C
D
S

Discover what's beneath

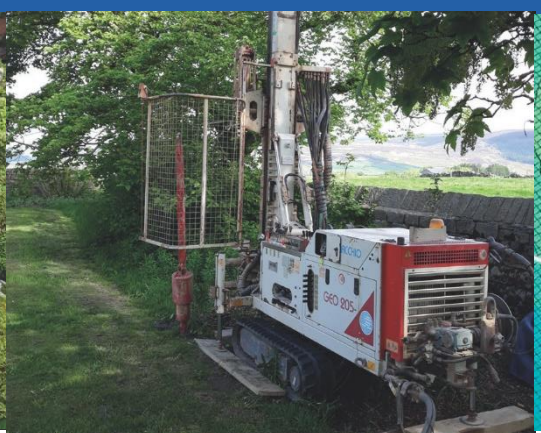
# Factual Site Investigation for Mr Toby Vanhegan.

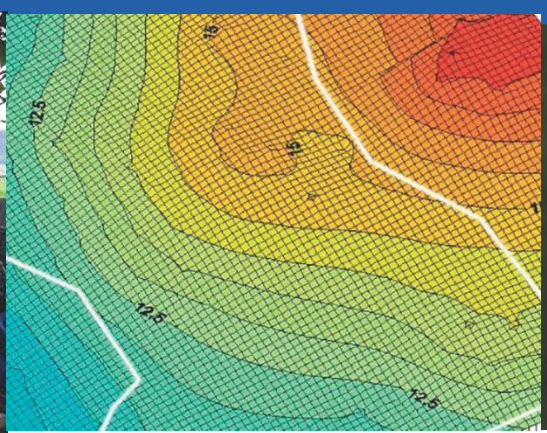
**Address: 18 Platt's Lane, London, NW3 7NS.**

**Date: 14th February 2025**

**Reference: ES0089**

**The CDS Group, Building 51, Wrest Park, Silsoe, Bedfordshire, MK45 4HS**
**W: www.thecdsgroup.co.uk**
**T: 01525 864387**





# Contents



## Figures

# 1 Introduction

Our authority for carrying out this work was given by way of an email instruction from Toby Vanhegan, dated 20th January 2025.

The CDS Group were requested to undertake a series of WLS boreholes, as part of the proposed construction.

**This report is a factual report only and does not include interpretation of any data.**

The approximate site location is shown below in Figures 1 and 2 and the approximate National Grid Reference for the centre of the site is 525312, 186104.

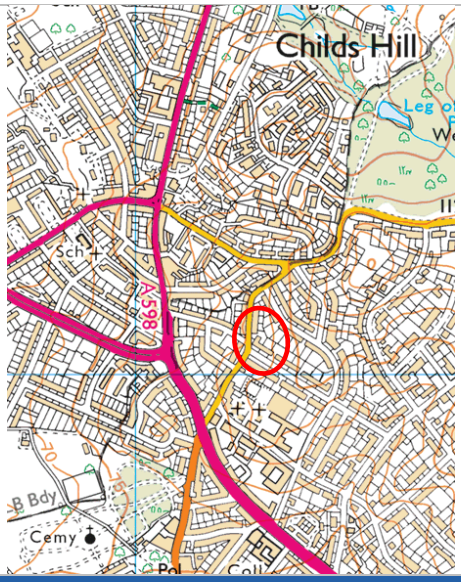



**Figure 1. OS map of the site (boundary indicated in red)**

**Figure 2. Aerial Image of the site (boundary indicated in red)**

# 2 Scope

This factual report presents our exploratory hole logs and insitu test results along with geotechnical and chemical testing results only. No interpretation is given, and no groundwater monitoring was undertaken by CDS.

A formal desk study, wider geotechnical and interpretative contamination assessment were outside the requested scope of works. Soil waste characterisation also did not form part of our brief for this investigation.

As with any site there may be differences in soil conditions between exploratory hole positions.

The site investigation was conducted, and this report has been prepared for the sole internal use and reliance of Toby Vanhegan and their appointed Engineers. This report shall not be relied upon or transferred to any other parties without the express written authorization of The CDS Group.

If an unauthorised third party comes into possession of this report they rely on it at their peril and the authors owe them no duty of care and skill.

# 3 Site Assessment

## 3.1 Geology

The British Geological Survey Map indicates that the site geology consists of Claygate Member over the London Clay Formation,

The **Claygate Member** forms the upper part of the London Clay Formation and comprises dark grey clays with sand laminae, passing up into interbedded clays, silts and fine-grained sand, with beds of bioturbated silt. Ferruginous concretions and septarian nodules occur in places.

The **London Clay** mainly comprises blue-grey or grey-brown fissured clay and silty clay, which weathers to brown near the surface. It commonly contains thin courses of carbonate concretions ('cementstone nodules'), selenite crystals and disseminated pyrite. It also includes a few thin beds of shells and fine sand partings or pockets of sand, which commonly increase towards the base and towards the top of the formation.

# 4 Intrusive Investigation

## 4.1 Site Investigation

The fieldwork was undertaken on the 27th January 2025. In accordance with our original quotation, which was based on a specification provided to us by the clients engineers, the following work was undertaken:-

- 3 No. WLS boreholes to a maximum depth of 6m bgl
- Disturbed and environmental samples were collected at various depths.


**Figure 3. Exploratory Hole Location Plan**

### 4.2 Soils as Found

The soils encountered are described in detail on the attached exploratory hole logs (Appendix A), but in general comprised variable made ground over natural CLAY soils.

### 4.3 Groundwater

Groundwater was recorded at 2.50m bgl in BH2 as a seepage.

## 5 Geotechnical Testing

The following tests were carried out on selected samples.

- Atterberg Limits

Test method references and results are given in Appendix D.
The laboratory testing was completed by K4 Soils Laboratory, 8, Olds Close, Old's Cl, Northwood, Watford WD18 9RU.

## 6 Contamination Testing

The following tests were carried out on selected samples.

- BRE SD1 Suite B (Greenfield with pyrite)

Test method references and results are given in Appendix C. The laboratory testing was completed by Eurofins Chemtest Ltd, Depot Road, Newmarket, Cambridge- UKAS testing laboratory number 2183.

## 7 Reporting Details

Report Author: Callum Ward BSc FGS

Date: 14th February 2025

# APPENDIX A

# Site Plan and Soil Logs

| CDS Environmental Solutions | Project Name: | Windowless Sampler Borehole Log | | Hole ID: | BH1 |
|---|---|---|---|---|---|
| | 18 Platts Lane | | | Hole Type: | WLS |
| | Project Location: | | | Level: | 91.10 |
| | London NW3 7NS | Project ID: | ES0089 | Logged By: | |
| | Client: | Contractor: | The CDS Group | Scale: | 1:25 |
| | Mr Toby Vanhegan | Date: | 27/01/2025 | Page No: | Sheet 1 of 2 |

| Well | Water Strikes | Sample and In Situ Testing | | | Depth (m) | Level (m) | Legend | Stratum Description | |
|---|---|---|---|---|---|---|---|---|---|
| | | Depth (m) | Type | Results | | | | | |
| | | | | | 0.30 | 90.80 | | Surface covering of 10mm pea shingle over Black clayey TOPSOIL with brick fragments. | |
| | | 1.00 | D | | | | | Firm becoming stiff orange-brown / grey mottled slightly sandy slightly gravelly silty CLAY. Gravels consist of fine to coarse sub-rounded flints | 1 |
| | | 1.00 | SPT | N=12 (3,2/3,3,3,3) | | | | | |
| | | 1.50 | ES | | | | | | |
| | | 2.00 | D | | | | | | 2 |
| | | 2.00 | SPT | N=8 (3,4/2,2,2,2) | | | | | |
| | | | | | 2.30 | 88.80 | | Stiff orange-brown / grey mottled silty CLAY | |
| | | 2.50 | ES | | | | | | |
| | | 3.00 | D | | | | | | 3 |
| | | 3.00 | SPT | N=9 (2,2/2,2,2,3) | | | | | |
| | | 3.50 | ES | | | | | | |
| | | 4.00 | D | | | | | | 4 |
| | | 4.00 | SPT | N=15 (3,3/3,4,4,4) | 4.10 | 87.00 | | Stiff dark grey mottled silty CLAY | |
| | | 4.50 | ES | | | | | | |
| | | 5.00 | D | | | | | | 5 |

| Hole Diameter | | Casing Diameter | | Chiselling | | | | Inclination and Orientation | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Depth Base | Diameter | Depth Base | Diameter | Depth Top | Depth Base | Duration | Tool | Depth Top | Depth Base | Inclination | Orientation |
| | | | | | | | | | | | |

Remarks

Dry upon completion

AGS

| | | | | | |
|---|---|---|---|---|---|
| CDS Environmental Solutions | **Project Name:** | **Windowless Sampler Borehole Log** | | **Hole ID:** | BH1 |
| | 18 Platts Lane | | | **Hole Type:** | WLS |
| | **Project Location:** | | | **Level:** | 91.10 |
| | London NW3 7NS | **Project ID:** | ES0089 | **Logged By:** | |
| | **Client:** | **Contractor:** | The CDS Group | **Scale:** | 1:25 |
| | Mr Toby Vanhegan | **Date:** | 27/01/2025 | **Page No:** | Sheet 2 of 2 |

| Well | Water Strikes | Sample and In Situ Testing | | | Depth (m) | Level (m) | Legend | Stratum Description |
|---|---|---|---|---|---|---|---|---|
| | | Depth (m) | Type | Results | | | | |
| | | 5.00 | SPT | N=18 (3,4/3,4,5,6) | | | | Stiff dark grey mottled silty CLAY |
| | | 5.50 | ES | | | | | |
| | | 6.00 | SPT | 17 (3,5/5,6,6,) | | | | |
| | | | | | 6.45 | 84.65 | | End of Borehole at 6.450m |

| Hole Diameter | | Casing Diameter | | Chiselling | | | | Inclination and Orientation | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Depth Base | Diameter | Depth Base | Diameter | Depth Top | Depth Base | Duration | Tool | Depth Top | Depth Base | Inclination | Orientation |
| | | | | | | | | | | | |

