

Appendix K

GEOTECHNICAL LABORATORY TEST RESULTS



Laboratory Report



GEO Site & Testing Services Ltd

Contract Number: 42556

Client Ref: **7051b**

Report Date: **04-02-2019**

Client PO: **7649**

Client **Earth Science Partnership**
33 Cardiff Road
Taff's Well
Cardiff
CF15 7RB

Contract Title: **Cowbridge**
For the attention of: **Emma Kirk**

Date Received: **17-01-2019**
Date Commenced: **17-01-2019**
Date Completed: **04-02-2019**

| Test Description | Qty |
|---|-----|
| Moisture Content BS 1377:1990 - Part 2 : 3.2 - * UKAS | 5 |
| 4 Point Liquid & Plastic Limit BS 1377:1990 - Part 2 : 4.3 & 5.3 - * UKAS | 5 |
| PSD Wet Sieve method BS 1377:1990 - Part 2 : 9.2 - * UKAS | 3 |
| Disposal of samples for job | 1 |

Notes: Observations and Interpretations are outside the UKAS Accreditation
* - denotes test included in laboratory scope of accreditation
- denotes test carried out by approved contractor
@ - denotes non accredited tests

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 Signatories:

Ben Sharp (Contracts Manager) - Emma Sharp (Office Manager) - Paul Evans (Quality/Technical Manager)

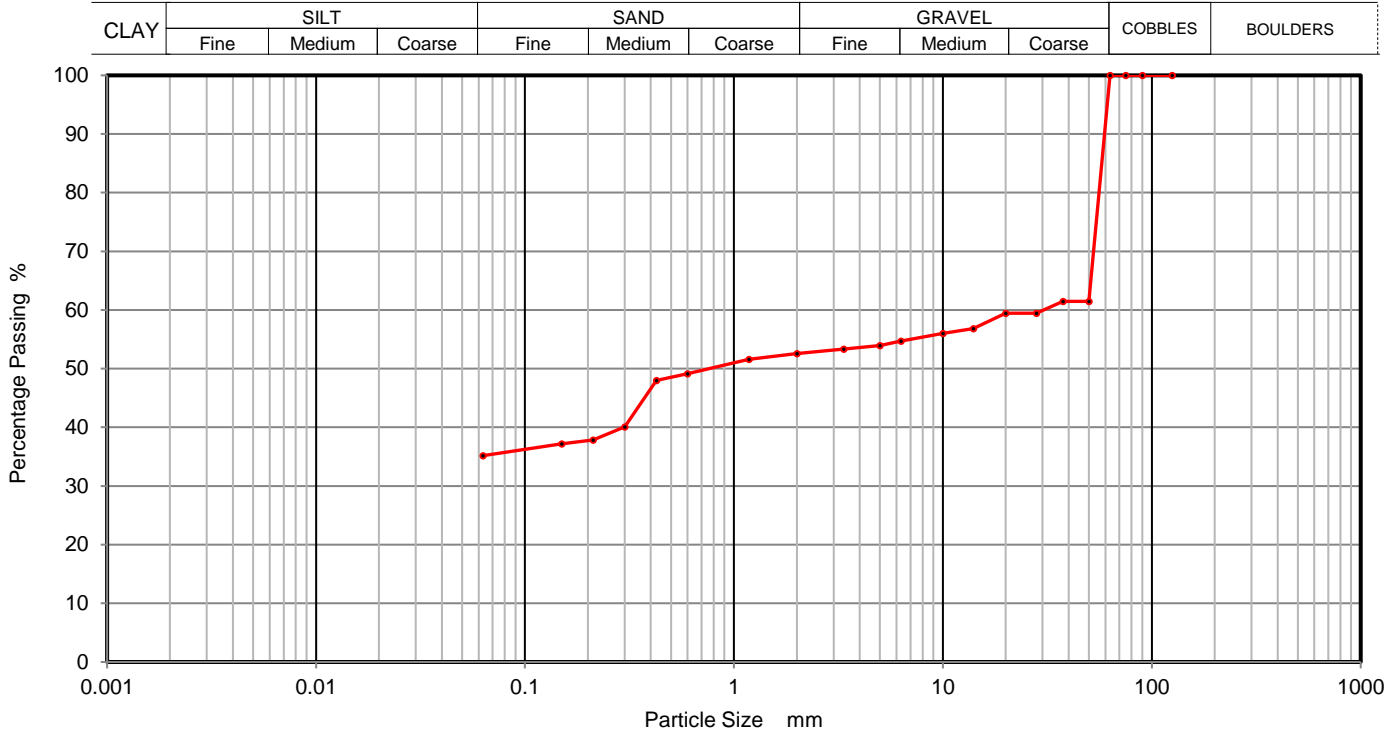
Richard John (Advanced Testing Manager) - Sean Penn (Administrative/Accounts Assistant) - Wayne Honey (Administrative/Quality Assistant)



