |                                |           |                                                                                   |                                             |                                                                                       |  |  | 19 |
|                                                                                                                                                                                                  |                                                                                    |                             |      |         |                                |           |                                                                                   |                                             |                                                                                       |  |  | 20 |
| Continued on next sheet                                                                                                                                                                          |                                                                                    |                             |      |         |                                |           |                                                                                   |                                             |                                                                                       |  |  |    |
| Remarks<br>1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was not encountered. 3. Exploratory hole surveyed in (level and co-ordinates) on completion. |                                                                                    |                             |      |         |                                |           |                                                                                   |                                             |  |  |  |    |

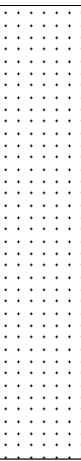
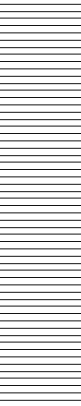
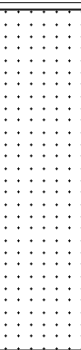
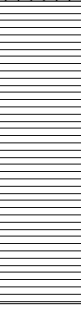
|                                                                                                                  |               |                             |      |         | <h1>Borehole Log</h1>          |           |                                                                                     | Borehole No.<br><b>BH03</b><br>Sheet 2 of 2           |                                                                                       |  |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-----------------------------|------|---------|--------------------------------|-----------|-------------------------------------------------------------------------------------|-------------------------------------------------------|---------------------------------------------------------------------------------------|--|--|
| Project Name: Quarry at Rastrick                                                                                                                                                                 |               |                             |      |         | Project No.<br>5003            |           | Co-ords: 412813.40 - 421106.28                                                      |                                                       | Hole Type<br>PH                                                                       |  |  |
| Location: Rastrick                                                                                                                                                                               |               |                             |      |         | Level: 177.70                  |           | Scale<br>1:100                                                                      |                                                       | Logged By<br>CC                                                                       |  |  |
| Client: Britology                                                                                                                                                                                |               |                             |      |         | Dates: 08/10/2024 - 09/10/2024 |           |                                                                                     |                                                       |                                                                                       |  |  |
| Well                                                                                                                                                                                             | Water Strikes | Samples and In Situ Testing |      |         | Depth (m)                      | Level (m) | Legend                                                                              | Stratum Description                                   |                                                                                       |  |  |
|                                                                                                                                                                                                  |               | Depth (m)                   | Type | Results |                                |           |                                                                                     |                                                       |                                                                                       |  |  |
|                                                                                                                |               |                             |      |         | 26.00                          | 151.70    |    |                                                       | 21                                                                                    |  |  |
|                                                                                                                                                                                                  |               |                             |      |         |                                |           |                                                                                     |                                                       | 22                                                                                    |  |  |
|                                                                                                                                                                                                  |               |                             |      |         |                                |           |                                                                                     |                                                       | 23                                                                                    |  |  |
|                                                                                                                                                                                                  |               |                             |      |         |                                |           |                                                                                     |                                                       | 24                                                                                    |  |  |
|                                                                                                                                                                                                  |               |                             |      |         |                                |           |                                                                                     |                                                       | 25                                                                                    |  |  |
|                                                                                                                                                                                                  |               |                             |      |         | 26.00                          | 151.70    |    | Dark grey MUDSTONE.<br>(ELLAND FLAGS)                 | 26                                                                                    |  |  |
|                                                                                                                                                                                                  |               |                             |      |         | 27.00                          | 150.70    |   | Interbedded SANDSTONE and MUDSTONE.<br>(ELLAND FLAGS) | 27                                                                                    |  |  |
|                                                                                                                                                                                                  |               |                             |      |         |                                |           |                                                                                     |                                                       | 28                                                                                    |  |  |
|                                                                                                                                                                                                  |               |                             |      |         |                                |           |                                                                                     |                                                       | 29                                                                                    |  |  |
|                                                                                                                                                                                                  |               |                             |      |         |                                |           |                                                                                     |                                                       | 30                                                                                    |  |  |
|                                                                                                                                                                                                  |               |                             |      |         | 31.00                          | 146.70    |  | Dark grey MUDSTONE.<br>(ELLAND FLAGS)                 | 31                                                                                    |  |  |
|                                                                                                                                                                                                  |               |                             |      |         |                                |           |                                                                                     |                                                       | 32                                                                                    |  |  |
|                                                                                                                                                                                                  |               |                             |      |         | 32.40                          | 145.30    | ----- End of borehole at 32.40 m -----                                              |                                                       | 33                                                                                    |  |  |
|                                                                                                                                                                                                  |               |                             |      |         |                                |           |                                                                                     |                                                       | 34                                                                                    |  |  |
|                                                                                                                                                                                                  |               |                             |      |         |                                |           |                                                                                     |                                                       | 35                                                                                    |  |  |
|                                                                                                                                                                                                  |               |                             |      |         |                                |           |                                                                                     |                                                       | 36                                                                                    |  |  |
|                                                                                                                                                                                                  |               |                             |      |         |                                |           |                                                                                     |                                                       | 37                                                                                    |  |  |
|                                                                                                                                                                                                  |               |                             |      |         |                                |           |                                                                                     |                                                       | 38                                                                                    |  |  |
|                                                                                                                                                                                                  |               |                             |      |         |                                |           |                                                                                     |                                                       | 39                                                                                    |  |  |
|                                                                                                                                                                                                  |               |                             |      |         |                                |           |                                                                                     |                                                       | 40                                                                                    |  |  |
| Remarks<br>1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was not encountered. 3. Exploratory hole surveyed in (level and co-ordinates) on completion. |               |                             |      |         |                                |           |                                                                                     |                                                       |  |  |  |