Remarks

Dry upon completion

| | | | | |
|---|---|---|---|---|
| CDS Environmental Solutions | **Project Name:** 18 Platts Lane | **Windowless Sampler Borehole Log** | **Hole ID:** | BH2 |
| | **Project Location:** | | **Hole Type:** | WLS |
| | London NW3 7NS | | **Level:** | 91.80 |
| | | **Project ID:** ES0089 | **Logged By:** | |
| | **Client:** | **Contractor:** The CDS Group | **Scale:** | 1:25 |
| | Mr Toby Vanhegan | **Date:** 27/01/2025 | **Page No:** | Sheet 1 of 2 |

| Well | Water Strikes | Sample and In Situ Testing Depth (m) | Type | Results | Depth (m) | Level (m) | Legend | Stratum Description |
|---|---|---|---|---|---|---|---|---|
| | | | | | 0.40 | 91.40 | | Brown / black clayey TOSPOIL with roots |
| | | 1.00 | ES | | | | | Firm becoming stiff orange-brown / grey mottled slightly sandy slightly gravelly silty CLAY. Gravels consist of fine to coarse sub-rounded flints |
| | | 1.00 | SPT | N=13 (3,2/3,3,3,4) | | | | |
| | | 1.50 | D | | | | | |
| | | 2.00 | ES | | | | | |
| | | 2.00 | SPT | N=10 (3,4/2,2,3,3) | | | | |
| | ▼ | 2.50 | D | | 2.50 | 89.30 | | Stiff orange-brown / grey mottled silty CLAY |
| | | 3.00 | ES | | | | | |
| | | 3.00 | SPT | N=8 (1,2/2,2,2,2) | | | | |
| | | 3.50 | D | | | | | |
| | | 4.00 | ES | | | | | |
| | | 4.00 | SPT | N=15 (4,3/3,4,4,4) | | | | |
| | | 4.50 | D | | 4.50 | 87.30 | | Stiff dark grey mottled silty CLAY |
| | | 5.00 | ES | | | | | |

| Hole Diameter | | Casing Diameter | | Chiselling | | | | Inclination and Orientation | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Depth Base | Diameter | Depth Base | Diameter | Depth Top | Depth Base | Duration | Tool | Depth Top | Depth Base | Inclination | Orientation |
| | | | | | | | | | | | |

Remarks

Seepage at 2.50m bgl

AGS

| | | | | |
|---|---|---|---|---|
| CDS Environmental Solutions | **Project Name:** 18 Platts Lane | **Windowless Sampler Borehole Log** | **Hole ID:** | BH2 |
| | **Project Location:** | | **Hole Type:** | WLS |
| | London NW3 7NS | | **Level:** | 91.80 |
| | | **Project ID:** ES0089 | **Logged By:** | |
| | **Client:** | **Contractor:** The CDS Group | **Scale:** | 1:25 |
| | Mr Toby Vanhegan | **Date:** 27/01/2025 | **Page No:** | Sheet 2 of 2 |

| Well | Water Strikes | Sample and In Situ Testing | | | Depth (m) | Level (m) | Legend | Stratum Description |
|---|---|---|---|---|---|---|---|---|
| | | Depth (m) | Type | Results | | | | |
| | | 5.00 | SPT | N=18 (3,4/3,4,5,6) | | | | Stiff dark grey mottled silty CLAY |
| | | 5.50 | D | | | | | |
| | | 6.00 | SPT | N=22 (3,5/5,5,6,6) | | | | |
| | | | | | 6.45 | 85.35 | | End of Borehole at 6.450m |

| Hole Diameter | | Casing Diameter | | Chiselling | | | | Inclination and Orientation | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Depth Base | Diameter | Depth Base | Diameter | Depth Top | Depth Base | Duration | Tool | Depth Top | Depth Base | Inclination | Orientation |
| | | | | | | | | | | | |

Remarks

Seepage at 2.50m bgl

CDS Environmental Solutions

| | | | |
|---|---|---|---|
| **Project Name:** | **Windowless Sampler Borehole Log** | **Hole ID:** | BH3 |
| 18 Platts Lane | | **Hole Type:** | WLS |
| **Project Location:** | | **Level:** | 91.90 |
| London NW3 7NS | **Project ID:** ES0089 | **Logged By:** | |
| **Client:** | **Contractor:** The CDS Group | **Scale:** | 1:25 |
| Mr Toby Vanhegan | **Date:** 27/01/2025 | **Page No:** | Sheet 1 of 1 |

| Well | Water Strikes | Sample and In Situ Testing | | | Depth (m) | Level (m) | Legend | Stratum Description |
|---|---|---|---|---|---|---|---|---|
| | | Depth (m) | Type | Results | | | | |
| | | | | | 0.05 | 91.85 | | Concrete |
| | | | | | | | | MADE GROUND comprising of crushed concrete and orange-brown SAND |
| | | | | | 0.30 | 91.60 | | MADE GROUND comprising dirty brown gravelly sandy CLAY with half and whole bricks, concrete fragments and burnt charcoal. |
| | | | | | 0.80 | 91.10 | | Firm orange-brown / grey mottled slightly sandy silty CLAY |
| | | 1.00 | D | | | | | |
| | | 1.00 | SPT | N=12 (2,2/3,3,3,3) | | | | |
| | | 1.50 | ES | | | | | |
| | | | | | | | | *Subrounded fine to coarse flint gravels.* |
| | | 2.00 | SPT | N=12 (3,3/2,3,3,4) | | | | |
| | | 2.20 | D | | | | | |
| | | | | | 3.00 | 88.90 | | End of Borehole at 3.000m |

| Hole Diameter | | Casing Diameter | | Chiselling | | | | Inclination and Orientation | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Depth Base | Diameter | Depth Base | Diameter | Depth Top | Depth Base | Duration | Tool | Depth Top | Depth Base | Inclination | Orientation |
| | | | | | | | | | | | |

Remarks

25mm lead water pipe at 0.7m bgl. Borehole terminated to enact repair.

AGS

# APPENDIX B

# CHEMICAL TEST RESULTS

eurofins | Chemtest
Eurofins Chemtest Ltd
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

# Amended Report

| | | | |
|---|---|---|---|
| **Report No.:** | 25-03193-2 | | |
| **Initial Date of Issue:** | 11-Feb-2025 | **Date of Re-Issue:** | 11-Feb-2025 |
| **Re-Issue Details:** | This report has been revised and directly supersedes 25-03193-1 in its entirety | | |
| **Client** | CDS Group | | |
| **Client Address:** | Building 51 Wrest Park<br>Silsoe<br>Bedfordshire<br>MK45 4HS | | |
| **Contact(s):** | Callum Ward | | |
| **Project** | 18 Platts Lane, London | | |
| **Quotation No.:** | Q21-24415 | **Date Received:** | 30-Jan-2025 |
| **Order No.:** | | **Date Instructed:** | 30-Jan-2025 |
| **No. of Samples:** | 9 | | |
| **Turnaround (Wkdays):** | 5 | **Results Due:** | 05-Feb-2025 |
| **Date Approved:** | 11-Feb-2025 | | |

**Approved By:**

**Details:** David Smith, Technical Director

**For details about application of accreditation to specific matrix types, please refer to the Table at the back of this report**

# Results - Soil

**Project: 18 Platts Lane, London**

| **Client: CDS Group** | | **Chemtest Job No.:** | | | | 25-03193 | 25-03193 | 25-03193 | 25-03193 | 25-03193 | 25-03193 | 25-03193 | 25-03193 | 25-03193 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Quotation No.: Q21-24415 | | **Chemtest Sample ID.:** | | | | 1925003 | 1925004 | 1925005 | 1925006 | 1925007 | 1925008 | 1925009 | 1925010 | 1925011 |
| | | Sample Location: | | | | BH1 | BH1 | BH1 | BH1 | BH2 | BH2 | BH2 | BH2 | BH3 |
| | | Sample Type: | | | | SOIL | SOIL | SOIL | SOIL | SOIL | SOIL | SOIL | SOIL | SOIL |
| | | Top Depth (m): | | | | 1.50 | 2.50 | 3.50 | 4.50 | 1.00 | 2.00 | 3.00 | 5.00 | 1.50 |
| | | Date Sampled: | | | | 27-Jan-2025 | 27-Jan-2025 | 27-Jan-2025 | 27-Jan-2025 | 27-Jan-2025 | 27-Jan-2025 | 27-Jan-2025 | 27-Jan-2025 | 27-Jan-2025 |
| **Determinand** | **HWOL Code** | **Accred.** | **SOP** | **Units** | **LOD** | | | | | | | | | |
| Moisture | | N | 2030 | % | 0.020 | 16 | 17 | 19 | 16 | 18 | 15 | 18 | 16 | 17 |
| Soil Colour | | N | 2040 | | N/A | Brown | Brown | Brown | Brown | Brown | Brown | Brown | Brown | Brown |
| Other Material | | N | 2040 | | N/A | None | None | None | None | Stones and Roots | None | None | None | None |
| Soil Texture | | N | 2040 | | N/A | Clay | Clay | Clay | Clay | Clay | Clay | Clay | Clay | Clay |
| pH (2.5:1) at 20C | | N | 2010 | | 4.0 | 8.0 | 7.8 | 7.6 | 8.3 | 8.2 | 8.1 | 8.1 | 8.4 | 8.1 |
| Sulphate (2:1 Water Soluble) as SO4 | | M | 2120 | g/l | 0.010 | < 0.010 | < 0.010 | < 0.010 | 0.064 | 0.019 | 0.047 | < 0.010 | 0.037 | < 0.010 |
| Total Sulphur | | U | 2175 | % | 0.010 | 0.010 | 0.040 | 0.010 | 0.37 | 0.020 | 0.020 | 0.010 | 0.50 | 0.010 |
| Sulphate (Acid Soluble) | | U | 2430 | % | 0.010 | 0.020 | 0.079 | < 0.010 | 0.016 | 0.045 | 0.045 | 0.010 | 0.027 | < 0.010 |