**PARTICLE SIZE DISTRIBUTION
BS 1377 Part 2:1990
Wet Sieve, Clause 9.2**

| | |
|------------------|--------------|
| Contract Number | 42556 |
| Borehole/Pit No. | TP1 |
| Sample No. | |
| Depth Top | 1.10 |
| Depth Base | |
| Sample Type | B |

| | |
|------------------|--|
| Site Name | Cowbridge |
| Soil Description | Brown fine to coarse sandy silty clayey fine to coarse GRAVEL. |



| Sieving | | Sedimentation | |
|------------------|-----------|------------------|-----------|
| Particle Size mm | % Passing | Particle Size mm | % Passing |
| 125 | 100 | | |
| 90 | 100 | | |
| 75 | 100 | | |
| 63 | 100 | | |
| 50 | 61 | | |
| 37.5 | 61 | | |
| 28 | 59 | | |
| 20 | 59 | | |
| 14 | 57 | | |
| 10 | 56 | | |
| 6.3 | 55 | | |
| 5 | 54 | | |
| 3.35 | 53 | | |
| 2 | 53 | | |
| 1.18 | 52 | | |
| 0.6 | 49 | | |
| 0.425 | 48 | | |
| 0.3 | 40 | | |
| 0.212 | 38 | | |
| 0.15 | 37 | | |
| 0.063 | 35 | | |

| Sample Proportions | % dry mass |
|--------------------|------------|
| Cobbles | 0 |
| Gravel | 47 |
| Sand | 18 |
| Silt and Clay | 35 |
| | |
| | |

Remarks
Preparation and testing in accordance with BS1377 unless noted below

| | | | | |
|-----------|----------|------------|------------|--|
| Operators | Checked | 03/02/2019 | Ben Sharp | |
| RO/MH | Approved | 04/02/2019 | Paul Evans | |