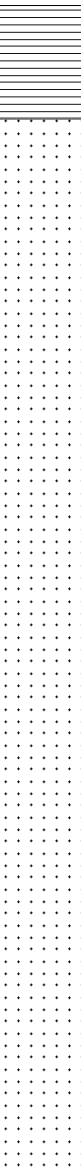
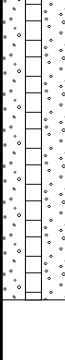
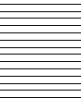
|                                                                                                                                                                         |               |                             |      |         | <h1>Borehole Log</h1>          |           |                                                                                    | Borehole No.<br><b>BH04</b><br>Sheet 1 of 3                                                                                                   |                 |  |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-----------------------------|------|---------|--------------------------------|-----------|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|-----------------|--|--|
| Project Name: Quarry at Rastrick                                                                                                                                                                                                                        |               |                             |      |         | Project No.<br>5003            |           | Co-ords: 412940.37 - 421050.00                                                     |                                                                                                                                               | Hole Type<br>PH |  |  |
| Location: Rastrick                                                                                                                                                                                                                                      |               |                             |      |         | Level: 176.30                  |           | Scale<br>1:100                                                                     |                                                                                                                                               | Logged By<br>CC |  |  |
| Client: Britology                                                                                                                                                                                                                                       |               |                             |      |         | Dates: 10/10/2024 - 10/10/2024 |           |                                                                                    |                                                                                                                                               |                 |  |  |
| Well                                                                                                                                                                                                                                                    | Water Strikes | Samples and In Situ Testing |      |         | Depth (m)                      | Level (m) | Legend                                                                             | Stratum Description                                                                                                                           |                 |  |  |
|                                                                                                                                                                                                                                                         |               | Depth (m)                   | Type | Results |                                |           |                                                                                    |                                                                                                                                               |                 |  |  |
|                                                                                                                                                                       |               |                             |      |         |                                |           |  | MADE GROUND: Light brown QUARRY BACKFILL. Recovered as a light brown sandstone with occasional bands of dark grey mudstone. (QUARRY BACKFILL) | 1               |  |  |
|                                                                                                                                                                                                                                                         |               |                             |      |         |                                |           |                                                                                    |                                                                                                                                               | 2               |  |  |
|                                                                                                                                                                                                                                                         |               |                             |      |         |                                |           |                                                                                    |                                                                                                                                               | 3               |  |  |
|                                                                                                                                                                                                                                                         |               |                             |      |         |                                |           |                                                                                    |                                                                                                                                               | 4               |  |  |
|                                                                                                                                                                                                                                                         |               |                             |      |         |                                |           |                                                                                    |                                                                                                                                               | 5               |  |  |
|                                                                                                                                                                                                                                                         |               |                             |      |         |                                |           |                                                                                    |                                                                                                                                               | 6               |  |  |
|                                                                                                                                                                                                                                                         |               |                             |      |         |                                |           |                                                                                    |                                                                                                                                               | 7               |  |  |
|                                                                                                                                                                                                                                                         |               |                             |      |         |                                |           |                                                                                    |                                                                                                                                               | 8               |  |  |
|                                                                                                                                                                                                                                                         |               |                             |      |         |                                |           |                                                                                    |                                                                                                                                               | 9               |  |  |
|                                                                                                                                                                                                                                                         |               |                             |      |         |                                |           |                                                                                    |                                                                                                                                               | 10              |  |  |
|                                                                                                                                                                                                                                                         |               |                             |      |         |                                |           |                                                                                    |                                                                                                                                               | 11              |  |  |
|                                                                                                                                                                                                                                                         |               |                             |      |         |                                |           |                                                                                    |                                                                                                                                               | 12              |  |  |
|                                                                                                                                                                                                                                                         |               |                             |      |         |                                |           |                                                                                    |                                                                                                                                               | 13              |  |  |
|                                                                                                                                                                                                                                                         |               |                             |      |         |                                |           |                                                                                    |                                                                                                                                               | 14              |  |  |
|                                                                                                                                                                                                                                                         |               |                             |      |         |                                |           |                                                                                    |                                                                                                                                               | 15              |  |  |
|                                                                                                                                                                                                                                                         |               |                             |      |         |                                |           |                                                                                    |                                                                                                                                               | 16              |  |  |
|                                                                                                                                                                                                                                                         |               |                             |      |         |                                |           |                                                                                    |                                                                                                                                               | 17              |  |  |
|                                                                                                                                                                                                                                                         |               |                             |      |         |                                |           |                                                                                    |                                                                                                                                               | 18              |  |  |
|                                                                                                                                                                                                                                                         |               |                             |      |         |                                |           |                                                                                    |                                                                                                                                               | 19              |  |  |
|                                                                                                                                                                                                                                                         |               |                             |      |         |                                |           |                                                                                    |                                                                                                                                               | 20              |  |  |
| Continued on next sheet                                                                                                                                                                                                                                 |               |                             |      |         |                                |           |                                                                                    |                                                                                                                                               |                 |  |  |
| Remarks<br>1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was not encountered. 3. Flush returns were lost from 40.0m and 44.5m depth. 4. Exploratory hole surveyed in (level and co-ordinates) on completion. |               |                             |      |         |                                |           |                                                                                    |                                                          |                 |  |  |



