# TEST REPORT

ISSUED BY SOIL PROPERTY TESTING LTD

DATE ISSUED: 08/11/2022

| | |
|---|---|
| **Contract** | **Marriage 1** |
| **Serial No.** | **41637_1** |

**Client:**

John Bailey

Gable House
30 Puddingmoor
Beccles
Suffolk
NR34 9PL


***Soil Property Testing Ltd***

**15, 16, 18 Halcyon Court, St Margaret's Way,**
**Stukeley Meadows, Huntingdon,**
**Cambridgeshire, PE29 6DG**

**Tel: 01480 455579**
**Email:** enquiries@soilpropertytesting.com
**Website:** www.soilpropertytesting.com


**Samples Submitted By:**

John Bailey

**Samples Labelled:**

Marriage 1

**Approved Signatories:**

☑ **J.C. Garner B.Eng (Hons) FGS**
Technical Director & Quality Manager

☐ **W. Johnstone**
Materials Lab Manager

**Date Received:** 21/10/2022

**Samples Tested Between:** 21/10/2022 **and** 08/11/2022

**Remarks:**

For the attention of John Bailey

**Notes:**

1. All remaining samples or remnants from this contract will be disposed of after 21 days from today, unless we are notified to the contrary.
2. This test report may not be reproduced other than in full except with the prior written approval of the issuing laboratory.
3. The results within this report only relate to the items tested or sampled.

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DATE ISSUED: 08/11/2022

| | | | |
|---|---|---|---|
| **Contract** | **Marriage 1** | | |
| **Serial No.** | **41637_1** | **Target Date** | 04/11/2022 |
| **Scheduled By** | John Bailey | | |

**Schedule Remarks**

| Bore Hole No. | Type | Sample Ref. | Top Depth | Triaxial Permeability | Sample Remarks |
|---|---|---|---|---|---|
| - | D | 1 | | 1 | |
| **Totals** | | | | 1 | **End of Schedule** |

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| | |
|---|---|
| Contract | Marriage 1 |
| Serial No. | 41637_1 |

## DETERMINATION OF PERMEABILITY IN A TRIAXIAL CELL
Using the Accelerated Permeability Test
EA-P1-398/TR/1

| BH / TP | Depth (m) | Type | Ref. | Description | Remarks |
|---|---|---|---|---|---|
| - | | D | 1 | Very stiff brownish yellow slightly gravelly slightly sandy silty CLAY. Gravel is fine and medium chalk | |

| Sample Details | |
|---|---|
| Type of Sample | Recompacted |

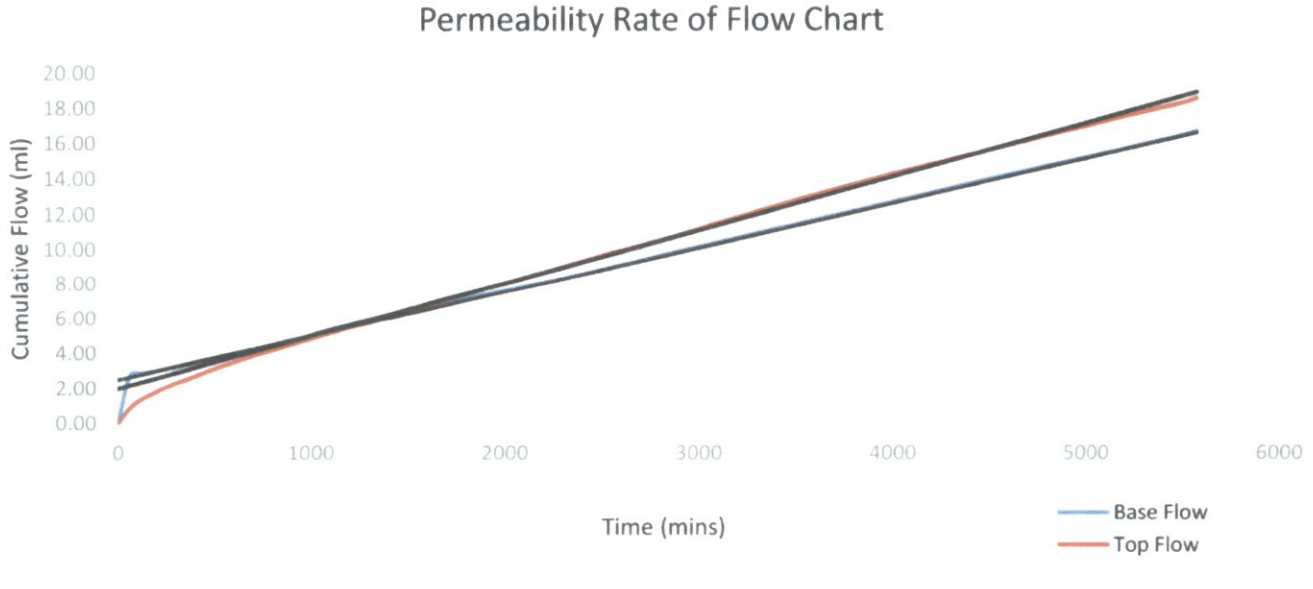
| Flow Conditions | |
|---|---|
| Direction | Vertical Downwards |

| Test Specimen Details | | Initial | Final |
|---|---|---|---|
| Mass of Sample | g | 1333.8 | 1339.2 |
| Diameter | mm | 104.70 | 104.67 |
| Area | $mm^2$ | 8609.9 | 8606.3 |
| Length | mm | 73.36 | 72.82 |
| Bulk Density | $Mg/m^3$ | 2.11 | 2.14 |
| Water Content | % | 16.8 | 17.4 |
| Dry Density | $Mg/m^3$ | 1.81 | 1.82 |

| Permeability Stage | | |
|---|---|---|
| Test Temperature | °C | 20.5 |
| Mean Effective Stress | kPa | 187.5 |
| Cell Pressure | kPa | 550 |
| Top Drain Pressure | kPa | 425 |
| Base Drain Pressure | kPa | 300 |
| Differential Pressure | kPa | 125 |
| Rate of Flow (q) | mL/min | 0.003 |

| Test Duration | |
|---|---|
| Cell Pressure Test | 1 |
| Flow | 1 |

| Test Result | | |
|---|---|---|
| Permeability (kv) | m/s | $3.3 \times 10^{-11}$ |




| | |
|---|---|
| Method of Preparation: | BS1377: PART1: 1990: 8.2 |
| Method of Test: | EA-P1-398/TR/1 |
| Type of sample key: | U = Undisturbed, B = Bulk, D = Disturbed, J = Jar, W= Water, SPT = Split Spoon Sample, C = Core Cutter |
| Comments: | *Procedure for the Determination of the Permeability of Clayey Soils in a Triaxial Cell Using the Accelerated Permeability Test - R&D Technical Report P1-398/TR/1 - Dr E J Murray. |