# Test Methods

| SOP | Title | Parameters included | Method summary | Water Accred. |
|---|---|---|---|---|
| 2010 | pH Value of Soils | pH at 20°C | pH Meter | |
| 2030 | Moisture and Stone Content of Soils(Requirement of MCERTS) | Moisture content | Determination of moisture content of soil as a percentage of its as received mass obtained at <30°C. | |
| 2040 | Soil Description(Requirement of MCERTS) | Soil description | As received soil is described based upon BS5930 | |
| 2120 | Water Soluble Boron, Sulphate, Magnesium & Chromium | Boron; Sulphate; Magnesium; Chromium | Aqueous extraction / ICP-OES | |
| 2175 | Total Sulphur in Soils | Total Sulphur | Determined by high temperature combustion under oxygen, using an Eltra elemental analyser. | |
| 2430 | Total Sulphate in soils | Total Sulphate | Acid digestion followed by determination of sulphate in extract by ICP-OES. | |

## Report Information

| Key | |
|---|---|
| U | UKAS accredited |
| M | MCERTS and UKAS accredited |
| N | Unaccredited |
| S | This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis |
| SN | This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis |
| T | This analysis has been subcontracted to an unaccredited laboratory |
| I/S | Insufficient Sample |
| U/S | Unsuitable Sample |
| N/E | not evaluated |
| < | "less than" |
| > | "greater than" |
| SOP | Standard operating procedure |
| LOD | Limit of detection |

This report shall not be reproduced except in full, and only with the prior approval of the laboratory.

Any comments or interpretations are outside the scope of UKAS accreditation.

The Laboratory is not accredited for any sampling activities and reported results relate to the samples 'as received' at the laboratory.

Uncertainty of measurement for the determinands tested are available upon request .

None of the results in this report have been recovery corrected.

All results are expressed on a dry weight basis.

The following tests were analysed on samples 'as received' and the results subsequently corrected to a dry weight basis EPH, VPH, TPH, BTEX, VOCs, SVOCs, PCBs, Phenols.

For all other tests the samples were dried at ≤ 30°C prior to analysis.

All Asbestos testing is performed at the indicated laboratory .

Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1.

| | |
|---|---|
| NEW_ASB | Eurofins Chemtest Limited, 11 Depot Road, Newmarket, CB8 0AL |
| DURHAM | Eurofins Chemtest Limited, Unit A North Wing, Prospect Business Park, Crookhall Lane, Consett, Co Durham, DH8 7PW |

### Sample Deviation Codes

A - Date of sampling not supplied

B - Sample age exceeds stability time (sampling to extraction)

C - Sample not received in appropriate containers

D - Broken Container

E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

### Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt.

All water samples will be retained for 14 days from the date of receipt.

Charges may apply to extended sample storage.

### Water Sample Category Key for Accreditation

## Report Information

DW - Drinking Water
GW - Ground Water
LE - Land Leachate
NA - Not Applicable
PL - Prepared Leachate
PW - Processed Water
RE - Recreational Water
SA - Saline Water
SW - Surface Water
TE - Treated Effluent
TS - Treated Sewage
UL - Unspecified Liquid

### Clean Up Codes

NC - No Clean Up
MC - Mathematical Clean Up
FC - Florisil Clean Up

### HWOL Acronym System

HS - Headspace analysis
EH - Extractable hydrocarbons – i.e. everything extracted by the solvent
CU - Clean-up – e.g. by Florisil, silica gel
1D - GC – Single coil gas chromatography
Total - Aliphatics & Aromatics
AL - Aliphatics only
AR - Aromatic only
2D - GC-GC – Double coil gas chromatography
#1 - EH_2D_Total but with humics mathematically subtracted
#2 - EH_2D_Total but with fatty acids mathematically subtracted
+ - Operator to indicate cumulative e.g. EH+EH_Total or EH_CU+HS_Total

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com

# APPENDIX C

# GEOTECHNICAL TEST RESULTS

# Summary of Water Content, Liquid Limit (1 point) and Plastic Limit Results

| Job No. | Project Name | Programme | |
|---|---|---|---|
| 36681 | 18 Platts Lane, London | Samples received | 27/01/2025 |
| | | Schedule received | 29/01/2025 |
| Project No. | Client | Project started | 29/01/2025 |
| ES0089 | CDS | Testing Started | 11/02/2025 |

| Hole No. | Sample | | | | Soil Description | Water content | Passing 425µm | Preparation | LL | PL | PI | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ref | Top m | Base m | Type | | % | % | | % | % | % | |
| BH1 | - | 2.00 | - | D | Orangish brown slightly mottled bluish grey slightly sandy silty CLAY | 21.8 | 100 | Tested in natural condition | 40 | 19 | 21 | |
| BH1 | - | 3.00 | - | D | Orangish brown slightly mottled bluish grey slightly sandy silty CLAY | 24.0 | 100 | Tested in natural condition | 44 | 22 | 22 | |
| BH1 | - | 4.00 | - | D | Dark grey slightly sandy silty CLAY | 24.2 | 100 | Tested in natural condition | 50 | 23 | 27 | |
| BH2 | - | 1.50 | - | D | Orangish brown slightly mottled grey and dark grey slightly gravelly silty CLAY (gravel is fm and sub-angular to rounded) | 16.5 | 97 | Tested after >425um removed by hand | 48 | 20 | 28 | |
| BH2 | - | 2.50 | - | D | Orangish brown slightly mottled bluish grey slightly sandy slightly gravelly silty CLAY (gravel is fm and sub-angular to rounded) | 22.5 | 97 | Tested after >425um removed by hand | 44 | 25 | 19 | |
| BH2 | - | 3.50 | - | D | Orangish brown slightly mottled grey sandy silty CLAY | 25.2 | 100 | Tested in natural condition | 38 | 20 | 18 | |
| BH2 | - | 5.50 | - | D | Dark grey slightly sandy silty CLAY | 23.4 | 100 | Tested in natural condition | 52 | 23 | 29 | |
| BH3 | - | 1.00 | - | D | Orangish brown slightly mottled grey slightly gravelly slightly sandy silty CLAY (gravel is fm and sub-angular to rounded) | 23.0 | 96 | Tested after >425um removed by hand | 42 | 18 | 24 | |
| BH3 | - | 2.20 | - | D | Brown mottled grey and orangish brown slightly sandy gravelly silty CLAY (gravel is fmc and angular to sub-angular) | 15.9 | 42 | Tested after washing to remove >425um | 44 | 18 | 26 | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

*80g/300 cone used unless otherwise stated, Corretation factor for 1 point method carried out using Table 1 (BS1377: 1990, Part 2)*

**Test Methods: BS EN ISO 17892**
Part 1: 2014+A1:2022 Water content
Part 12: 2018 +A2:2022 Liquid & plastic limit

*These results only apply to the items tested*
NOTE: The report shall not be reproduced except in full without authority of the laboratory

**Test Report by K4 SOILS LABORATORY**
**Unit 8 Olds Close Olds Approach**
**Watford Herts WD18 9RU**

**Tel: 01923 711 288**
**Email: James@k4soils.com**

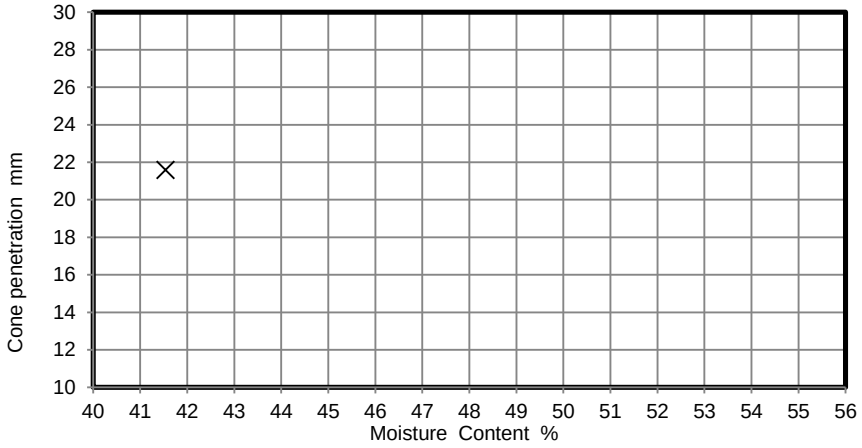
**Checked and Approved**
**Initials** **J.P**
**Date:** 14/02/2025