|                                                                                                                                                                         |               |                             |      |         | <h1>Borehole Log</h1>          |           |                                                                                    | Borehole No.<br><b>BH04</b><br>Sheet 2 of 3 |                                                                                       |  |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-----------------------------|------|---------|--------------------------------|-----------|------------------------------------------------------------------------------------|---------------------------------------------|---------------------------------------------------------------------------------------|--|--|
| Project Name: Quarry at Rastrick                                                                                                                                                                                                                        |               |                             |      |         | Project No.<br>5003            |           | Co-ords: 412940.37 - 421050.00                                                     |                                             | Hole Type<br>PH                                                                       |  |  |
| Location: Rastrick                                                                                                                                                                                                                                      |               |                             |      |         | Level: 176.30                  |           | Scale<br>1:100                                                                     |                                             | Logged By<br>CC                                                                       |  |  |
| Client: Britology                                                                                                                                                                                                                                       |               |                             |      |         | Dates: 10/10/2024 - 10/10/2024 |           |                                                                                    |                                             |                                                                                       |  |  |
| Well                                                                                                                                                                                                                                                    | Water Strikes | Samples and In Situ Testing |      |         | Depth (m)                      | Level (m) | Legend                                                                             | Stratum Description                         |                                                                                       |  |  |
|                                                                                                                                                                                                                                                         |               | Depth (m)                   | Type | Results |                                |           |                                                                                    |                                             |                                                                                       |  |  |
|                                                                                                                                                                       |               |                             |      |         |                                |           |  | )                                           | 21                                                                                    |  |  |
|                                                                                                                                                                                                                                                         |               |                             |      |         |                                |           |                                                                                    |                                             | 22                                                                                    |  |  |
|                                                                                                                                                                                                                                                         |               |                             |      |         |                                |           |                                                                                    |                                             | 23                                                                                    |  |  |
|                                                                                                                                                                                                                                                         |               |                             |      |         |                                |           |                                                                                    |                                             | 24                                                                                    |  |  |
|                                                                                                                                                                                                                                                         |               |                             |      |         |                                |           |                                                                                    |                                             | 25                                                                                    |  |  |
|                                                                                                                                                                                                                                                         |               |                             |      |         |                                |           |                                                                                    |                                             | 26                                                                                    |  |  |
|                                                                                                                                                                                                                                                         |               |                             |      |         |                                |           |                                                                                    |                                             | 27                                                                                    |  |  |
|                                                                                                                                                                                                                                                         |               |                             |      |         |                                |           |                                                                                    |                                             | 28                                                                                    |  |  |
|                                                                                                                                                                                                                                                         |               |                             |      |         |                                |           |                                                                                    |                                             | 29                                                                                    |  |  |
|                                                                                                                                                                                                                                                         |               |                             |      |         |                                |           |                                                                                    |                                             | 30                                                                                    |  |  |
|                                                                                                                                                                                                                                                         |               |                             |      |         |                                |           |                                                                                    |                                             | 31                                                                                    |  |  |
|                                                                                                                                                                                                                                                         |               |                             |      |         |                                |           |                                                                                    |                                             | 32                                                                                    |  |  |
|                                                                                                                                                                                                                                                         |               |                             |      |         |                                |           |                                                                                    |                                             | 33                                                                                    |  |  |
|                                                                                                                                                                                                                                                         |               |                             |      |         |                                |           |                                                                                    |                                             | 34                                                                                    |  |  |
|                                                                                                                                                                                                                                                         |               |                             |      |         |                                |           |                                                                                    |                                             | 35                                                                                    |  |  |
|                                                                                                                                                                                                                                                         |               |                             |      |         |                                |           |                                                                                    |                                             | 36                                                                                    |  |  |
|                                                                                                                                                                                                                                                         |               |                             |      |         |                                |           |                                                                                    |                                             | 37                                                                                    |  |  |
|                                                                                                                                                                                                                                                         |               |                             |      |         |                                |           |                                                                                    |                                             | 38                                                                                    |  |  |
|                                                                                                                                                                                                                                                         |               |                             |      |         |                                |           |                                                                                    |                                             | 39                                                                                    |  |  |
|                                                                                                                                                                                                                                                         |               |                             |      |         |                                |           |                                                                                    |                                             | 40                                                                                    |  |  |
|                                                                                                                                                                                                                                                         |               |                             |      |         | 40.00                          | 136.30    | Continued on next sheet                                                            |                                             |                                                                                       |  |  |
| Remarks<br>1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was not encountered. 3. Flush returns were lost from 40.0m and 44.5m depth. 4. Exploratory hole surveyed in (level and co-ordinates) on completion. |               |                             |      |         |                                |           |                                                                                    |                                             |  |  |  |

