



ARCH
ASSOCIATES

APPENDIX 5

PHASE II SITE INVESTIGATION

PHASE 2 REPORT ON A SITE INVESTIGATION

Site

**LAND ADJACENT TO 1 & 2 RAILWAY COTTAGES,
STOPHAM ROAD, PULBOROUGH,
WEST SUSSEX RH20 1DP**

Client

SIGMA HOMES LTD

Report Ref

17/11139/JM

Issued

NOVEMBER 2017



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1 INTRODUCTION

The Client proposes to construct a new residential development at the land adjacent to 1 & 2 Railway Cottages, Stopham Road, Pulborough, West Sussex ("the site"). Consequently, a site investigation has been undertaken in order to ascertain the nature and engineering properties of the soils underlying the proposed development site and to obtain data which will assist in the formulation of a safe and economical foundation solution. In addition, a geo-environmental appraisal of the site has also been carried out. The works were completed in general accordance with the recommendations made in the Phase 1 Desk Study issued by Albury S.I. Ltd in February 2015, Report Ref. 15/10368/JM, which should be referred to.

At the time of the site works, the area of land was over-grown with brambles and other vegetation. It was noted that hedging and some trees were present around the perimeter of the site. Stockpiled rubbish and fly-tipping waste were also present in areas across the site and behind the main access gate from Stopham Road. Hence, the site was accessed via the gate in the north-eastern corner of the site, reached from the narrow access track adjacent to the Railway Cottages.

The programme of this investigation comprised the construction of 18 no. machine excavated trial pits using a mechanical backhoe excavator. During this work samples were recovered for further examination and laboratory testing. In addition, large scale soakaway testing was also performed. This report describes the work undertaken, presents the information obtained and discusses the ground conditions with respect to foundation design, construction and potential contamination.

2 FIELDWORKS

The trial pits were constructed between 16th and 18th October 2017, at the locations as shown on the site plan, drawing no. 17/11139/1, which is presented as Figure 1. The salient details were extracted from existing and proposed plans drawn by P Stubbington Land Surveys Ltd and ADP Architects Ltd, respectively, provided by the Client. The exploratory positions were located in order to provide adequate site coverage and based upon the conclusions of the Phase 1 Desk Study. Four trial pits were carried out along the proposed road layout in order to undertake soakaway testing and to collect samples for CBR testing, these being designated as SA1 to SA4.

The depths and descriptions of the strata encountered in the trial pits are given on the records which comprise Appendix 1 to this report. These records note the depths at which samples were taken and any groundwater observations noted at the time of the fieldworks.

3 GROUND CONDITIONS

3.1 Geology

Reference has been made to the published 1:50,000 scale British Geological Survey (BGS) mapping of the area, sheet no. 317/322 Chichester and Bognor. The site is indicated as being underlain by Head Deposits. These superficial deposits are underlain by the Folkestone Formation, typically comprising sand and sandstone, part of the Lower Greensand Group, which is of lower Cretaceous age. In the area of this site the Lower Greensand Group is understood to gently dip to the south.

3.2 Stratigraphy

Consideration of the trial pit records indicates that made ground, generally comprising vegetation over brown silty sand with occasional metal, concrete, plastic, ceramic tile, brick, glass, charcoal and chalk fragments with roots/rootlets, was noted at each of the investigatory locations and was proved to depths of between 0.2m to 0.6m.

Soils varying in composition from pale orange-brown, yellow-orange to brown silty sand with sandstone gravel to locally sandy gravel with pockets of red-purple-black staining, pockets of off-white to orange sand, locally with lenses of sandy clay and roots/rootlets were noted upon penetrating the made ground. Dark grey sand with occasional gravel or slightly silty very sandy gravel was noted between 1.6-1.9m and 1.4-1.8m in trial pit 2 and trial pit SA1, respectively. These predominantly granular soils were noted to extend to the concluding depths of between 1.1m and 3.3m in the trial pits with the exception of trial pit SA3. At the location of trial pit SA3 a layer of pale brown fissured clay with lenses of sand was noted to be present between 1.6m and its concluding depth of 2m.

The predominantly granular nature of the soils excavated across the site makes geological distinction between the Head Deposits and the underlying Folkestone Formation difficult.

3.3 Groundwater

No groundwater strikes were recorded during the construction of the investigatory positions. However, trial pit SA2 was noted to be slightly damp during excavation at 1m depth. No short-term standing water levels were recorded, prior to backfilling.

3.4 In Situ Testing

It is understood that consideration is being given to the use of traditional soakaways to dispose of surface water run-off from the proposed development site. Therefore, four large scale soakaway tests have been completed in general accordance with BRE Digest 365 at locations designated SA1 to SA4 as shown on the site plan, drawing no. 17/11139/1, which is presented as Figure 1. The soakaway test results are noted on the relevant exploratory records in Appendix 1. Two cycles were achieved at each test location except for SA2. The results have established soil infiltration rates f (m/s) of between 1.01E-05 and 3.87E-07, which infers average drainage characteristics.

4 LABORATORY TESTING

A programme of laboratory testing has been undertaken and the results are presented as Appendix 2 to this report. The geotechnical soil testing was undertaken by Albury S.I. Ltd, whilst representative samples were submitted for geochemical testing at the UKAS accredited laboratories operated by Chemtest Ltd. Each type of test is summarised below and the results obtained have been used to assist in the formulation of the discussion.

4.1 Particle Size Distribution

Samples of the granular soils encountered at this site have been subjected to sieve analysis in order to determine the soils' particle size distribution. In some instances this work was extended by sedimentation analysis to ascertain the soils' silt and clay fraction. Clay fractions varying from 6% to 14% were generally recorded. An exception was a sample of the clay retrieved from soakaway 3. In this case a clay fraction of 62% was determined. The results of this work are presented in the form of grading curves.

4.2 California Bearing Ratio

Samples of the soil taken from likely road formation level have been tested in order to determine their CBR value. Each test was made on specimens that had been recompacted in the standard laboratory mould, at their approximate natural water contents. Under the conditions of this work CBR values of between 0.6% and 37% were obtained. It should be noted, however, that the results of the Particle Size Distribution analysis indicate that this granular material is frost susceptible, as greater than 10% passes the 75 μ m test sieve. Hence, a minimum thickness of 450mm of non-frost susceptible material should be incorporated beneath roads and paved areas.

4.3 Chemical Testing – Soluble Sulphates & pH

Samples of the soils encountered at this site have been subjected to chemical analyses in order to determine their soluble sulphate contents and pH values. Under the conditions of this work low concentrations of soluble sulphate have been recorded in association with slightly acidic to slightly alkaline pH values.

4.4 Geochemical Testing

Selected samples of the made ground have been submitted to the UKAS accredited laboratories operated by Chemtest Ltd. The testing comprised a suite of typical inorganic and organic priority contaminants including metals, PAH, TPH CWG and an asbestos screen.

5 GEOTECHNICAL DISCUSSION

5.1 Foundations

The Client proposes to construct a new residential development, which will incorporate 28 no. residential houses/flats with associated new road layout, parking and private gardens at the site. The existing and proposed layouts are shown in Figure 1. At the time of the preparation of this report no precise information was available with regard to the likely structural loadings.

It cannot be recommended that major structural foundations be located within the made ground revealed by this investigation. Soils of this origin are frequently present in a weak and variable condition such that unacceptable settlement could occur even under the action of light loading intensities. Therefore, it will be necessary to continue foundation excavations through these undesirable materials. The above precautions need not necessarily be applied to light ancillary structures, which will be formed structurally discrete from the main development and in which a greater degree of settlement can be tolerated.

The data derived from this investigation indicates that a limited thickness of made ground extends to 0.6m depth and overlies silty sand with sandy gravel and lenses of sandy clay, which is considered to be associated with both the Head Deposits and Folkestone Formation. Clay was noted below 1.6m in the location of trial pit SA3.

Interpretation of the data derived from this investigation indicates that strip or spread foundations, constructed within the granular soils, can be designed to accept a maximum increase in load of 125kPa. At this loading intensity, a factor of safety of 3 against general

shear failure will be operative. Moreover, settlement should remain within tolerable limits for the type of structure under consideration, these movements occurring within a normal construction period due to the free-draining nature of the granular soils encountered at this site.

5.2 Stability of Excavations

Excavations of less than 1m depth should not require temporary support to their sides. However, if foundation excavations are to be extended below this level, then adequate temporary support or shoring should be provided in order to comply with current statutory safety regulations and to maintain the stability of the excavation sides.

5.3 Groundwater

No groundwater was encountered during the course of this investigation. Hence, groundwater is unlikely to represent an engineering problem for shallow depth foundation excavations. It is considered that any minor seepages encountered will dissipate through the base of the excavations in the granular soils.

5.4 Drainage

It is understood that consideration is being given to the use of traditional soakaways for the disposal of surface water. Therefore, large scale soakaway testing was carried out and the soil infiltration rates calculated, suggesting average drainage characteristics.