UKAS TESTING
2519

Approved Signatories: K.Phaure (Tech.Mgr) J.Phaure (Lab.Mgr)

# LIQUID LIMIT, PLASTIC LIMIT AND PLASTICITY INDEX

| | | | | | |
|---|---|---|---|---|---|
| | | | | Job No. | 36681 |
| | | | | Borehole/Pit No. | BH1 |
| Site Name | 18 Platts Lane, London | | | Sample No. | - |
| Project No. | ES0089 | Client | CDS | Depth Top m | 2.00 |
| Soil Description | Orangish brown slightly mottled bluish grey slightly sandy silty CLAY | | | Depth Base m | - |
| | | | | Sample Type | D |
| | | | | Samples received | 27/01/2025 |
| | | | | Schedules received | 29/01/2025 |
| | | | | Project Started | 29/01/2025 |
| | | | | Date Tested | 11/02/2025 |




| | | |
|---|---|---|
| **WATER CONTENT** | **21.8** | **%** |
| **% PASSING 425µm SIEVE** | **100** | **%** |
| **LIQUID LIMIT** | **40** | **%** |
| **PLASTIC LIMIT** | **19** | **%** |
| **PLASTICITY INDEX** | **21** | **%** |

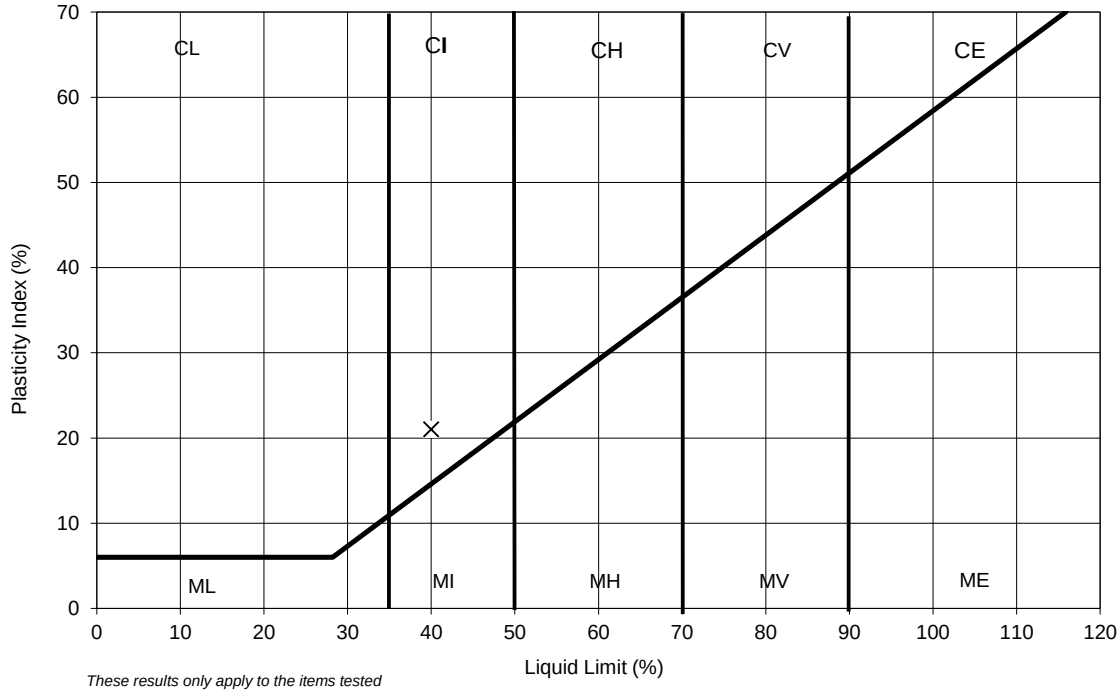
**Preparation Method**

Tested in natural condition

**Remarks**

*Factors corresponding to the cone penetration and moisture content range in Table 1 (BS1377:1990 ; Part 2)*

## PLASTICITY INDEX

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**TEST METHOD**

BS EN ISO17892: Part 1:2014+A1:2022 Water Content
BS EN ISO 17892: Part 12:2018+A2:2022 Liquid Limit & Plastic Limit

**Checked and Approved**

Initials: J.P
Date: 14/02/2025

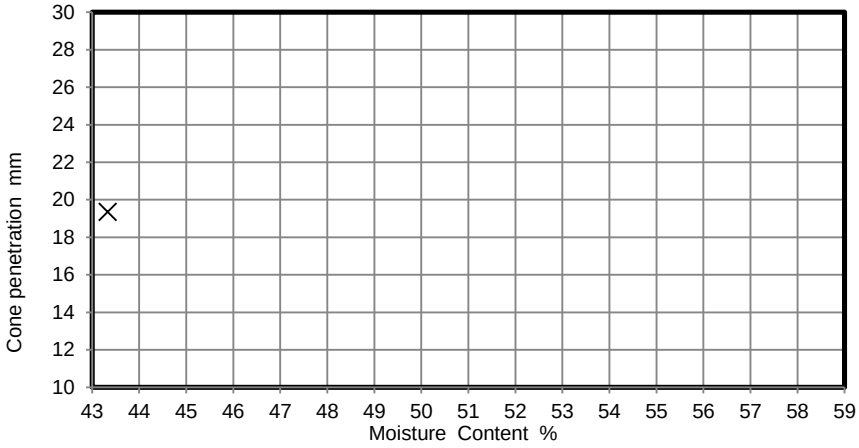
Test Report by K4 SOILS LABORATORY Unit 8 Olds Close Olds Approach Watford Herts WD18 9RU
Tel: 01923 711 288 Email: James@k4soils.com

2519

*Approved Signatories: K.Phaure (Tech.Mgr) J.Phaure (Lab.Mgr)*

# LIQUID LIMIT, PLASTIC LIMIT AND PLASTICITY INDEX

| | | | | | |
|---|---|---|---|---|---|
| | | | | Job No. | 36681 |
| | | | | Borehole/Pit No. | BH1 |
| Site Name | 18 Platts Lane, London | | | Sample No. | - |
| Project No. | ES0089 | Client | CDS | Depth Top m | 3.00 |
| Soil Description | Orangish brown slightly mottled bluish grey slightly sandy silty CLAY | | | Depth Base m | - |
| | | | | Sample Type | D |
| | | | | Samples received | 27/01/2025 |
| | | | | Schedules received | 29/01/2025 |
| | | | | Project Started | 29/01/2025 |
| | | | | Date Tested | 11/02/2025 |




| | | |
|---|---|---|
| **WATER CONTENT** | **24.0** | **%** |
| **% PASSING 425µm SIEVE** | **100** | **%** |
| **LIQUID LIMIT** | **44** | **%** |
| **PLASTIC LIMIT** | **22** | **%** |
| **PLASTICITY INDEX** | **22** | **%** |

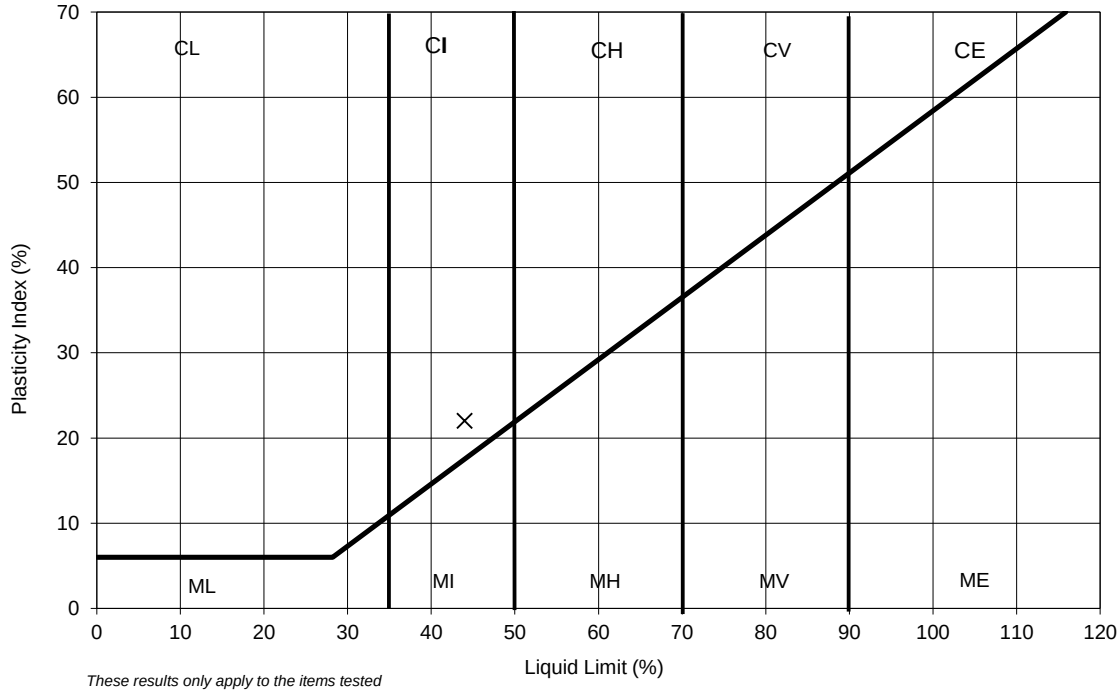
**Preparation Method**

Tested in natural condition

**Remarks**

*Factors corresponding to the cone penetration and moisture content range in Table 1 (BS1377:1990 ; Part 2)*