|                                                                                                                                                              |               |                             |      |         | <h1>Borehole Log</h1>          |           |                                | Borehole No.<br><b>BH04</b><br>Sheet 3 of 3              |                 |  |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-----------------------------|------|---------|--------------------------------|-----------|--------------------------------|----------------------------------------------------------|-----------------|--|--|
| Project Name: Quarry at Rastrick                                                                                                                                                                                                             |               |                             |      |         | Project No.<br>5003            |           | Co-ords: 412940.37 - 421050.00 |                                                          | Hole Type<br>PH |  |  |
| Location: Rastrick                                                                                                                                                                                                                           |               |                             |      |         | Level: 176.30                  |           | Scale<br>1:100                 |                                                          | Logged By<br>CC |  |  |
| Client: Britology                                                                                                                                                                                                                            |               |                             |      |         | Dates: 10/10/2024 - 10/10/2024 |           |                                |                                                          |                 |  |  |
| Well                                                                                                                                                                                                                                         | Water Strikes | Samples and In Situ Testing |      |         | Depth (m)                      | Level (m) | Legend                         | Stratum Description                                      |                 |  |  |
|                                                                                                                                                                                                                                              |               | Depth (m)                   | Type | Results |                                |           |                                |                                                          |                 |  |  |
|                                                                                                                                                                                                                                              |               |                             |      |         | 44.50                          | 131.80    |                                | Soft drilling, limited flush returns. Possible mudstone? |                 |  |  |
|                                                                                                                                                                                                                                              |               |                             |      |         |                                |           |                                | End of borehole at 44.50 m                               |                 |  |  |
| Remarks                                                                                                                                                                                                                                      |               |                             |      |         |                                |           |                                |                                                          |                 |  |  |
| 1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was not encountered. 3. Flush returns were lost from 40.0m and 44.5m depth. 4. Exploratory hole surveyed in (level and co-ordinates) on completion. |               |                             |      |         |                                |           |                                |                                                          |                 |  |  |
|                                                                                                                                                         |               |                             |      |         |                                |           |                                |                                                          |                 |  |  |