In conclusion, it is likely that the use of soakaways to dispose of surface water run-off at this site may be possible with the exception of the area of trial pit SA3, where clay of low permeability was revealed.

5.5 Pavement Design

CBR values of between 0.6% and 37% were obtained from the laboratory testing. Should pockets or zones of weak or soft materials be exposed at formation level, these should be removed and replaced by adequately compacted approved granular fill materials. It would also be prudent to undertake in situ CBRs to confirm the design value.

The results of the Particle Size Distribution analysis infer that the granular soils encountered at this site are frost susceptible. Hence, a minimum thickness of 450mm cover of non-frost susceptible material should be incorporated in paved areas where it is revealed near surface.

5.6 Ground Floor Slabs

The thickness of made ground revealed by this investigation infers that a system of non-suspended or ground bearing floor slabs can be incorporated within the proposed structures providing the superficial materials are removed and replaced by not more than 0.6m thickness of adequately compacted approved granular fill material. Alternatively, consideration can be given to the use of fully-suspended ground floor slabs.

5.7 Buried Concrete

The information obtained from this investigation has been compared with the criteria proposed in BRE Special Digest 1, 2005 Edition, Concrete in Aggressive Ground. Using the information in Table C1 (natural ground) of this publication the Aggressive Chemical Environment for Concrete Classification is AC-1s, which coincides with a Design Sulphate Class DS-1. This Design Sulphate Class can be used to establish the design mix for buried concrete in accordance with Part D of the Digest.

6 GROUND CONTAMINATION

A Conceptual Site Model (CSM) was formulated for this site as part of the earlier Phase 1 Desk Study, which informed the current intrusive investigation. The CSM produced as part of the Phase 1 has been reviewed and updated and is presented in tabular form below.

Table 1 - Conceptual Site Model			
Source(s)	Potential Pathway(s)	Receptor(s)	Risk Level
Heavy metal based pesticides, organic compounds & asbestos containing materials - Allotments (on site)	Migration, digestion, dermal contact and inhalation	Site workers and end users	Low
Metals & metallic compounds, acids/alkalis & asbestos containing materials - Fly-tipping waste (on site)	Migration, digestion, dermal contact and inhalation	Site workers and end users	Low-moderate

The site formed part of fields which were later used as allotment gardens, which may have resulted in worked or made ground beneath the site. Fly-tipping waste is present on the ground surface in areas of the site.

6.1 Human Health

A generic assessment of the chronic or long-term risk to human health from soil contamination has been made using the available generic screening criteria. The screening values include the Category 4 Screening Levels [C4SLs] (DEFRA, 2014) and Suitable for Use Levels [S4ULs] (LQM/CIEH, 2014) derived using the CLEA software. It should be appreciated that these do not consider the short-term or acute risks, such as to construction workers or SI personnel.

The soil results obtained have been compared with guidelines for the proposed land use category Residential (with home-grown produce) and the appropriate SOM %. The soil results indicate that there is an isolated elevated level of the PAH Benzo(a)pyrene - B(a)P, at a depth of 0.2m in trial pit 5, with a result of 3.5mg/kg. However, following a statistical appraisal of the data, the B(a)P average and calculated 95th percentile (US⁹⁵) are lower than the LQM/CIEH S4ULs of 2.7mg/kg for B(a)P. Asbestos was not detected at any location. Hence, remedial measures will not be required as part of the proposed development.

It would be prudent to incorporate a watching brief/discovery strategy as part of the proposed development, whereby if suspect materials are encountered during any groundworks they be inspected by a suitably qualified professional and analysed, if appropriate. Any action would be dependent upon the type of contaminant identified and should be agreed with the regulatory bodies at that time.

6.2 Groundwater

The site is partly underlain by a superficial Secondary aquifer of high leaching potential associated with the Head Deposits, whilst the underlying Folkestone Formation is classed as a Principal aquifer. The majority of the site is underlain by a drinking water source protection [SPZ] zone 3 total catchment. However, on the basis of the results obtained, it is suggested that the site does not pose a significant risk to groundwater.

6.3 Vegetation

The metals boron, copper, nickel and zinc are phytotoxic at certain levels, with their availability being dependent upon soil pH. These levels may not pose a significant long-term health risk to humans, but could be detrimental to plant growth or function. The results obtained suggest that there are no elevated levels identified at the tested locations.

6.4 Preliminary Waste Assessment

It is likely that, if excavated soils cannot be re-used or retained on site, these surplus materials will require off site disposal. It may be possible to divert the unwanted material to a soil treatment hub where it can be recycled. Where material cannot be re-used or recycled then disposal at a licensed landfill site can be considered. It will then be necessary to classify the spoil as inert, non-hazardous or hazardous. A discussion of the current regime for the classification and treatment of waste soils is included in Appendix 3.

An initial assessment of the geochemical results obtained from this investigation has been carried out to provide a preliminary classification of the surplus materials. The Atkins CAT-WASTE tool determines whether waste soil should be classified as being non-hazardous or hazardous. The output from the CAT-WASTE assessment is located in Appendix 3. Asbestos was not detected in any of the samples screened. Based on the output waste soil arisings from this site have been tentatively identified as being non-hazardous waste. The underlying Head Deposits and Folkestone Formation are considered inert for disposal purposes.

This assessment is preliminary and based upon the information obtained from the investigation. Where made ground is excavated then these materials should be stockpiled and segregated. Further sampling, testing and characterisation to accurately classify waste soil arisings may be required. Given that no exceedances of human health soil guidance values were recorded, it is likely that material can be retained and re-used on site.

It should be appreciated that it is the responsibility of the waste producer to sufficiently characterise their waste. Moreover, the agreement of the waste acceptor should be sought.

6.5 Potable Water Supply Pipes

If any new potable water supply is to be installed, it may be prudent to ascertain whether the water supply company has any specific requirements with regard to any buried water supply pipes. The geo-environmental analysis completed as part of this report may be of assistance in this regard.

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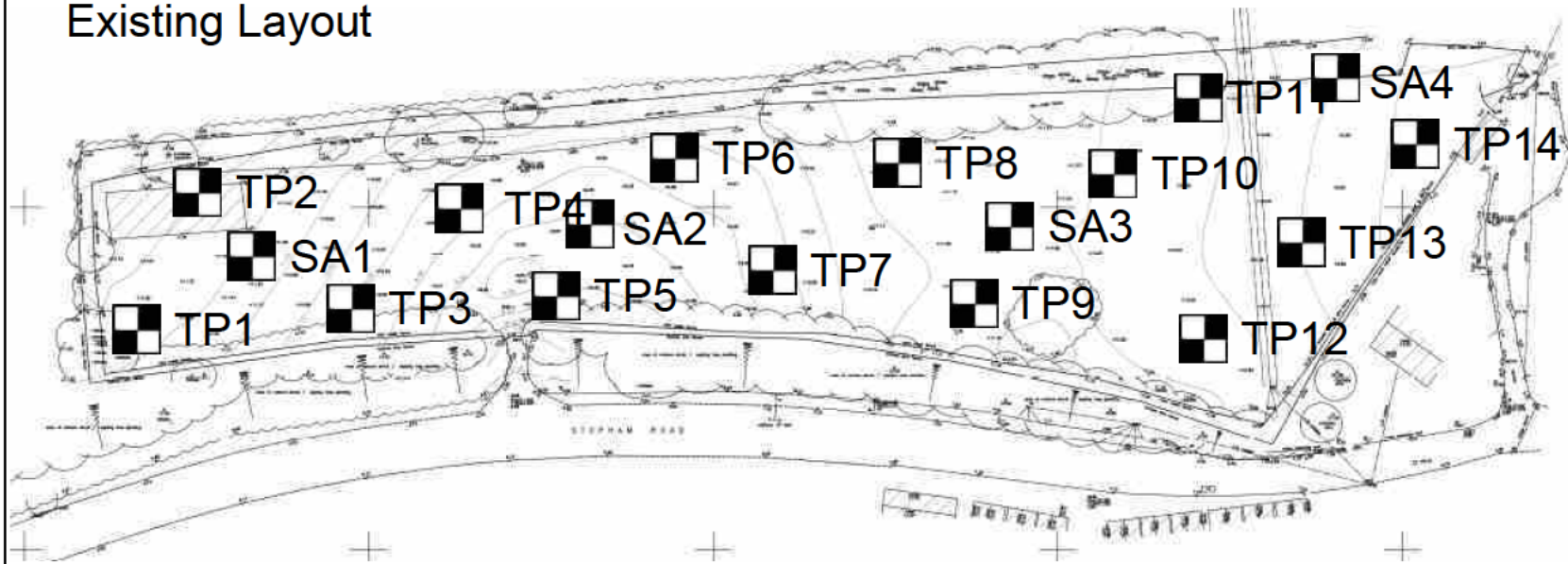
LIST OF ABBREVIATIONS