## PLASTICITY INDEX

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**TEST METHOD**

BS EN ISO17892: Part 1:2014+A1:2022 Water Content
BS EN ISO 17892: Part 12:2018+A2:2022 Liquid Limit & Plastic Limit

**Checked and Approved**

Initials: J.P
Date: 14/02/2025

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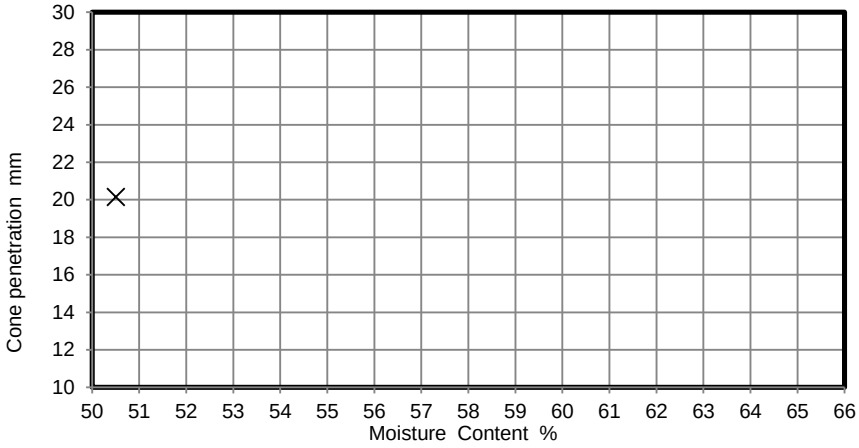
# LIQUID LIMIT, PLASTIC LIMIT AND PLASTICITY INDEX

| | | | | | |
|---|---|---|---|---|---|
| | | | | Job No. | 36681 |
| | | | | Borehole/Pit No. | BH1 |
| Site Name | 18 Platts Lane, London | | | Sample No. | - |
| Project No. | ES0089 | Client | CDS | Depth Top m | 4.00 |
| Soil Description | Dark grey slightly sandy silty CLAY | | | Depth Base m | - |
| | | | | Sample Type | D |
| | | | | Samples received | 27/01/2025 |
| | | | | Schedules received | 29/01/2025 |
| | | | | Project Started | 29/01/2025 |
| | | | | Date Tested | 11/02/2025 |




| | | |
|---|---|---|
| **WATER CONTENT** | **24.2** | **%** |
| **% PASSING 425µm SIEVE** | **100** | **%** |
| **LIQUID LIMIT** | **50** | **%** |
| **PLASTIC LIMIT** | **23** | **%** |
| **PLASTICITY INDEX** | **27** | **%** |

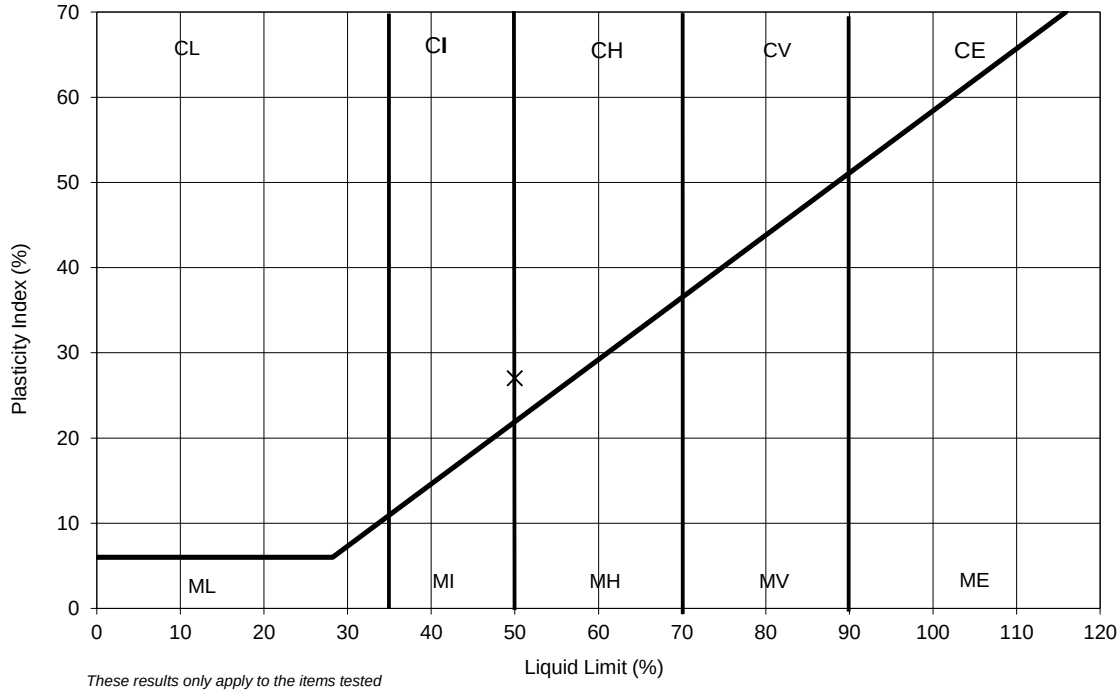
**Preparation Method**

Tested in natural condition

**Remarks**

*Factors corresponding to the cone penetration and moisture content range in Table 1 (BS1377:1990 ; Part 2)*

**PLASTICITY INDEX**

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**TEST METHOD**

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BS EN ISO 17892: Part 12:2018+A2:2022 Liquid Limit & Plastic Limit

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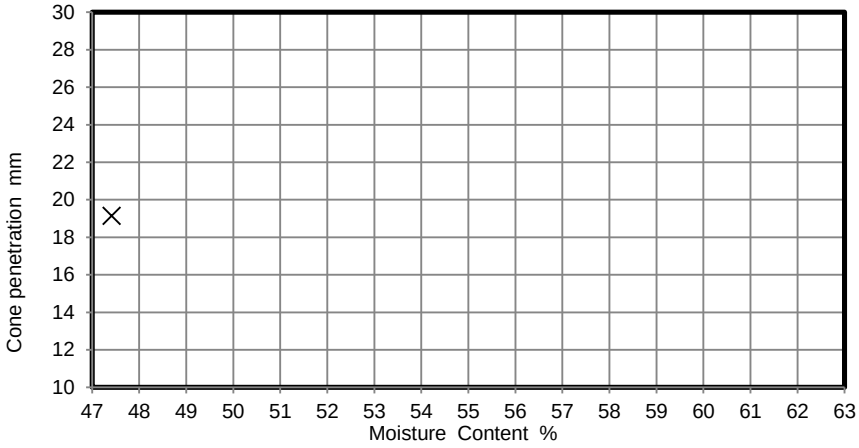
# LIQUID LIMIT, PLASTIC LIMIT AND PLASTICITY INDEX

| | | | | | |
|---|---|---|---|---|---|
| | | | | Job No. | 36681 |
| | | | | Borehole/Pit No. | BH2 |
| Site Name | 18 Platts Lane, London | | | Sample No. | - |
| Project No. | ES0089 | Client | CDS | Depth Top m | 1.50 |
| Soil Description | Orangish brown slightly mottled grey and dark grey slightly gravelly silty CLAY (gravel is fm and sub-angular to rounded) | | | Depth Base m | - |
| | | | | Sample Type | D |
| | | | | Samples received | 27/01/2025 |
| | | | | Schedules received | 29/01/2025 |
| | | | | Project Started | 29/01/2025 |
| | | | | Date Tested | 11/02/2025 |




| | | |
|---|---|---|
| **WATER CONTENT** | **16.5** | **%** |
| **% PASSING 425µm SIEVE** | **97** | **%** |
| **LIQUID LIMIT** | **48** | **%** |
| **PLASTIC LIMIT** | **20** | **%** |
| **PLASTICITY INDEX** | **28** | **%** |