|                                                                                                                                                                                                  |                  |                             |      |         |                                |              |                                                                                     |                                             |                 |    |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|-----------------------------|------|---------|--------------------------------|--------------|-------------------------------------------------------------------------------------|---------------------------------------------|-----------------|----|--|
|                                                                                                                  |                  |                             |      |         | <h1>Borehole Log</h1>          |              |                                                                                     | Borehole No.<br><b>BH05</b><br>Sheet 1 of 2 |                 |    |  |
| Project Name: Quarry at Rastrick                                                                                                                                                                 |                  |                             |      |         | Project No.<br>5003            |              | Co-ords: 413013.46 - 421099.76                                                      |                                             | Hole Type<br>PH |    |  |
| Location: Rastrick                                                                                                                                                                               |                  |                             |      |         | Level: 173.10                  |              | Scale<br>1:100                                                                      |                                             | Logged By<br>CC |    |  |
| Client: Britology                                                                                                                                                                                |                  |                             |      |         | Dates: 14/10/2024 - 14/10/2024 |              |                                                                                     |                                             |                 |    |  |
| Well                                                                                                                                                                                             | Water<br>Strikes | Samples and In Situ Testing |      |         | Depth<br>(m)                   | Level<br>(m) | Legend                                                                              | Stratum Description                         |                 |    |  |
|                                                                                                                                                                                                  |                  | Depth (m)                   | Type | Results |                                |              |                                                                                     |                                             |                 |    |  |
|                                                                                                                |                  |                             |      |         | 6.00                           | 167.10       |    | Light brown SANDSTONE.<br>(ELLAND FLAGS)    |                 | 1  |  |
|                                                                                                                                                                                                  |                  |                             |      |         |                                |              |                                                                                     |                                             |                 | 2  |  |
|                                                                                                                                                                                                  |                  |                             |      |         |                                |              |                                                                                     |                                             |                 | 3  |  |
|                                                                                                                                                                                                  |                  |                             |      |         |                                |              |                                                                                     |                                             |                 | 4  |  |
|                                                                                                                                                                                                  |                  |                             |      |         |                                |              |                                                                                     |                                             |                 | 5  |  |
|                                                                                                                                                                                                  |                  |                             |      |         |                                |              |                                                                                     |                                             |                 | 6  |  |
|                                                                                                                                                                                                  |                  |                             |      |         |                                |              |   | Dark grey MUDSTONE.<br>(ELLAND FLAGS)       |                 | 7  |  |
|                                                                                                                                                                                                  |                  |                             |      |         |                                |              |                                                                                     |                                             |                 | 8  |  |
|                                                                                                                                                                                                  |                  |                             |      |         |                                |              |                                                                                     |                                             |                 | 9  |  |
|                                                                                                                                                                                                  |                  |                             |      |         |                                |              |                                                                                     |                                             |                 | 10 |  |
|                                                                                                                                                                                                  |                  |                             |      |         |                                |              |                                                                                     |                                             |                 | 11 |  |
|                                                                                                                                                                                                  |                  |                             |      |         |                                |              |  | Light brown SANDSTONE.<br>(ELLAND FLAGS)    |                 | 12 |  |
|                                                                                                                                                                                                  |                  |                             |      |         |                                |              |                                                                                     |                                             |                 | 13 |  |
|                                                                                                                                                                                                  |                  |                             |      |         |                                |              |                                                                                     |                                             |                 | 14 |  |
|                                                                                                                                                                                                  |                  |                             |      |         |                                |              |                                                                                     |                                             |                 | 15 |  |
|                                                                                                                                                                                                  |                  |                             |      |         |                                |              |                                                                                     |                                             |                 | 16 |  |
|                                                                                                                                                                                                  |                  |                             |      |         |                                |              |  | Dark grey MUDSTONE.<br>(ELLAND FLAGS)       |                 | 17 |  |
|                                                                                                                                                                                                  |                  |                             |      |         |                                |              |                                                                                     |                                             |                 | 18 |  |
|                                                                                                                                                                                                  |                  |                             |      |         |                                |              |                                                                                     |                                             |                 | 19 |  |
|                                                                                                                                                                                                  |                  |                             |      |         |                                |              |                                                                                     |                                             |                 | 20 |  |
| Continued on next sheet                                                                                                                                                                          |                  |                             |      |         |                                |              |                                                                                     |                                             |                 |    |  |
| Remarks<br>1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was not encountered. 3. Exploratory hole surveyed in (level and co-ordinates) on completion. |                  |                             |      |         |                                |              |                                                                                     |                                             |                 |    |  |
|                                                                                                             |                  |                             |      |         |                                |              |                                                                                     |                                             |                 |    |  |