AOD	-	Above Ordnance Datum
ACM	-	Asbestos-containing Material
BGS	-	British Geological Survey
BH	-	Borehole
BRE	-	Building Research Establishment
BSI	-	British Standards Institution
BS	-	British Standard
C4SL	-	Category Four Screening Level
CIRIA	-	Construction Industry Research and Information Association
CP	-	Cable Percussive
DPH	-	Dynamic Probing Heavy
DPSH	-	Dynamic Probing Super Heavy
EA	-	Environment Agency
GAC	-	Generic Assessment Criteria
LL	-	Liquid Limit
mAOD	-	Metres above ordnance datum
mBGL	-	Metres below ground level
mOD	-	Metres Ordnance Datum
OS	-	Ordnance Survey
PAH	-	Polycyclic aromatic hydrocarbons
PCB	-	Polychlorinated biphenyl
PID	-	Photo Ionisation Detector
PL	-	Plastic Limit
PSD	-	Particle Size Distribution
SGV	-	Soil Guideline Value
SOM	-	Soil Organic Matter
SPT	-	Standard Penetration Test
SVOC	-	Semi-volatile Organic Compounds
TPH	-	Total Petroleum Hydrocarbon
UXB	-	Unexploded Bombs
UXO	-	Unexploded Ordnance
VOC	-	Volatile Organic Compound

FIGURE 1

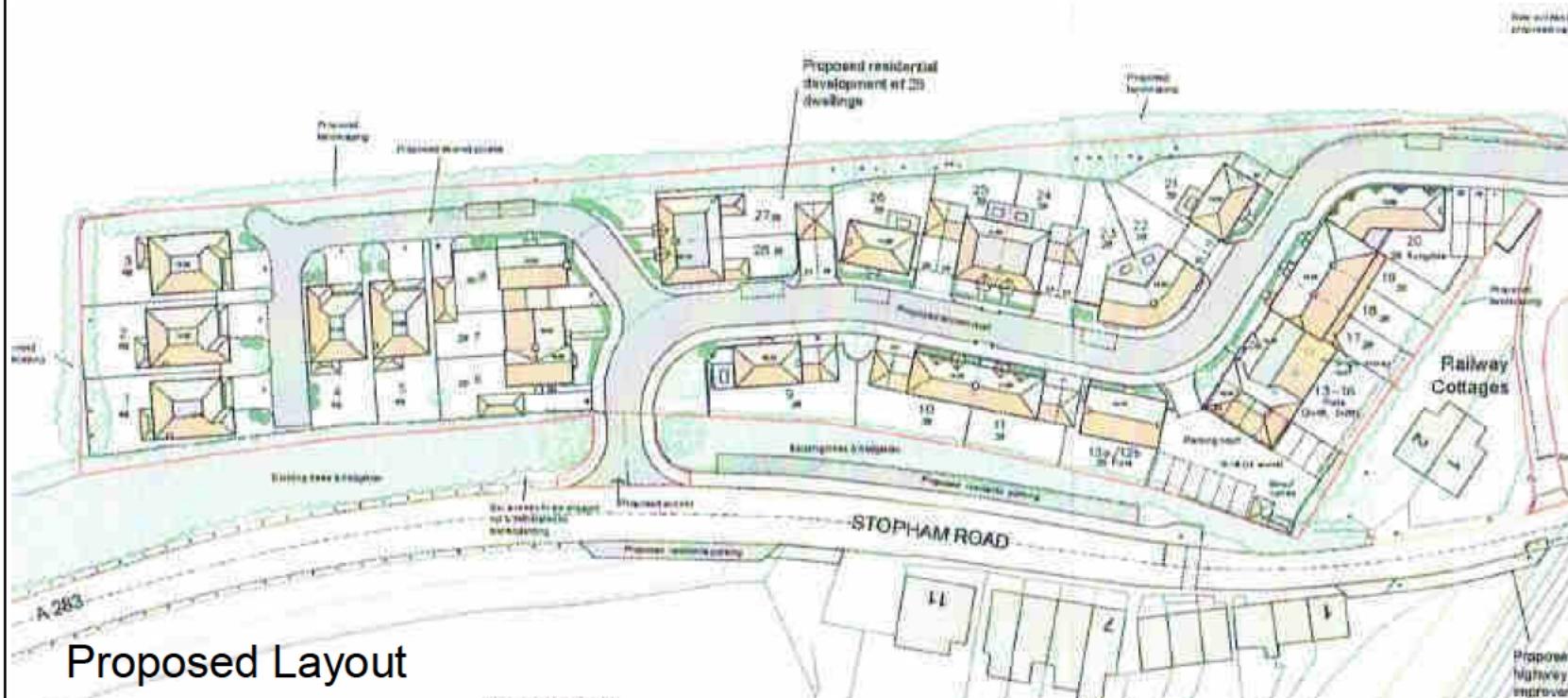
SITE LAYOUT PLAN

Existing Layout



Legend:

-  Borehole Location
-  Trial Pit Location



Proposed Layout

Title: Site Layout Plan

Dwg No: 17/11139/1

Drawn by: JM

Client: Sigma Homes Ltd

Contract: Stopham Road,
Pulborough

Job Ref: 17/11139/JM

Scale: NTS

Revision: 0

Issue Date: 24/10/2017



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APPENDIX 1

EXPLORATORY RECORDS

**ALBURY S.I. LTD**

Miltons Yard, Petworth Road, Witley, Surrey GU8 5LH

TRIAL PIT**1****Contract**

Stopham Road, Pulborough

Report Ref

17/11139/JM

Client

Sigma Homes Ltd

Date

16/10/2017

Site AddressLand adjacent to 1 & 2 Railway Cottages, Stopham Road,
Pulborough, West Sussex RH20 1DP**Ground Level****Type of excavator:**

Mechanical

Water level after completion, m

dry

Water strikes, m

Pit Dimensions, m

Ease of excavation, m

1

none

Length

2.00

Very easy

Difficult

2

Breadth

0.60

Moderate

GL-1.10

Very hard

Remarks**Samples or tests****Shear
Strength
kPa****Depth****Legend****Strata Description****Type****Depth, m**

D

0.10

D

0.20

0.30

D

0.50

D

1.00

1.00

1.10

MADE GROUND (brambles over brown silty sandy loam with
roots/rootlets)

Pale orange-brown silty SAND with occasional roots/rootlets

0.50m: with very occasional weak sandstone gravel

Yellow-orange slightly silty SAND

END OF TRIAL PIT



2

17/11139/JM

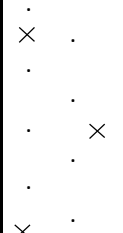
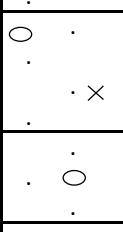
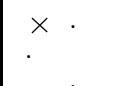
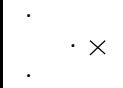
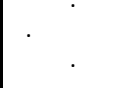
16/10/2017

dry

Ease of excavation, m

Moderate GL-1.60 & 1.90-3.20 Very hard

Remarks

Samples or tests		Shear Strength kPa	Depth		Legend	Strata Description
Type	Depth, m					
D	0.10		0.30			MADE GROUND (grass over brown silty sandy loam with roots/rootlets)
D	0.20					
D	0.50					Pale orange-brown silty SAND
D	1.00					Yellow/orange-brown slightly silty SAND with occasional fine to medium gravel
D	1.50		1.20			
D	1.60					
			1.60			
						Dark grey SAND with occasional subangular gravel and pockets of red sand and orange/red/purple staining
			1.90			
D	2.00					Yellow-orange slightly silty SAND with pockets of off-white to orange sand
D	2.50					
D	3.00					END OF TRIAL PIT
			3.20			

Sample Code: **U** - 100mm diameter **B** - Large Disturbed **D** - Small Disturbed **W** - Water Sample

**ALBURY S.I. LTD**

Miltons Yard, Petworth Road, Witley, Surrey GU8 5LH

TRIAL PIT**3****Contract**

Stopham Road, Pulborough

Report Ref

17/11139/JM

Client

Sigma Homes Ltd

Date

16/10/2017

Site AddressLand adjacent to 1 & 2 Railway Cottages, Stopham Road,
Pulborough, West Sussex RH20 1DP**Ground Level****Type of excavator:**

Mechanical

Water level after completion, m

dry

Water strikes, m

Pit Dimensions, m

Ease of excavation, m

1

none

Length

2.00

Very easy

Difficult

2

Breadth

0.60

Moderate

GL-2.80

Very hard

Remarks

Long sides of trial pit collapsing below 0.8m depth, before complete collapse at 2.80m.