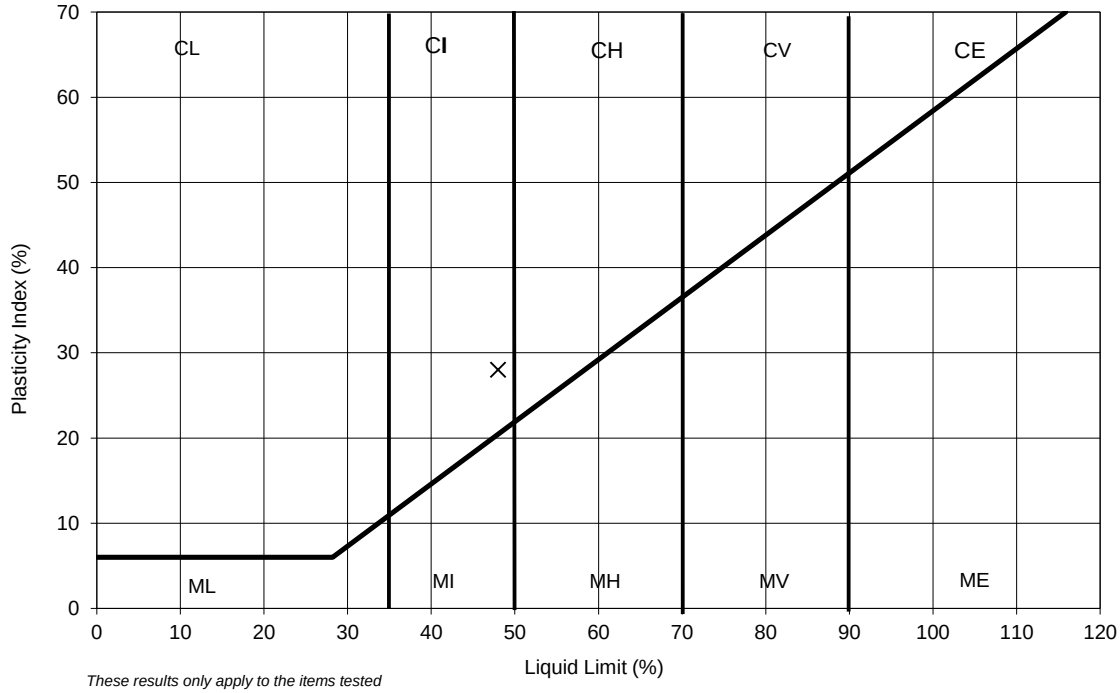
**Preparation Method**

Tested after >425um removed by hand

**Remarks**

*Factors corresponding to the cone penetration and moisture content range in Table 1 (BS1377:1990 ; Part 2)*

## PLASTICITY INDEX

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**TEST METHOD**

BS EN ISO17892: Part 1:2014+A1:2022 Water Content
BS EN ISO 17892: Part 12:2018+A2:2022 Liquid Limit & Plastic Limit

**Checked and Approved**

Initials: J.P
Date: 14/02/2025

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Tel: 01923 711 288 Email: James@k4soils.com

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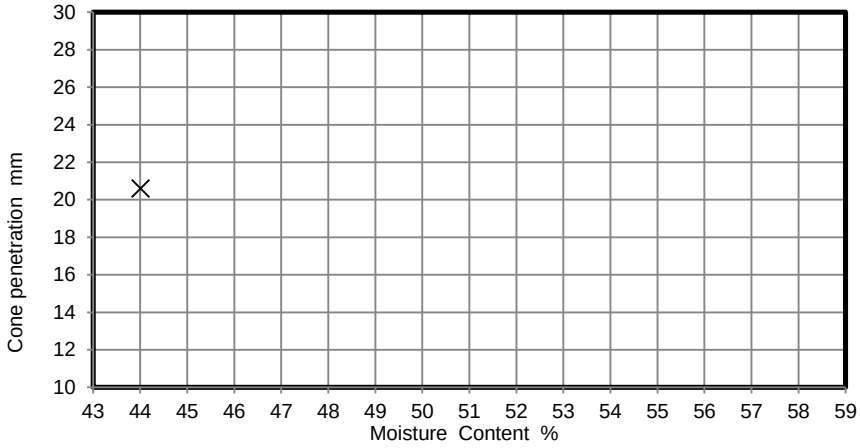
2519

*Approved Signatories: K.Phaure (Tech.Mgr) J.Phaure (Lab.Mgr)*

# LIQUID LIMIT, PLASTIC LIMIT AND PLASTICITY INDEX

| | | | | | |
|---|---|---|---|---|---|
| | | | | Job No. | 36681 |
| | | | | Borehole/Pit No. | BH2 |
| Site Name | 18 Platts Lane, London | | | Sample No. | - |
| Project No. | ES0089 | Client | CDS | Depth Top m | 2.50 |
| Soil Description | Orangish brown slightly mottled bluish grey slightly sandy slightly gravelly silty CLAY (gravel is fm and sub-angular to rounded) | | | Depth Base m | - |
| | | | | Sample Type | D |
| | | | | Samples received | 27/01/2025 |
| | | | | Schedules received | 29/01/2025 |
| | | | | Project Started | 29/01/2025 |
| | | | | Date Tested | 11/02/2025 |




| | | |
|---|---|---|
| **WATER CONTENT** | **22.5** | **%** |
| **% PASSING 425µm SIEVE** | **97** | **%** |
| **LIQUID LIMIT** | **44** | **%** |
| **PLASTIC LIMIT** | **25** | **%** |
| **PLASTICITY INDEX** | **19** | **%** |

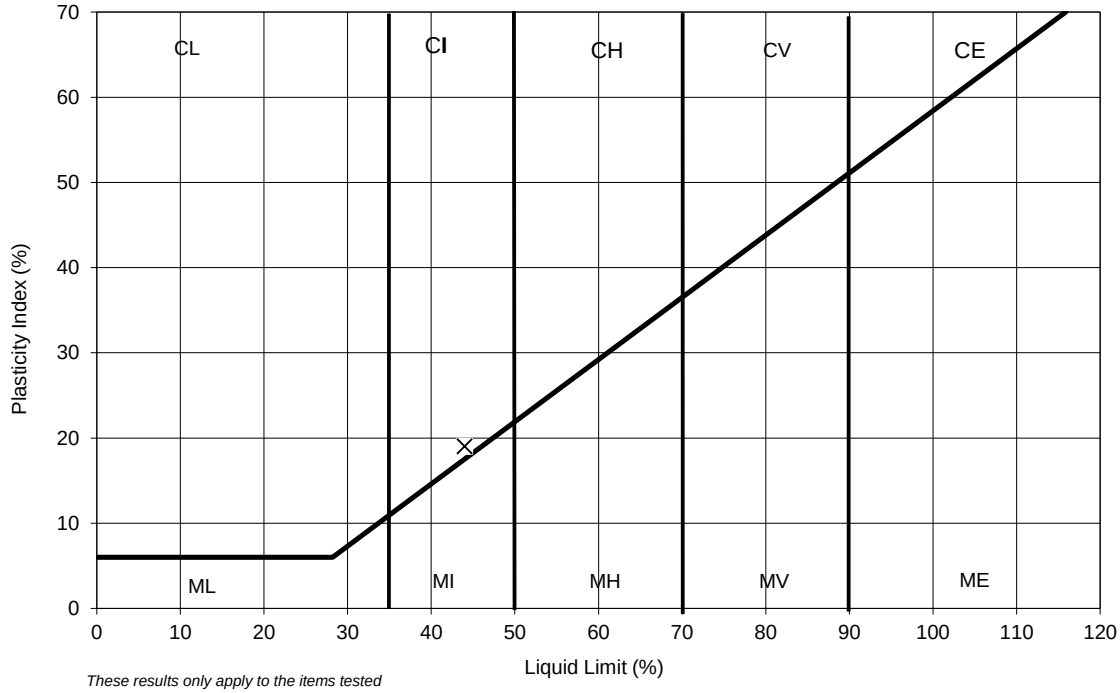
**Preparation Method**

Tested after >425um removed by hand

**Remarks**

*Factors corresponding to the cone penetration and moisture content range in Table 1 (BS1377:1990 ; Part 2)*

## PLASTICITY INDEX

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**TEST METHOD**

BS EN ISO17892: Part 1:2014+A1:2022 Water Content
BS EN ISO 17892: Part 12:2018+A2:2022 Liquid Limit & Plastic Limit

**Checked and Approved**

Initials: J.P
Date: 14/02/2025

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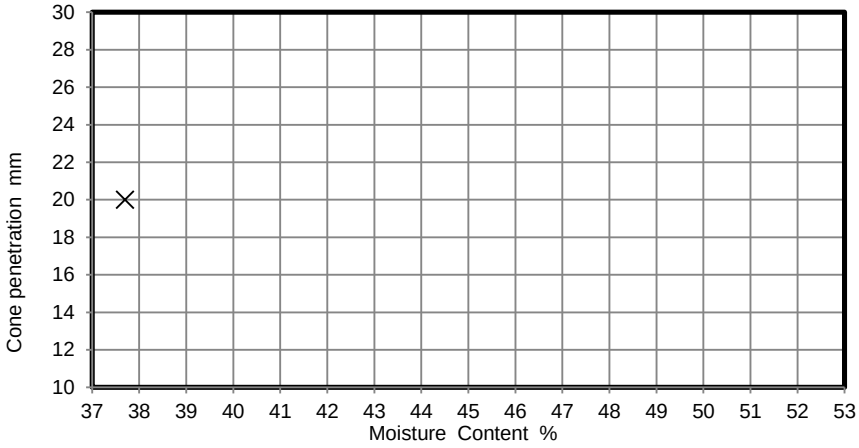
# LIQUID LIMIT, PLASTIC LIMIT AND PLASTICITY INDEX

| | | | | | |
|---|---|---|---|---|---|
| | | | | Job No. | 36681 |
| | | | | Borehole/Pit No. | BH2 |
| Site Name | 18 Platts Lane, London | | | Sample No. | - |
| Project No. | ES0089 | Client | CDS | Depth Top m | 3.50 |
| Soil Description | Orangish brown slightly mottled grey sandy silty CLAY | | | Depth Base m | - |
| | | | | Sample Type | D |
| | | | | Samples received | 27/01/2025 |
| | | | | Schedules received | 29/01/2025 |
| | | | | Project Started | 29/01/2025 |
| | | | | Date Tested | 11/02/2025 |




| | | |
|---|---|---|
| **WATER CONTENT** | **25.2** | **%** |
| **% PASSING 425µm SIEVE** | **100** | **%** |
| **LIQUID LIMIT** | **38** | **%** |
| **PLASTIC LIMIT** | **20** | **%** |
| **PLASTICITY INDEX** | **18** | **%** |