|                                                                                     |                  |                             |      |         |                                |              |                                                                                     |                                             |                                                                                                                                                                                                  |  |  |  |  |  |  |  |  |
|-------------------------------------------------------------------------------------|------------------|-----------------------------|------|---------|--------------------------------|--------------|-------------------------------------------------------------------------------------|---------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|
|     |                  |                             |      |         | <h1>Borehole Log</h1>          |              |                                                                                     | Borehole No.<br><b>BH05</b><br>Sheet 2 of 2 |                                                                                                                                                                                                  |  |  |  |  |  |  |  |  |
| Project Name: Quarry at Rastrick                                                    |                  |                             |      |         | Project No.<br>5003            |              | Co-ords: 413013.46 - 421099.76                                                      |                                             | Hole Type<br>PH                                                                                                                                                                                  |  |  |  |  |  |  |  |  |
| Location: Rastrick                                                                  |                  |                             |      |         | Level: 173.10                  |              | Scale<br>1:100                                                                      |                                             | Logged By<br>CC                                                                                                                                                                                  |  |  |  |  |  |  |  |  |
| Client: Britology                                                                   |                  |                             |      |         | Dates: 14/10/2024 - 14/10/2024 |              |                                                                                     |                                             |                                                                                                                                                                                                  |  |  |  |  |  |  |  |  |
| Well                                                                                | Water<br>Strikes | Samples and In Situ Testing |      |         | Depth<br>(m)                   | Level<br>(m) | Legend                                                                              | Stratum Description                         |                                                                                                                                                                                                  |  |  |  |  |  |  |  |  |
|                                                                                     |                  | Depth (m)                   | Type | Results |                                |              |                                                                                     |                                             |                                                                                                                                                                                                  |  |  |  |  |  |  |  |  |
|   |                  |                             |      |         | 21.50                          | 151.60       |   | Light brown SANDSTONE.<br>(ELLAND FLAGS)    | 21                                                                                                                                                                                               |  |  |  |  |  |  |  |  |
|                                                                                     |                  |                             |      |         |                                |              |                                                                                     |                                             | 22                                                                                                                                                                                               |  |  |  |  |  |  |  |  |
|                                                                                     |                  |                             |      |         |                                |              |                                                                                     |                                             | 23                                                                                                                                                                                               |  |  |  |  |  |  |  |  |
|                                                                                     |                  |                             |      |         |                                |              |                                                                                     |                                             | 24                                                                                                                                                                                               |  |  |  |  |  |  |  |  |
|                                                                                     |                  |                             |      |         |                                |              |                                                                                     |                                             | 25                                                                                                                                                                                               |  |  |  |  |  |  |  |  |
|                                                                                     |                  |                             |      |         |                                |              |                                                                                     |                                             | 26                                                                                                                                                                                               |  |  |  |  |  |  |  |  |
|                                                                                     |                  |                             |      |         |                                |              |                                                                                     |                                             | 27                                                                                                                                                                                               |  |  |  |  |  |  |  |  |
|                                                                                     |                  |                             |      |         |                                |              |                                                                                     |                                             | 28                                                                                                                                                                                               |  |  |  |  |  |  |  |  |
|                                                                                     |                  |                             |      |         |                                |              |                                                                                     |                                             | 29                                                                                                                                                                                               |  |  |  |  |  |  |  |  |
|                                                                                     |                  |                             |      |         |                                |              |                                                                                     |                                             | 30                                                                                                                                                                                               |  |  |  |  |  |  |  |  |
|  |                  |                             |      |         | 35.50                          | 137.60       |  | Dark grey MUDSTONE.<br>(ELLAND FLAGS)       | 35                                                                                                                                                                                               |  |  |  |  |  |  |  |  |
|                                                                                     |                  |                             |      |         |                                |              |                                                                                     |                                             | 36                                                                                                                                                                                               |  |  |  |  |  |  |  |  |
|                                                                                     |                  |                             |      |         |                                |              |                                                                                     |                                             | 37                                                                                                                                                                                               |  |  |  |  |  |  |  |  |
|                                                                                     |                  |                             |      |         |                                |              |                                                                                     |                                             | 38                                                                                                                                                                                               |  |  |  |  |  |  |  |  |
|                                                                                     |                  |                             |      |         |                                |              |                                                                                     |                                             | 39                                                                                                                                                                                               |  |  |  |  |  |  |  |  |
|                                                                                     |                  |                             |      |         |                                |              |                                                                                     |                                             | 40                                                                                                                                                                                               |  |  |  |  |  |  |  |  |
|                                                                                     |                  |                             |      |         |                                |              |                                                                                     |                                             | End of borehole at 39.50 m                                                                                                                                                                       |  |  |  |  |  |  |  |  |
|                                                                                     |                  |                             |      |         |                                |              |                                                                                     |                                             | Remarks<br>1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was not encountered. 3. Exploratory hole surveyed in (level and co-ordinates) on completion. |  |  |  |  |  |  |  |  |
|                                                                                     |                  |                             |      |         |                                |              |                                                                                     |                                             |                                                                                                             |  |  |  |  |  |  |  |  |

## Certificate of Analysis

*Certificate Number* 25-10725

*Issued:* 22-May-25

*Client* Lithos Consulting Ltd  
Parkhill  
Walton Rd  
Wetherby  
LS22 5DZ

*Our Reference* 25-10725

*Client Reference* ~ 5003

*Order No* ~ PO24203

*Contract Title* ~ Lower Edge Quarry

*Description* 1 Groundwater sample, 1 River/Surface Water sample.

*Date Received* 14-May-25

*Date Started* 15-May-25

*Date Completed* 22-May-25

*Test Procedures* Identified by prefix DETSn (details on request).

*Notes* Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.