**PARTICLE SIZE DISTRIBUTION
BS 1377 Part 2:1990
Wet Sieve, Clause 9.2**

Contract Number **42556**

Borehole/Pit No. **TP3a**

Site Name **Cowbridge**

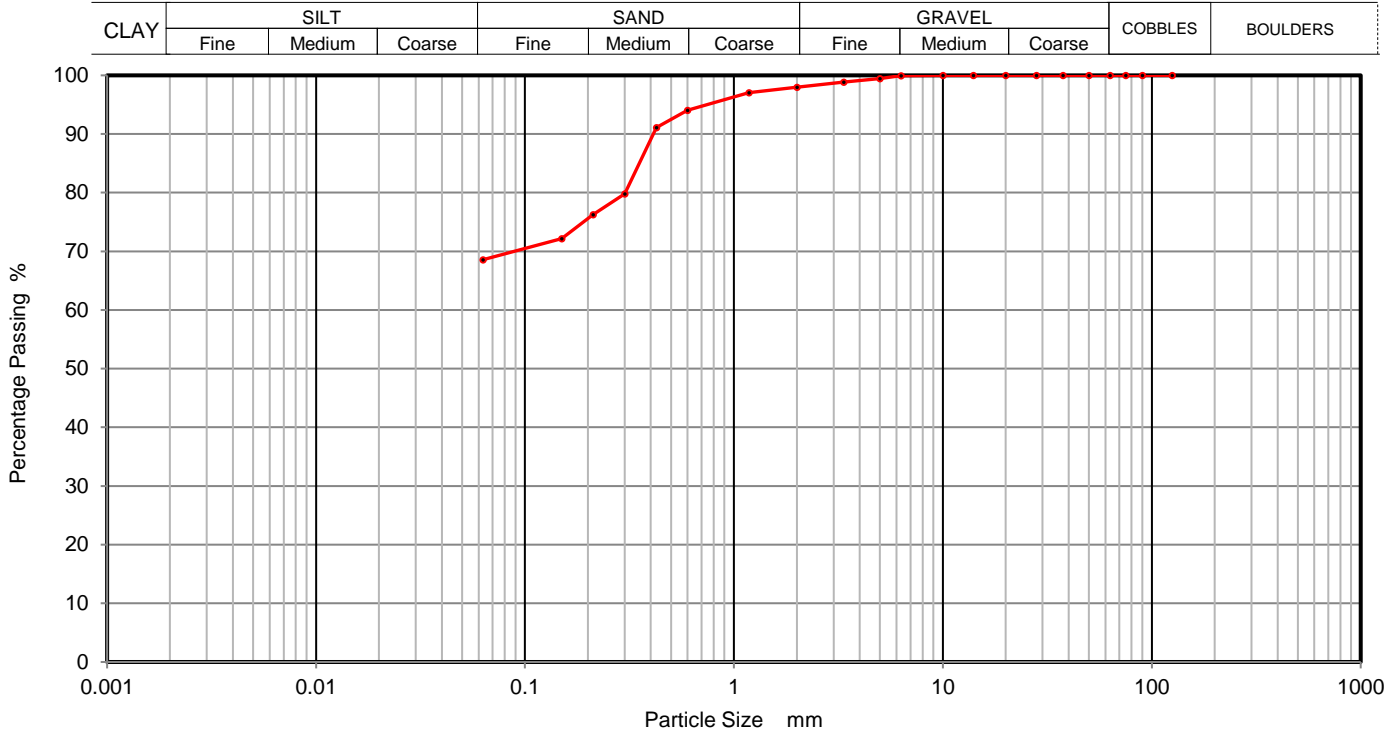
Sample No.

Soil Description
Brown fine to medium slightly gravelly fine to coarse sandy silty
CLAY.

Depth Top **1.00**

Depth Base

Sample Type **B**



| Sieving | | Sedimentation | |
|------------------|-----------|------------------|-----------|
| Particle Size mm | % Passing | Particle Size mm | % Passing |
| 125 | 100 | | |
| 90 | 100 | | |
| 75 | 100 | | |
| 63 | 100 | | |
| 50 | 100 | | |
| 37.5 | 100 | | |
| 28 | 100 | | |
| 20 | 100 | | |
| 14 | 100 | | |
| 10 | 100 | | |
| 6.3 | 100 | | |
| 5 | 99 | | |
| 3.35 | 99 | | |
| 2 | 98 | | |
| 1.18 | 97 | | |
| 0.6 | 94 | | |
| 0.425 | 91 | | |
| 0.3 | 80 | | |
| 0.212 | 76 | | |
| 0.15 | 72 | | |
| 0.063 | 69 | | |

| Sample Proportions | % dry mass |
|--------------------|------------|
| Cobbles | 0 |
| Gravel | 2 |
| Sand | 29 |
| Silt and Clay | 69 |
| | |
| | |