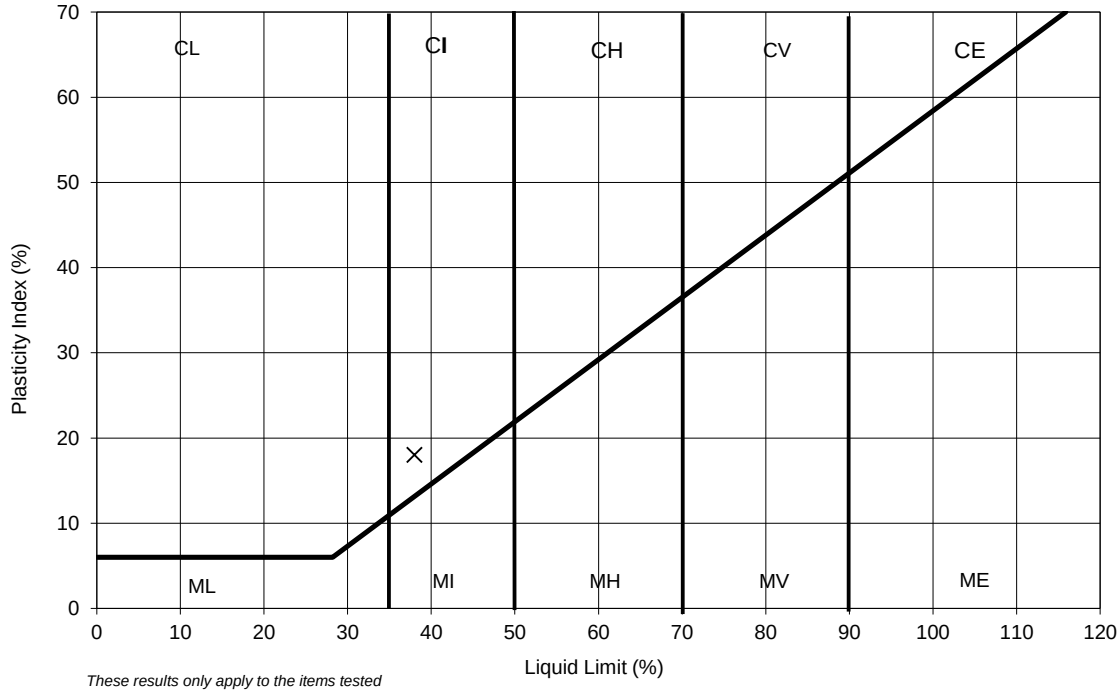
**Preparation Method**

Tested in natural condition

**Remarks**

*Factors corresponding to the cone penetration and moisture content range in Table 1 (BS1377:1990 ; Part 2)*

**PLASTICITY INDEX**

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**TEST METHOD**

BS EN ISO17892: Part 1:2014+A1:2022 Water Content
BS EN ISO 17892: Part 12:2018+A2:2022 Liquid Limit & Plastic Limit

**Checked and Approved**

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Date: 14/02/2025

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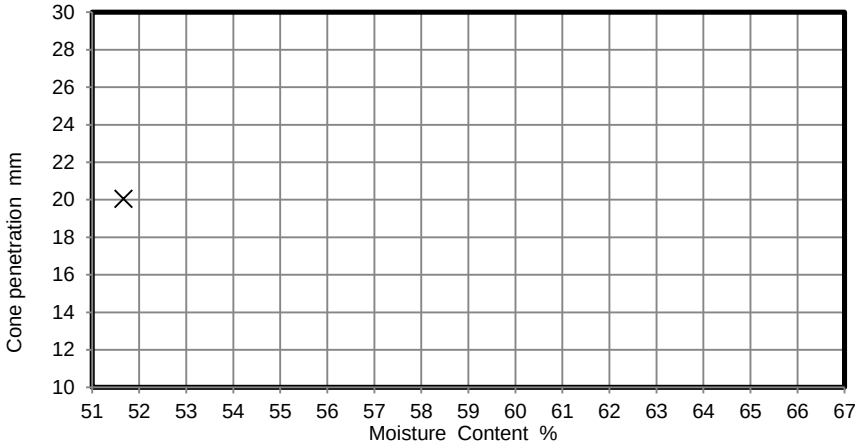
# LIQUID LIMIT, PLASTIC LIMIT AND PLASTICITY INDEX

| | | | | | |
|---|---|---|---|---|---|
| | | | | Job No. | 36681 |
| | | | | Borehole/Pit No. | BH2 |
| Site Name | 18 Platts Lane, London | | | Sample No. | - |
| Project No. | ES0089 | Client | CDS | Depth Top m | 5.50 |
| Soil Description | Dark grey slightly sandy silty CLAY | | | Depth Base m | - |
| | | | | Sample Type | D |
| | | | | Samples received | 27/01/2025 |
| | | | | Schedules received | 29/01/2025 |
| | | | | Project Started | 29/01/2025 |
| | | | | Date Tested | 11/02/2025 |




| | | |
|---|---|---|
| **WATER CONTENT** | **23.4** | **%** |
| **% PASSING 425µm SIEVE** | **100** | **%** |
| **LIQUID LIMIT** | **52** | **%** |
| **PLASTIC LIMIT** | **23** | **%** |
| **PLASTICITY INDEX** | **29** | **%** |

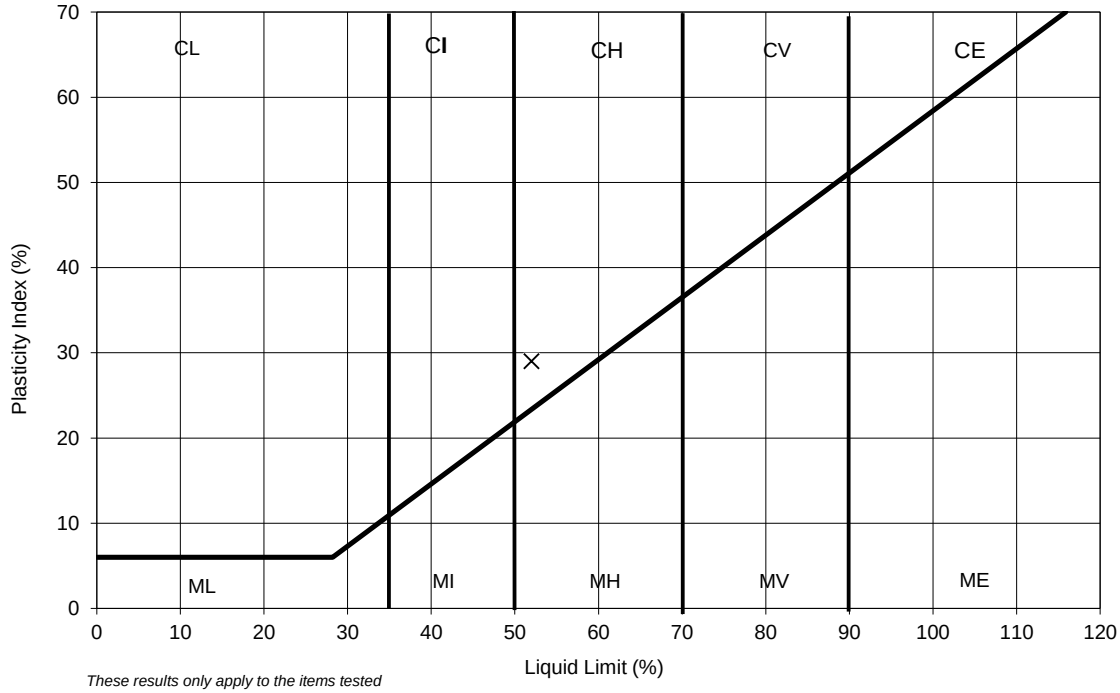
**Preparation Method**

Tested in natural condition

**Remarks**

*Factors corresponding to the cone penetration and moisture content range in Table 1 (BS1377:1990 ; Part 2)*

## PLASTICITY INDEX

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**TEST METHOD**

BS EN ISO17892: Part 1:2014+A1:2022 Water Content
BS EN ISO 17892: Part 12:2018+A2:2022 Liquid Limit & Plastic Limit