*Approved By*



Louise Cook  
Contracts Manager



# Summary of Chemical Analysis

## Water Samples

Our Ref 25-10725

Client Ref ~ 5003

Contract Title ~ Lower Edge Quarry

|                 |                     |              |
|-----------------|---------------------|--------------|
| Lab No          | 2508618             | 2508619      |
| Sample ID ~     | SW1                 | BH05         |
| Depth ~         |                     |              |
| Other ID ~      |                     |              |
| Sample Type ~   | RIVER/SURFACE WATER | GROUND WATER |
| Sampling Date ~ | 13/05/2025          | 13/05/2025   |
| Sampling Time ~ | n/s                 | n/s          |

| Test                          | Method      | LOD   | Units |        |        |
|-------------------------------|-------------|-------|-------|--------|--------|
| <b>Metals</b>                 |             |       |       |        |        |
| Arsenic, Dissolved            | DETSC 2306  | 0.16  | ug/l  | 0.57   | 1.2    |
| Boron, Dissolved              | DETSC 2306* | 12    | ug/l  | 308.6  | 157.9  |
| Cadmium, Dissolved            | DETSC 2306  | 0.03  | ug/l  | < 0.03 | < 0.03 |
| Chromium, Dissolved           | DETSC 2306  | 0.25  | ug/l  | 0.32   | < 0.25 |
| Copper, Dissolved             | DETSC 2306  | 0.4   | ug/l  | 1.5    | 11     |
| Lead, Dissolved               | DETSC 2306  | 0.09  | ug/l  | < 0.09 | 1.0    |
| Mercury, Dissolved            | DETSC 2306  | 0.01  | ug/l  | < 0.01 | 0.06   |
| Nickel, Dissolved             | DETSC 2306  | 0.5   | ug/l  | 1.9    | 3.1    |
| Selenium, Dissolved           | DETSC 2306  | 0.25  | ug/l  | 19     | 0.78   |
| Zinc, Dissolved               | DETSC 2306  | 1.3   | ug/l  | 130    | 160    |
| <b>Inorganics</b>             |             |       |       |        |        |
| Conductivity (25oC)           | DETSC 2009  | 1     | uS/cm | 1500   | 3100   |
| pH                            | DETSC 2008  |       | pH    | 7.7    | 7.5    |
| Dissolved Organic Carbon      | DETSC 2085  | 2     | mg/l  | 48     | 89     |
| Ammoniacal Nitrogen as N      | DETSC 2207  | 0.015 | mg/l  | 0.51   | 1.6    |
| Chloride                      | DETSC 2055  | 0.1   | mg/l  | 30     | 94     |
| <b>Petroleum Hydrocarbons</b> |             |       |       |        |        |
| Aliphatic C5-C6               | DETSC 3322  | 0.1   | ug/l  | < 0.1  | < 0.1  |
| Aliphatic C6-C8               | DETSC 3322  | 0.1   | ug/l  | < 0.1  | < 0.1  |
| Aliphatic C8-C10              | DETSC 3322  | 0.1   | ug/l  | < 0.1  | < 0.1  |
| Aliphatic C10-C12             | DETSC 3072* | 1     | ug/l  | < 1.0  | < 1.0  |
| Aliphatic C12-C16             | DETSC 3072* | 1     | ug/l  | < 1.0  | < 1.0  |
| Aliphatic C16-C21             | DETSC 3072* | 1     | ug/l  | < 1.0  | < 1.0  |
| Aliphatic C21-C35             | DETSC 3072* | 1     | ug/l  | < 1.0  | < 1.0  |
| Aliphatic C5-C35              | DETSC 3072* | 10    | ug/l  | < 10   | < 10   |
| Aromatic C5-C7                | DETSC 3322  | 0.1   | ug/l  | < 0.1  | < 0.1  |
| Aromatic C7-C8                | DETSC 3322  | 0.1   | ug/l  | < 0.1  | < 0.1  |
| Aromatic C8-C10               | DETSC 3322  | 0.1   | ug/l  | < 0.1  | < 0.1  |
| Aromatic C10-C12              | DETSC 3072* | 1     | ug/l  | < 1.0  | < 1.0  |
| Aromatic C12-C16              | DETSC 3072* | 1     | ug/l  | 11     | < 1.0  |
| Aromatic C16-C21              | DETSC 3072* | 1     | ug/l  | 21     | < 1.0  |
| Aromatic C21-C35              | DETSC 3072* | 1     | ug/l  | < 1.0  | < 1.0  |
| Aromatic C5-C35               | DETSC 3072* | 10    | ug/l  | 33     | < 10   |
| TPH Ali/Aro Total C5-C35      | DETSC 3072* | 10    | ug/l  | 33     | < 10   |
| <b>PAHs</b>                   |             |       |       |        |        |
| Naphthalene                   | DETSC 3304  | 0.05  | ug/l  | < 0.05 | < 0.05 |
| Acenaphthylene                | DETSC 3304  | 0.01  | ug/l  | < 0.01 | < 0.01 |
| Acenaphthene                  | DETSC 3304  | 0.01  | ug/l  | < 0.01 | < 0.01 |
| Fluorene                      | DETSC 3304  | 0.01  | ug/l  | < 0.01 | < 0.01 |
| Phenanthrene                  | DETSC 3304  | 0.01  | ug/l  | < 0.01 | 0.02   |
| Anthracene                    | DETSC 3304  | 0.01  | ug/l  | < 0.01 | 0.01   |