Samples or tests**Shear
Strength
kPa****Depth****Legend****Strata Description****Type****Depth, m**

D

0.10

D

0.20

0.30

D

0.50

D

1.00

D

1.50

1.70

D

2.00

D

2.50

D

2.80

2.80

MADE GROUND (brown silty sandy loam with roots/rootlets)

Pale orange-brown silty SAND with very occasional subangular
gravel and roots (20mm dia)

Pale yellow-orange SAND

2.50m: locally with pockets of red sand

END OF TRIAL PIT



4

17/11139/JM

16/10/2017

Ground Level

dry

Ease of excavation, m

Difficult GL-0.30

Very hard

Remarks

Sample Code: **U** - 100mm diameter **B** - Large Disturbed **D** - Small Disturbed **W** - Water Sample

**ALBURY S.I. LTD**

Miltens Yard, Petworth Road, Witley, Surrey GU8 5LH

TRIAL PIT**5****Contract**

Stopham Road, Pulborough

Report Ref

17/11139/JM

Client

Sigma Homes Ltd

Date

18/10/2017

Site AddressLand adjacent to 1 & 2 Railway Cottages, Stopham Road,
Pulborough, West Sussex RH20 1DP**Ground Level****Type of excavator:**

Mechanical

Water level after completion, m

dry

Water strikes, m

Pit Dimensions, m

Ease of excavation, m

1

none

Length

1.50

Very easy

Difficult

2

Breadth

0.60

Moderate

GL-3.10

Very hard

Remarks**Samples or tests****Shear
Strength
kPa****Depth****Legend****Strata Description****Type****Depth, m**

D

0.10

D

0.20

0.35

D

0.50

D

1.00

D

1.50

D

2.00

D

2.50

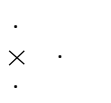
D

3.00

3.10



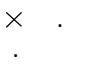
MADE GROUND (brambles over brown silty sand with very occasional ceramic tile fragments and gravel and roots/rootlets)



Pale orange-brown silty SAND



1.00m: very occasional subangular sandstone gravel



3.00m: with 3 no. gravel fragments

END OF TRIAL PIT

**ALBURY S.I. LTD**

Miltens Yard, Petworth Road, Witley, Surrey GU8 5LH

TRIAL PIT**6****Contract**

Stopham Road, Pulborough

Report Ref

17/11139/JM

Client

Sigma Homes Ltd

Date

18/10/2017

Site AddressLand adjacent to 1 & 2 Railway Cottages, Stopham Road,
Pulborough, West Sussex RH20 1DP**Ground Level****Type of excavator:**

Mechanical

Water level after completion, m

dry

Water strikes, m

Pit Dimensions, m

Ease of excavation, m

1

none

Length

1.50

Very easy

Difficult

2

Breadth

0.60

Moderate

GL-3.10

Very hard

Remarks**Samples or tests****Shear
Strength
kPa****Depth****Legend****Strata Description****Type****Depth, m**

D

0.10

D

0.20

D

0.50

0.70

D

1.00

D

1.50

D

2.00

D

2.50

D

3.00

3.10

MADE GROUND (grass over brown silty sand with very occasional
glass, brick and chalk fragments with roots/rootlets)

Pale brown silty SAND

1.50m: with very occasional fine to medium sandstone gravel

END OF TRIAL PIT



7

17/11139/JM

18/10/2017

Ground Level

dry

Ease of excavation, m

Very easy Difficult 0.90-1.40

Moderate GL-0.90 & 1.40-2.10 Very hard

Remarks

Sample Code: **U** - 100mm diameter **B** - Large Disturbed **D** - Small Disturbed **W** - Water Sample

**ALBURY S.I. LTD**

Miltons Yard, Petworth Road, Witley, Surrey GU8 5LH

TRIAL PIT**8****Contract**

Stopham Road, Pulborough

Report Ref

17/11139/JM

Client

Sigma Homes Ltd

Date

18/10/2017

Site AddressLand adjacent to 1 & 2 Railway Cottages, Stopham Road,
Pulborough, West Sussex RH20 1DP**Ground Level****Type of excavator:**

Mechanical

Water level after completion, m

dry

Water strikes, m

Pit Dimensions, m

Ease of excavation, m

1

none

Length

1.20

Very easy

Difficult

0.50-2.10

2

Breadth

0.60

Moderate

GL-0.50

Very hard

Remarks**Samples or tests****Shear
Strength
kPa****Depth****Legend****Strata Description****Type****Depth, m**

D

0.10

D

0.20

D

0.50

0.50

D

1.00

D

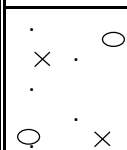
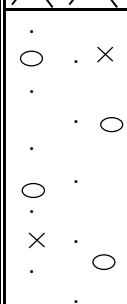
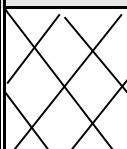
1.50

1.50

D

2.00

2.10



MADE GROUND (grass over brown silty sand with very occasional ceramic tile fragments and roots/rootlets)

Pale orange-brown silty sandy GRAVEL. Gravel is subangular to rounded fine to medium occasionally coarse sandstone

Pale orange-brown silty SAND with occasional yellow-red and black sandstone gravel and cobbles

END OF TRIAL PIT

**ALBURY S.I. LTD**

Miltons Yard, Petworth Road, Witley, Surrey GU8 5LH

TRIAL PIT**9****Contract**

Stopham Road, Pulborough

Report Ref

17/11139/JM

Client

Sigma Homes Ltd

Date

18/10/2017

Site AddressLand adjacent to 1 & 2 Railway Cottages, Stopham Road,
Pulborough, West Sussex RH20 1DP**Ground Level****Type of excavator:**

Mechanical

Water level after completion, m

dry

Water strikes, m

Pit Dimensions, m

Ease of excavation, m

1

none

Length

1.50

Very easy

Difficult

1.00-1.90

2

Breadth

0.60

Moderate

GL-1.00

Very hard

1.90-2.20

Remarks**Samples or tests****Shear
Strength
kPa****Depth****Legend****Strata Description****Type****Depth, m**

D

0.10

D

0.20

D

0.50

0.60

D

1.00

1.00

D

1.50

1.70

D

1.80

1.90

D

2.00

2.20

MADE GROUND (grass over brown silty sand with very occasional gravel including chalk fragments and roots/rootlets)

Pale brown silty SAND

Orange-brown silty sandy fine and medium sandstone GRAVEL

Brown silty SAND with sandstone gravel and cobbles

Yellow-orange SAND with occasional lenses of pale grey sandy clay

END OF TRIAL PIT

**ALBURY S.I. LTD**

Miltons Yard, Petworth Road, Witley, Surrey GU8 5LH

TRIAL PIT**10****Contract**

Stopham Road, Pulborough

Report Ref

17/11139/JM

Client

Sigma Homes Ltd

Date

18/10/2017

Site AddressLand adjacent to 1 & 2 Railway Cottages, Stopham Road,
Pulborough, West Sussex RH20 1DP**Ground Level****Type of excavator:**

Mechanical

Water level after completion, m

dry

Water strikes, m

Pit Dimensions, m

Ease of excavation, m

1

none

Length

1.50

Very easy

Difficult

1.50-3.10

2

Breadth

0.60

Moderate

GL-1.50

Very hard

Remarks**Samples or tests****Shear
Strength
kPa****Depth****Legend****Strata Description****Type****Depth, m**

D

0.10

D

0.20

0.35

D

0.50

D

1.00

D

1.50

1.50

D

2.00

1.90

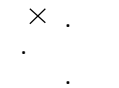
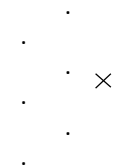
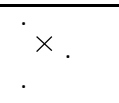
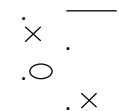
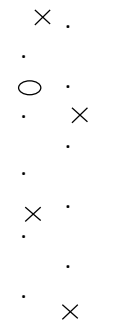
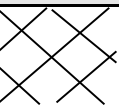
D

2.50

D

3.00

3.10

MADE GROUND (brambles and grass over brown silty sandy loam
with infilled worm burrows, roots/rootlets)

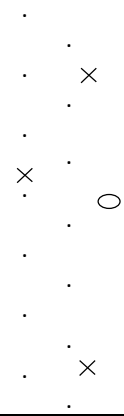
Orange-brown silty SAND with very occasional gravel

Orange-brown silty SAND with occasional lenses of grey sandy
clay and very occasional gravel

Yellow-orange silty SAND

2.30m-2.80m: with yellow and orange seams/laminations

END OF TRIAL PIT

 ALBURY S.I. LTD Miltons Yard, Petworth Road, Witley, Surrey GU8 5LH		TRIAL PIT	11		
Contract	Stopham Road, Pulborough		Report Ref	17/11139/JM	
Client	Sigma Homes Ltd		Date	18/10/2017	
Site Address	Land adjacent to 1 & 2 Railway Cottages, Stopham Road, Pulborough, West Sussex RH20 1DP		Ground Level		
Type of excavator:	Mechanical	Water level after completion, m dry			
Water strikes, m	Pit Dimensions, m		Ease of excavation, m		
1 none	Length 1.20	Very easy Difficult 1.80-2.10			
2	Breadth 0.60	Moderate GL-1.80 Very hard			
Remarks					
Samples or tests		Shear Strength kPa	Depth	Legend	Strata Description
Type	Depth, m				
D	0.10				MADE GROUND (brambles over brown silty sandy loam with roots/rootlets)
D	0.20				
D	0.50		0.40		Orange-brown slightly silty coarse SAND with very occasional sandstone gravel
D	1.00				
D	1.50				
D	2.00		1.80		
D	2.10		2.10		Orange-brown SAND with very occasional fine and medium gravel
					END OF TRIAL PIT