Remarks
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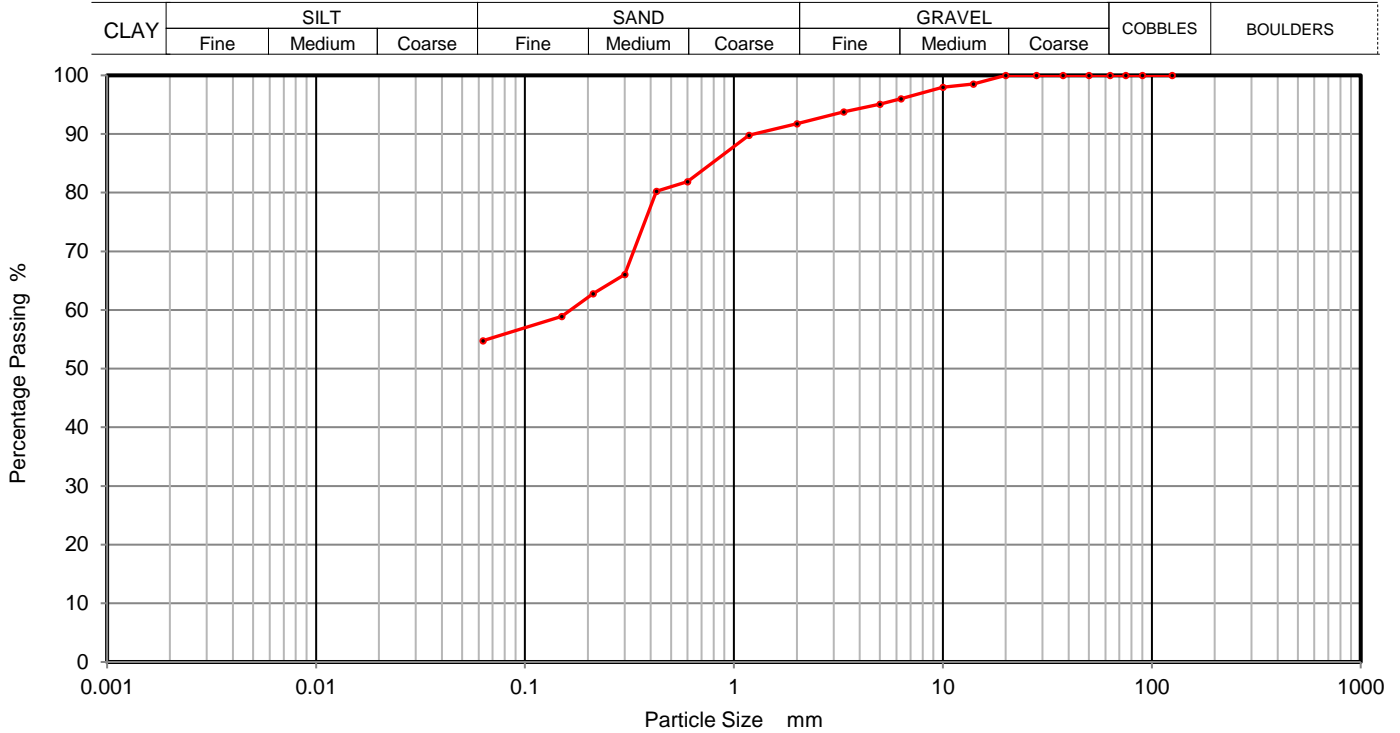
| | | | | |
|-----------|----------|------------|------------|--|
| Operators | Checked | 03/02/2019 | Ben Sharp | |
| RO/MH | Approved | 04/02/2019 | Paul Evans | |





**PARTICLE SIZE DISTRIBUTION
BS 1377 Part 2:1990
Wet Sieve, Clause 9.2**

| | |
|------------------|---|
| Contract Number | 42556 |
| Borehole/Pit No. | TP4 |
| Site Name | Cowbridge |
| Sample No. | |
| Soil Description | Brown fine to medium slightly gravelly fine to coarse sandy silty CLAY. |
| Depth Top | 1.40 |
| Depth Base | |
| Sample Type | B |



| Sieving | | Sedimentation | |
|------------------|-----------|------------------|-----------|
| Particle Size mm | % Passing | Particle Size mm | % Passing |
| 125 | 100 | | |
| 90 | 100 | | |
| 75 | 100 | | |
| 63 | 100 | | |
| 50 | 100 | | |
| 37.5 | 100 | | |
| 28 | 100 | | |
| 20 | 100 | | |
| 14 | 99 | | |
| 10 | 98 | | |
| 6.3 | 96 | | |
| 5 | 95 | | |
| 3.35 | 94 | | |
| 2 | 92 | | |
| 1.18 | 90 | | |
| 0.6 | 82 | | |
| 0.425 | 80 | | |
| 0.3 | 66 | | |
| 0.212 | 63 | | |
| 0.15 | 59 | | |
| 0.063 | 55 | | |

| Sample Proportions | % dry mass |
|--------------------|------------|
| Cobbles | 0 |
| Gravel | 8 |
| Sand | 37 |
| Silt and Clay | 55 |
| | |
| | |

Remarks
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| | | | | |
|-----------|----------|------------|------------|--|
| Operators | Checked | 03/02/2019 | Ben Sharp | |
| RO/MH | Approved | 04/02/2019 | Paul Evans | |