## Summary of Chemical Analysis

### Water Samples

Our Ref 25-10725

Client Ref ~ 5003

Contract Title ~ Lower Edge Quarry

|                 |                     |              |
|-----------------|---------------------|--------------|
| Lab No          | 2508618             | 2508619      |
| Sample ID ~     | SW1                 | BH05         |
| Depth ~         |                     |              |
| Other ID ~      |                     |              |
| Sample Type ~   | RIVER/SURFACE WATER | GROUND WATER |
| Sampling Date ~ | 13/05/2025          | 13/05/2025   |
| Sampling Time ~ | n/s                 | n/s          |

| Test                    | Method      | LOD  | Units |        |        |
|-------------------------|-------------|------|-------|--------|--------|
| Fluoranthene            | DETSC 3304  | 0.01 | ug/l  | < 0.01 | 0.01   |
| Pyrene                  | DETSC 3304  | 0.01 | ug/l  | < 0.01 | 0.01   |
| Benzo(a)anthracene      | DETSC 3304  | 0.01 | ug/l  | < 0.01 | < 0.01 |
| Chrysene                | DETSC 3304  | 0.01 | ug/l  | < 0.01 | < 0.01 |
| Benzo(b)fluoranthene    | DETSC 3304  | 0.01 | ug/l  | < 0.01 | < 0.01 |
| Benzo(k)fluoranthene    | DETSC 3304  | 0.01 | ug/l  | < 0.01 | < 0.01 |
| Benzo(a)pyrene          | DETSC 3304  | 0.01 | ug/l  | < 0.01 | < 0.01 |
| Indeno(1,2,3-c,d)pyrene | DETSC 3304  | 0.01 | ug/l  | < 0.01 | < 0.01 |
| Dibenzo(a,h)anthracene  | DETSC 3304  | 0.01 | ug/l  | < 0.01 | < 0.01 |
| Benzo(g,h,i)perylene    | DETSC 3304  | 0.01 | ug/l  | < 0.01 | < 0.01 |
| PAH Total               | DETSC 3304  | 0.2  | ug/l  | < 0.20 | < 0.20 |
| <b>Phenols</b>          |             |      |       |        |        |
| Total Phenol            | DETSC 3451* | 0.5  | ug/l  | < 0.50 | < 0.50 |

## Information in Support of the Analytical Results

Our Ref 25-10725  
 Client Ref ~ 5003  
 Contract ~ Lower Edge Quarry

### Containers Received & Deviating Samples

| Lab No  | Sample ID ~                | Date<br>Sampled ~ | Containers Received | Holding time<br>exceeded for tests | Incorrect<br>container for tests |
|---------|----------------------------|-------------------|---------------------|------------------------------------|----------------------------------|
| 2508618 | SW1<br>RIVER/SURFACE WATER | 13/05/25          | GB 1L, GV, PB 1L    |                                    |                                  |
| 2508619 | BH05 GROUND<br>WATER       | 13/05/25          | GB 1L, GV, PB 1L    |                                    |                                  |

Key: G-Glass P-Plastic B-Bottle V-Vial

Normec DETS cannot be held responsible for the integrity of samples received whereby the laboratory did not undertake the sampling. In this instance samples received may be deviating. Deviating Sample criteria are based on British and International standards and laboratory trials in conjunction with the UKAS note 'Guidance on Deviating Samples'. All samples received are listed above. However, those samples that have additional comments in relation to hold time, inappropriate containers etc are deviating due to the reasons stated. This means that the analysis is accredited where applicable, but results may be compromised due to sample deviations. If no sampled date (soils) or date+time (waters) has been supplied then samples are deviating. However, if you are able to supply a sampled date (and time for waters) this will prevent samples being reported as deviating where specific hold times are not exceeded and where the container supplied is suitable.

### Disposal

From the issue date of this test certificate, samples will be held for the following times prior to disposal :-  
 Soils - 1 month, Liquids - 2 weeks, Asbestos (test portion) - 6 months

#### Key:

~ Sample details are provided by the client and can affect the validity of the results  
 \* -not accredited.  
 # -MCERTS (accreditation only applies if report carries the MCERTS logo).  
 \$ -subcontracted.  
 n/s -not supplied.  
 I/S -insufficient sample.  
 U/S -unsuitable sample.  
 t/f -to follow.  
 nd -not detected.

#### End of Report