12

17/11139/JM

18/10/2017

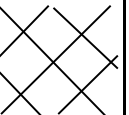
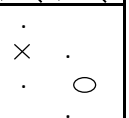
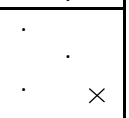
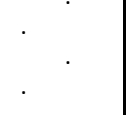
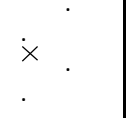
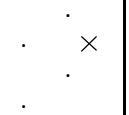
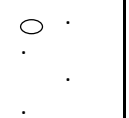
dry

Ease of excavation, m

Difficult

Very hard

Remarks

Samples or tests		Shear Strength kPa	Depth		Legend	Strata Description
Type	Depth, m					
D	0.10					MADE GROUND (grass over brown silty sandy loam with occasional chalk fragments and roots/rootlets)
D	0.20					
D	0.50		0.40			Pale brown silty SAND with very occasional sandstone cobble (200mm dia) and roots
D	1.00		0.80			Orange-brown slightly silty SAND, locally yellow-orange with roots to 1.80m depth
D	1.50					
D	2.00					
D	2.50					2.50m-3.30m: locally with pockets of yellow and red sand and very occasional fine and medium sandstone gravel
D	3.00					
			3.30			END OF TRIAL PIT

Sample Code: **U** - 100mm diameter **B** - Large Disturbed **D** - Small Disturbed **W** - Water Sample



13

17/11139/JM

18/10/2017

dry

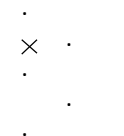
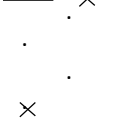
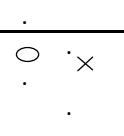
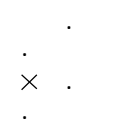
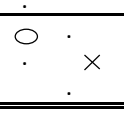
Ease of excavation, m

Difficult

Very hard

Trial pit sides collapsing below 1m depth.

Sample Code: **U** - 100mm diameter **B** - Large Disturbed **D** - Small Disturbed **W** - Water Sample

 ALBURY S.I. LTD Miltons Yard, Petworth Road, Witley, Surrey GU8 5LH		TRIAL PIT	14		
Contract	Stopham Road, Pulborough		Report Ref	17/11139/JM	
Client	Sigma Homes Ltd		Date	18/10/2017	
Site Address	Land adjacent to 1 & 2 Railway Cottages, Stopham Road, Pulborough, West Sussex RH20 1DP		Ground Level		
Type of excavator:	Mechanical	Water level after completion, m dry			
Water strikes, m	Pit Dimensions, m		Ease of excavation, m		
1 none	Length 2.00	Very easy Difficult 1.40-1.60			
2	Breadth 0.60	Moderate GL-1.40 & 1.60-3.10 Very hard			
Remarks Trial pit location adjacent to stack of tyres.					
Samples or tests		Shear Strength kPa	Depth	Legend	Strata Description
Type	Depth, m				
D	0.10		0.30		MADE GROUND (vegetation including brambles over brown silty sandy loam with very occasional gravel and roots/rootlets)
D	0.20				
D	0.50				Pale brown silty SAND, locally clayey
D	1.00				
D	1.50				
D	2.00				
D	2.50				1.00m: with infilled worm burrows
D	3.00				
D	1.40				Orange-brown slightly silty SAND 1.40m-1.60m: with iron-stained sandstone gravel and cobbles (20mm dia)
D	1.50				
D	2.10				
D	2.50				
D	2.80				2.10m: with occasional lenses of yellow sand
D	3.10				
D	3.10				2.50m: with occasional lenses of pale grey sandy clay
D	3.10				
D	3.10		Dark orange-brown/red slightly silty SAND and occasional gravel		
D	3.10				
END OF TRIAL PIT					

**ALBURY S.I. LTD**

Miltons Yard, Petworth Road, Witley, Surrey GU8 5LH

TRIAL PIT**SA1****Contract**

Stopham Road, Pulborough

Report Ref

17/11139/JM

Client

Sigma Homes Ltd

Date

16/10/2017

Site AddressLand adjacent to 1 & 2 Railway Cottages, Stopham Road,
Pulborough, West Sussex RH20 1DP**Ground Level****Type of excavator:**

Mechanical

Water level after completion, m

dry

Water strikes, m

Pit Dimensions, m

Ease of excavation, m

1

none

Length

1.90

Very easy

Difficult

2

Breadth

0.30

Moderate

GL-2.10

Very hard

RemarksBRE 365 soakaway tests carried out within SA1. Cycle 1: 1.10m depth, soil infiltration rate 1.01E-05.
Cycle 2: 0.78m depth, extrapolated soil infiltration rate 1.09E-05.

Samples or tests		Shear Strength kPa	Depth		Legend	Strata Description
Type	Depth, m					
D	0.10					MADE GROUND (grass and brambles over brown silty sandy loam with rootlets)
			0.30			
B	0.50					Orange-brown silty SAND with very occasional iron-stained sandstone gravel and roots
						0.70m: locally yellow-orange
D	1.00		0.90			Grey locally orange very silty SAND
			1.40			Dark grey slightly silty very sandy subrounded GRAVEL
D	1.50					
D	1.60					Yellow/orange-brown slightly silty SAND
			1.80			
D	2.00					END OF TRIAL PIT
			2.10			

**ALBURY S.I. LTD**

Miltons Yard, Petworth Road, Witley, Surrey GU8 5LH

TRIAL PIT**SA2****Contract**

Stopham Road, Pulborough

Report Ref

17/11139/JM

Client

Sigma Homes Ltd

Date

16/10/2017

Site AddressLand adjacent to 1 & 2 Railway Cottages, Stopham Road,
Pulborough, West Sussex RH20 1DP**Ground Level****Type of excavator:**

Mechanical

Water level after completion, m

dry

Water strikes, m

Pit Dimensions, m

Ease of excavation, m

1

none

Length

2.10

Very easy

Difficult

2

Breadth

0.30

Moderate

GL-2.00

Very hard

Remarks

BRE 365 soakaway test carried out within SA2. Cycle 1: 0.98m depth, extrapolated soil infiltration rate 3.87E-07.

Samples or tests**Shear
Strength
kPa****Depth****Legend****Strata Description****Type****Depth, m**

D

0.10

0.30

B

0.50

D

1.00

D

1.50

D

2.00

2.00

MADE GROUND (grass and brambles over brown silty sand with
very occasional chalk and metal fragments and roots/rootlets)

Pale orange-brown silty SAND

1.00m: slightly damp

2.00m: with very occasional gravel

END OF TRIAL PIT



SA3

17/11139/JM

16/10/2017

dry

Ease of excavation, m

Difficult

Very hard

BRE 365 soakaway tests carried out within SA3. Sides of trial pit spoiling during test. Extrapolated soil infiltration rate 6.16E-06. Cycle 2: 0.68m depth, soil infiltration rate 1.45E-05.

Sample Code: **U** - 100mm diameter **B** - Large Disturbed **D** - Small Disturbed **W** - Water Sample



SA4

17/11139/JM

16/10/2017

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dry

Ease of excavation, m

Difficult

Very hard

BRE 365 soakaway tests carried out within SA4. Sides of trial pit spoiling during test.

Cycle 1: 0.82m depth, extrapolated soil infiltration rate 5.53E-06.

Cycle 2: 0.44m depth, extrapolated soil infiltration rate 6.82E-06.