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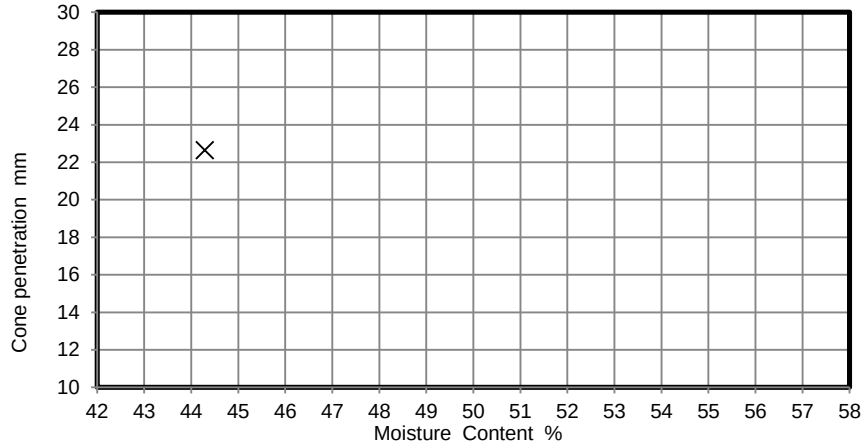
# LIQUID LIMIT, PLASTIC LIMIT AND PLASTICITY INDEX

| | | | | | |
|---|---|---|---|---|---|
| | | | | Job No. | 36681 |
| | | | | Borehole/Pit No. | BH3 |
| Site Name | 18 Platts Lane, London | | | Sample No. | - |
| Project No. | ES0089 | Client | CDS | Depth Top m | 1.00 |
| Soil Description | Orangish brown slightly mottled grey slightly gravelly slightly sandy silty CLAY (gravel is fm and sub-angular to rounded) | | | Depth Base m | - |
| | | | | Sample Type | D |
| | | | | Samples received | 27/01/2025 |
| | | | | Schedules received | 29/01/2025 |
| | | | | Project Started | 29/01/2025 |
| | | | | Date Tested | 11/02/2025 |




| | | |
|---|---|---|
| **WATER CONTENT** | **23.0** | **%** |
| **% PASSING 425µm SIEVE** | **96** | **%** |
| **LIQUID LIMIT** | **42** | **%** |
| **PLASTIC LIMIT** | **18** | **%** |
| **PLASTICITY INDEX** | **24** | **%** |

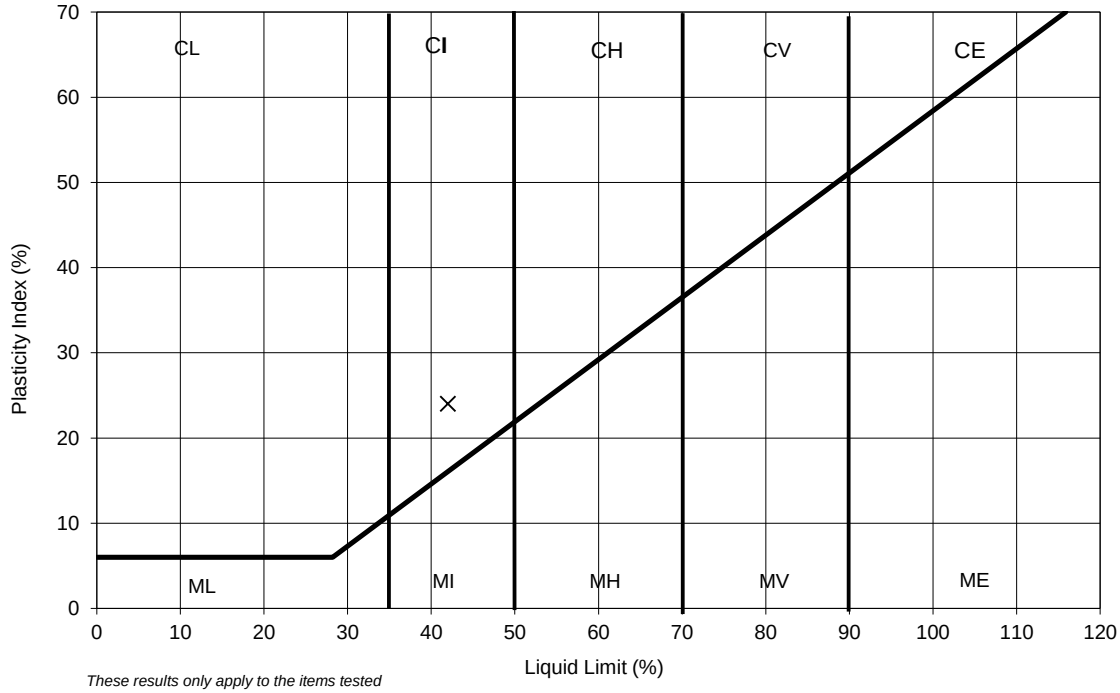
**Preparation Method**

Tested after >425um removed by hand

**Remarks**

*Factors corresponding to the cone penetration and moisture content range in Table 1 (BS1377:1990 ; Part 2)*

## PLASTICITY INDEX

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**TEST METHOD**

BS EN ISO17892: Part 1:2014+A1:2022 Water Content
BS EN ISO 17892: Part 12:2018+A2:2022 Liquid Limit & Plastic Limit

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Date: 14/02/2025

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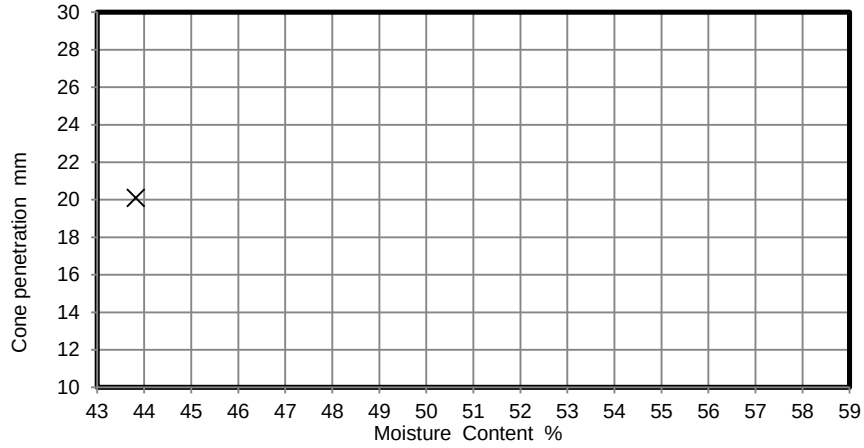
# LIQUID LIMIT, PLASTIC LIMIT AND PLASTICITY INDEX

| | | | | | |
|---|---|---|---|---|---|
| | | | | Job No. | 36681 |
| | | | | Borehole/Pit No. | BH3 |
| Site Name | 18 Platts Lane, London | | | Sample No. | - |
| Project No. | ES0089 | Client | CDS | Depth Top m | 2.20 |
| Soil Description | Brown mottled grey and orangish brown slightly sandy gravelly silty CLAY (gravel is fmc and angular to sub-angular) | | | Depth Base m | - |
| | | | | Sample Type | D |
| | | | | Samples received | 27/01/2025 |
| | | | | Schedules received | 29/01/2025 |
| | | | | Project Started | 29/01/2025 |
| | | | | Date Tested | 11/02/2025 |




| | | |
|---|---|---|
| **WATER CONTENT** | **15.9** | **%** |
| **% PASSING 425µm SIEVE** | **42** | **%** |
| **LIQUID LIMIT** | **44** | **%** |
| **PLASTIC LIMIT** | **18** | **%** |
| **PLASTICITY INDEX** | **26** | **%** |

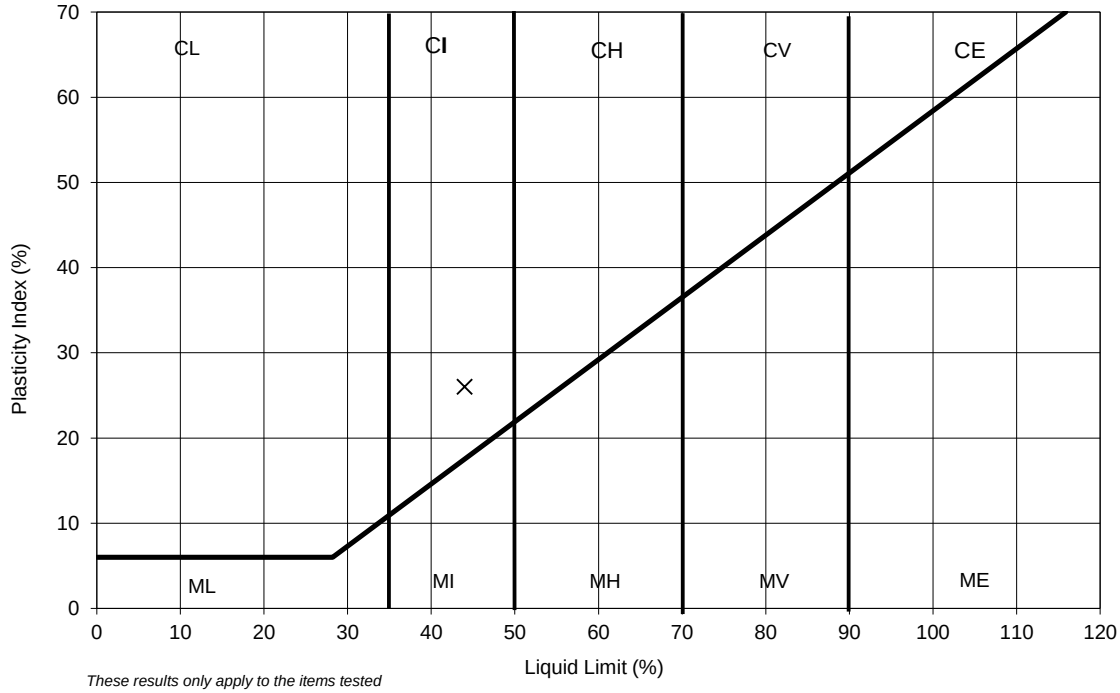
**Preparation Method**

Tested after washing to remove >425um

**Remarks**

*Factors corresponding to the cone penetration and moisture content range in Table 1 (BS1377:1990 ; Part 2)*

## PLASTICITY INDEX

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**TEST METHOD**

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BS EN ISO 17892: Part 12:2018+A2:2022 Liquid Limit & Plastic Limit

**Checked and Approved**

Initials: J.P
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