Strata Description

umbles over brown silty sand with very
umber and glass fragments and roots/rootlets)

MADE GROUND (brambles over brown silty sand with very occasional plastic, timber and glass fragments and roots/rootlets)

Pale brown very silty SAND

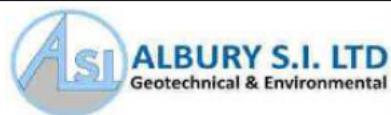
1.00m: with very occasional fine gravel
Pale orange-brown slightly silty SAND with occasional pockets of yellow-orange sand

Pale orange-brown slightly silty SAND with occasional pockets of yellow-orange sand

END OF TRIAL PIT

Sample Code: **U** - 100mm diameter **B** - Large Disturbed **D** - Small Disturbed **W** - Water Sample

SOAKAWAY INFILTRATION TEST RESULTS



Contract	Stopham Road, Pulborough
Report Ref	17/11139/JM
Test Location	SA1 - Cycle 1

Time (mins)	Depth of Water (m)
0	1.00
2	0.93
7	0.81
11	0.77
16	0.72
52	0.54
90	0.43
128	0.34
188	0.24

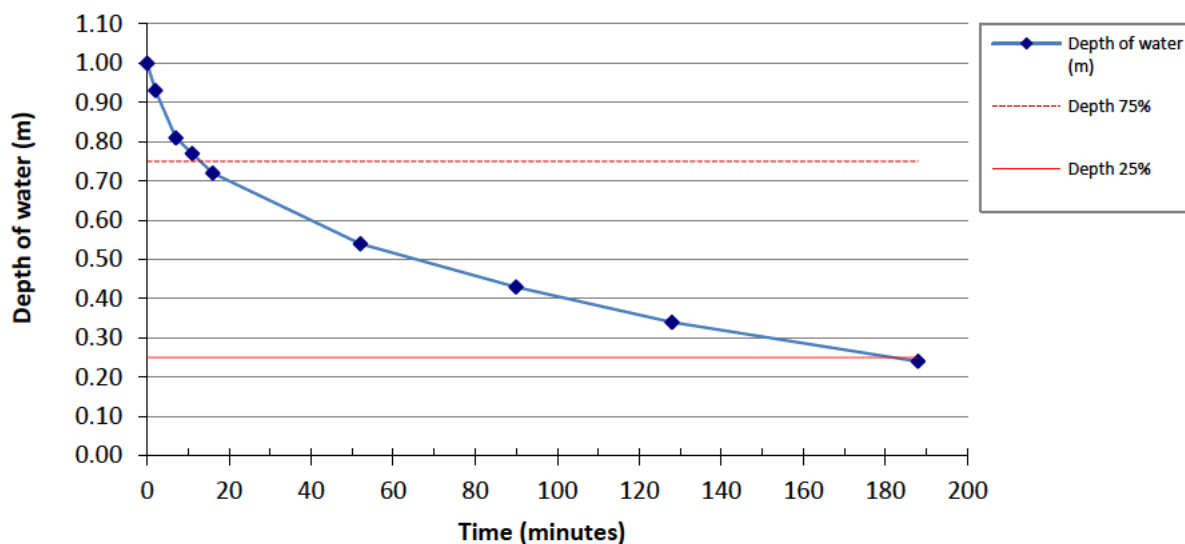
Pit Dimensions (m)

Length	1.90
Width	0.30
Depth	2.10

Remarks:

1. Test undertaken in general accordance with BRE Digest 365
2. Trial pit was not filled with aggregate for test

Fall of water over time



V_{p75-25}	Effective depth storage volume of water in trial pit between 75% and 25% effective depth	0.285
α_{p50}	Internal surface area of trial pit up to 50% effective depth and including base	2.77
t_{p75-25}	Time for water level to fall from 75% to 25% effective depth	169

Soil Infiltration Rate (m/sec) f	1.01E-05
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SOAKAWAY INFILTRATION TEST RESULTS



Contract	Stopham Road, Pulborough
Report Ref	17/11139/JM
Test Location	SA1 - Cycle 2

Time (mins)	Depth of Water (m)
0	1.32
5	1.24
11	1.15
17	1.09
54	0.78
100	0.57
107	0.55

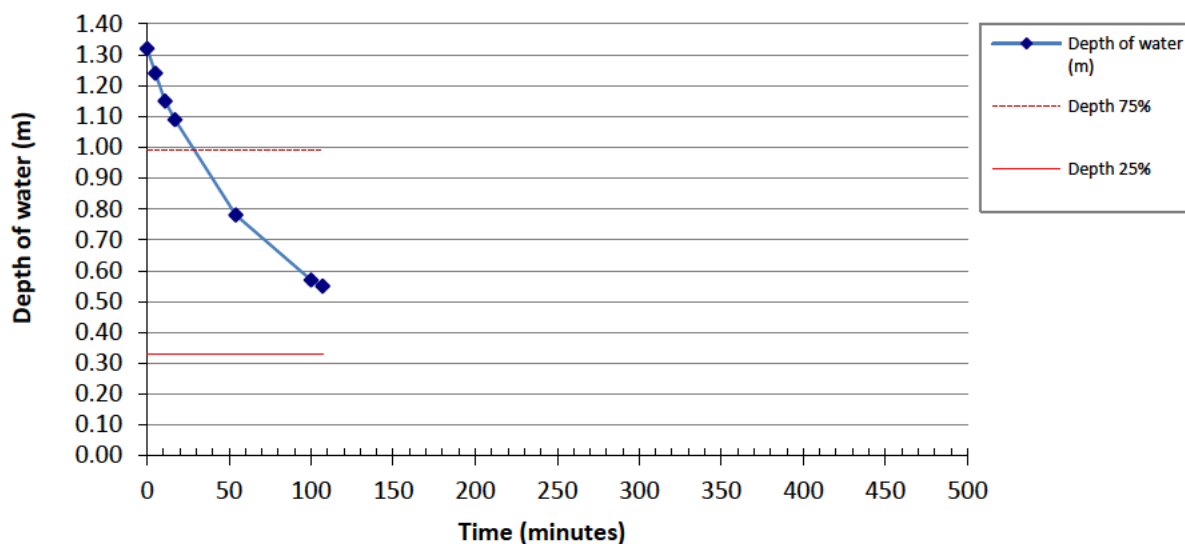
Pit Dimensions (m)

Length	1.90
Width	0.30
Depth	2.10

Remarks:

1. Test undertaken in general accordance with BRE Digest 365
2. Trial pit was not filled with aggregate for test

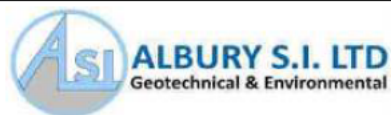
Fall of water over time



V_{p75-25}	Effective depth storage volume of water in trial pit between 75% and 25% effective depth	0.3762
α_{p50}	Internal surface area of trial pit up to 50% effective depth and including base	3.474
t_{p75-25}	Time for water level to fall from 75% to 25% effective depth	165

Soil Infiltration Rate (m/sec) f	1.09E-05
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SOAKAWAY INFILTRATION TEST RESULTS



Contract	Stopham Road, Pulborough
Report Ref	17/11139/JM
Test Location	SA2 - Cycle 1

Time (mins)	Depth of Water (m)
0	1.02
2	1.01
6	1.00
10	0.99
21	0.97
48	0.97
80	0.95
118	1.00
155	0.98
210	0.94
247	0.92
271	0.91
318	0.9
327	0.9
1320	0.71

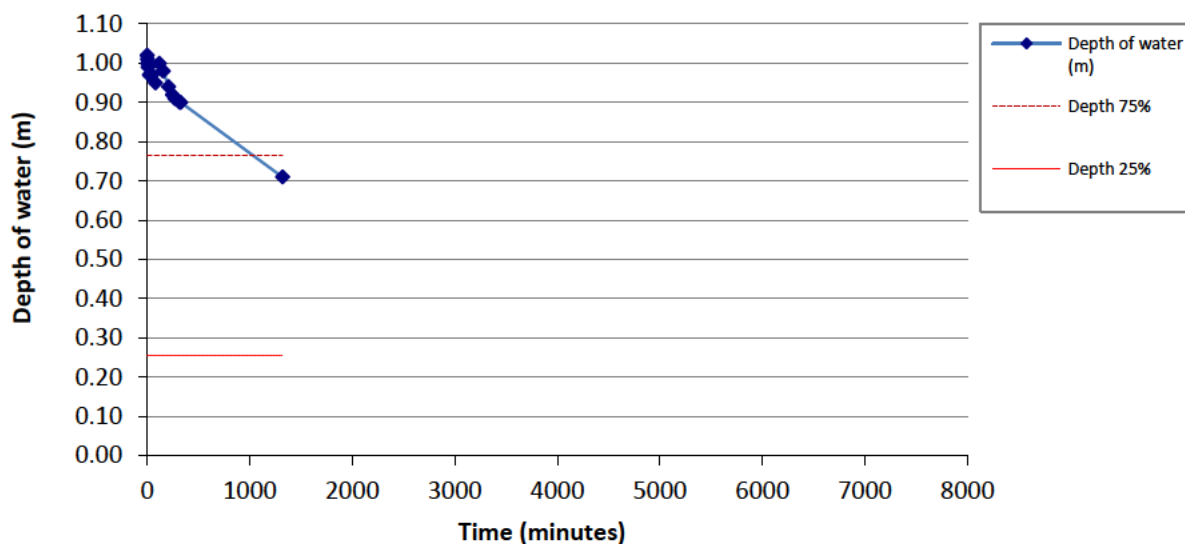
Pit Dimensions (m)

Length	2.10
Width	0.30
Depth	2.00

Remarks:

1. Test undertaken in general accordance with BRE Digest 365
2. Trial pit was not filled with aggregate for test

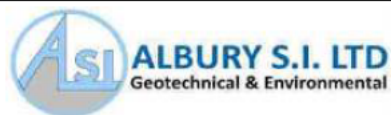
Fall of water over time



V_{p75-25}	Effective depth storage volume of water in trial pit between 75% and 25% effective depth	0.3213
α_{p50}	Internal surface area of trial pit up to 50% effective depth and including base	3.078
t_{p75-25}	Time for water level to fall from 75% to 25% effective depth	4500

Soil Infiltration Rate (m/sec) f	3.87E-07
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SOAKAWAY INFILTRATION TEST RESULTS



Contract	Stopham Road, Pulborough
Report Ref	17/11139/JM
Test Location	SA3 - Cycle 1

Time (mins)	Depth of Water (m)
0	1.07
2	0.99
5	0.93
8	0.88
14	0.82
33	0.66
68	0.54
100	0.47
138	0.40
176	0.35
210	0.34

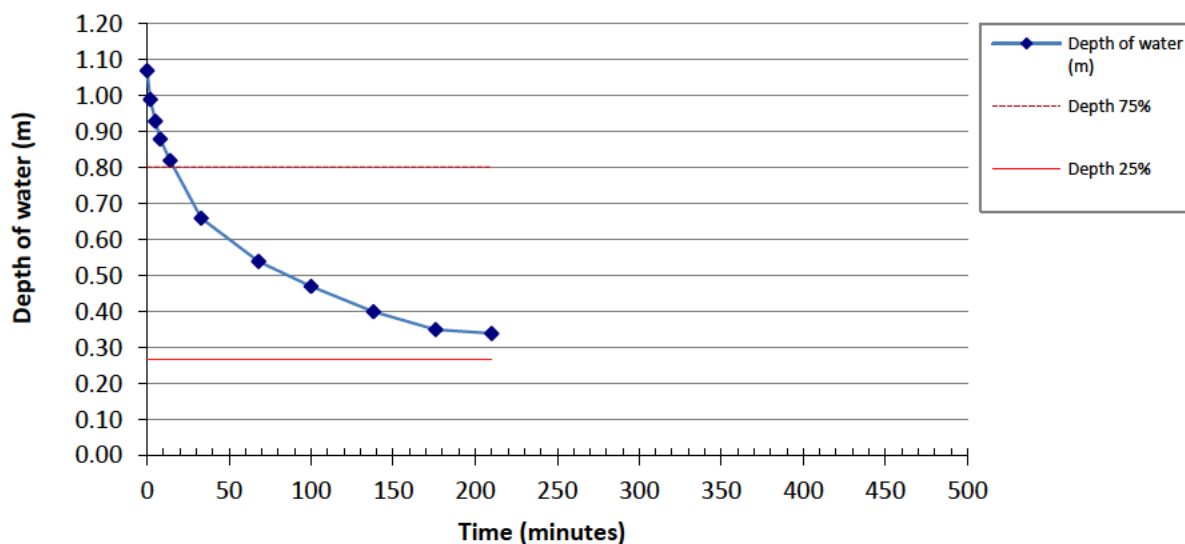
Pit Dimensions (m)

Length	1.90
Width	0.30
Depth	2.00

Remarks:

1. Test undertaken in general accordance with BRE Digest 365
2. Trial pit was not filled with aggregate for test

Fall of water over time



V_{p75-25}	Effective depth storage volume of water in trial pit between 75% and 25% effective depth	0.30495
α_{p50}	Internal surface area of trial pit up to 50% effective depth and including base	2.924
t_{p75-25}	Time for water level to fall from 75% to 25% effective depth	282

Soil Infiltration Rate (m/sec) f	6.16E-06
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SOAKAWAY INFILTRATION TEST RESULTS



Contract	Stopham Road, Pulborough
Report Ref	17/11139/JM
Test Location	SA3 - Cycle 2

Time (mins)	Depth of Water (m)
0	0.98
2	0.89
7	0.81
12	0.74
52	0.49
74	0.41
107	0.31
133	0.25
1140	0.00

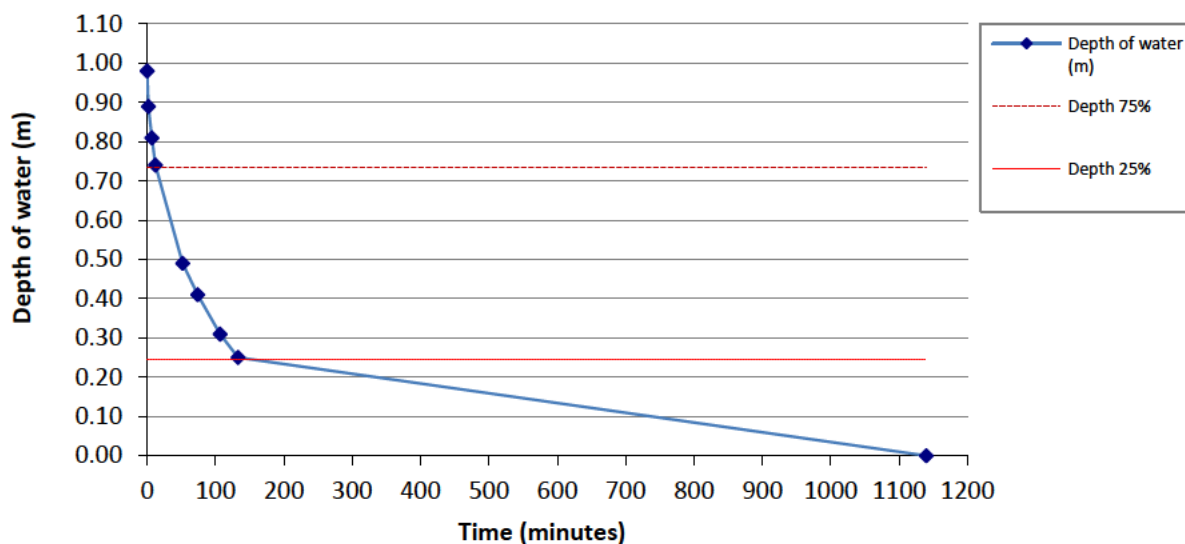
Pit Dimensions (m)

Length	1.90
Width	0.30
Depth	1.66

Remarks:

1. Test undertaken in general accordance with BRE Digest 365
2. Trial pit was not filled with aggregate for test

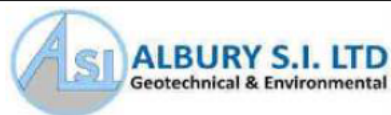
Fall of water over time



V_{p75-25}	Effective depth storage volume of water in trial pit between 75% and 25% effective depth	0.2793
α_{p50}	Internal surface area of trial pit up to 50% effective depth and including base	2.726
t_{p75-25}	Time for water level to fall from 75% to 25% effective depth	118

Soil Infiltration Rate (m/sec) f	1.45E-05
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SOAKAWAY INFILTRATION TEST RESULTS



Contract	Stopham Road, Pulborough
Report Ref	17/11139/JM
Test Location	SA4 - Cycle 1

Time (mins)	Depth of Water (m)
0	1.18
1	1.14
2	1.12
4	1.07
7	1.04
10	0.99
16	0.95
30	0.87
54	0.79
89	0.70
125	0.64
163	0.59
198	0.53

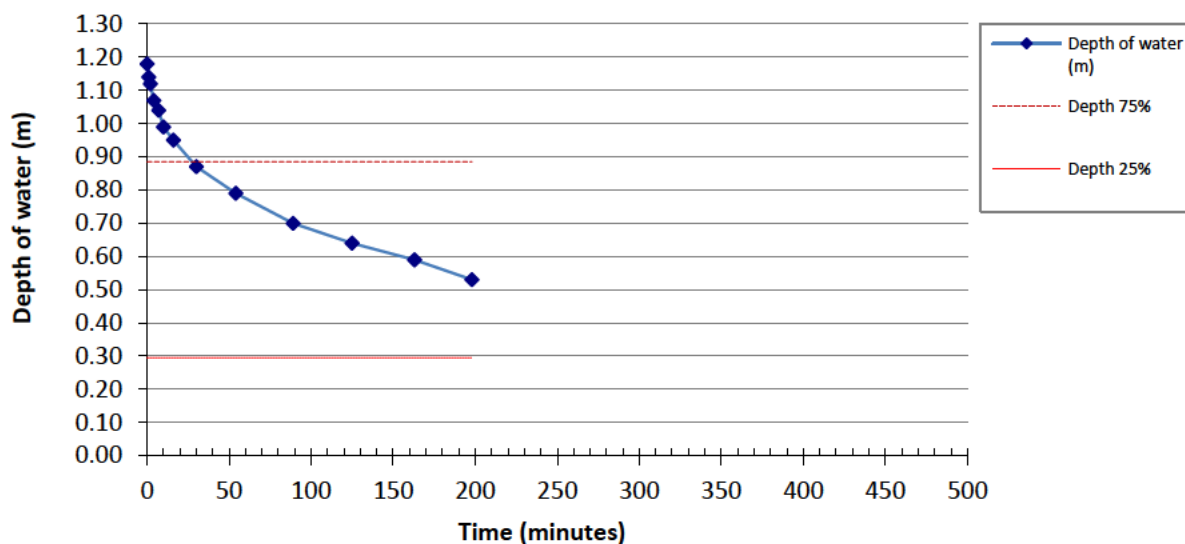
Pit Dimensions (m)

Length	1.90
Width	0.30
Depth	2.00

Remarks:

1. Test undertaken in general accordance with BRE Digest 365
2. Trial pit was not filled with aggregate for test

Fall of water over time



V_{p75-25}	Effective depth storage volume of water in trial pit between 75% and 25% effective depth	0.3363
α_{p50}	Internal surface area of trial pit up to 50% effective depth and including base	3.166
t_{p75-25}	Time for water level to fall from 75% to 25% effective depth	320

Soil Infiltration Rate (m/sec) f	5.53E-06
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SOAKAWAY INFILTRATION TEST RESULTS



Contract	Stopham Road, Pulborough
Report Ref	17/11139/JM
Test Location	SA4 - Cycle 2

Time (mins)	Depth of Water (m)
0	1.03
3	0.95
11	0.80
17	0.73
22	0.72
38	0.66
83	0.53
100	0.50
134	0.43

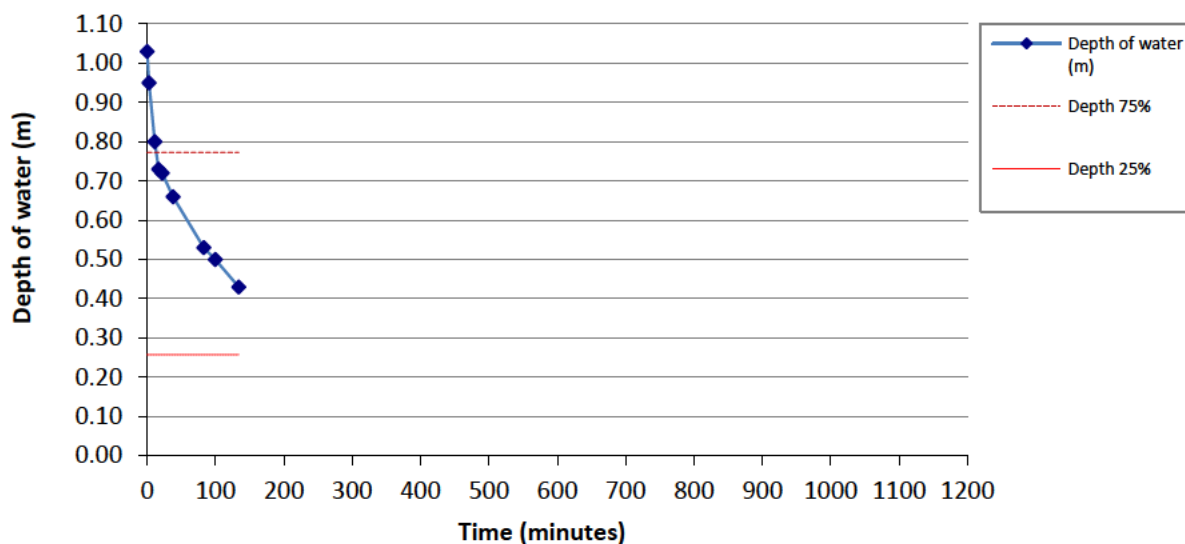
Pit Dimensions (m)

Length	1.90
Width	0.30
Depth	1.47

Remarks:

1. Test undertaken in general accordance with BRE Digest 365
2. Trial pit was not filled with aggregate for test

Fall of water over time



V_{p75-25}	Effective depth storage volume of water in trial pit between 75% and 25% effective depth	0.29355
α_{p50}	Internal surface area of trial pit up to 50% effective depth and including base	2.836
t_{p75-25}	Time for water level to fall from 75% to 25% effective depth	253

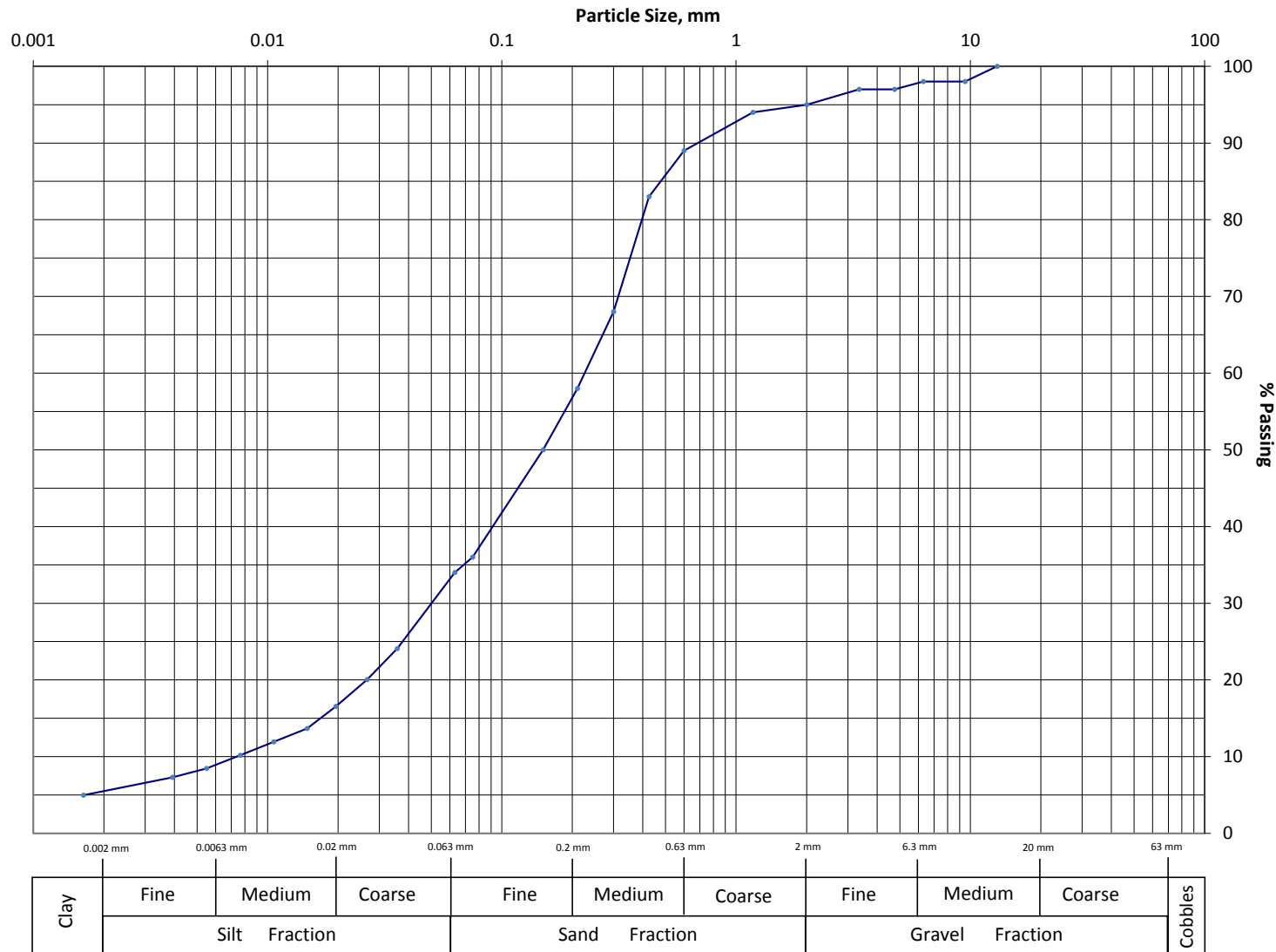
Soil Infiltration Rate (m/sec) f	6.82E-06
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APPENDIX 2

LABORATORY TEST RESULTS

PARTICLE SIZE DISTRIBUTION TEST

BS 1377 : Part 2 : Clauses 9.2 and 9.5 : 1990 Particle Size Distribution by Wet Sieving & Sedimentation by Hydrometer Method



Sieve Aperture/ Particle Size (mm)	Percentage Passing
75	
63	
50	
37.5	
25	
20	
13	100
9.5	98
6.3	98
4.75	97
3.35	97
2	95
1.18	94
0.6	89
0.425	83
0.3	68
0.21	58
0.15	50
0.075	36
0.063	34
0.036	24
0.027	20
0.020	17
0.015	14
0.011	12
0.0076	10
0.0055	8
0.0039	7
0.0016	5

Sample Proportions (%)	
Cobbles	0
Gravel	5
Sand	61
Silt & Clay	34

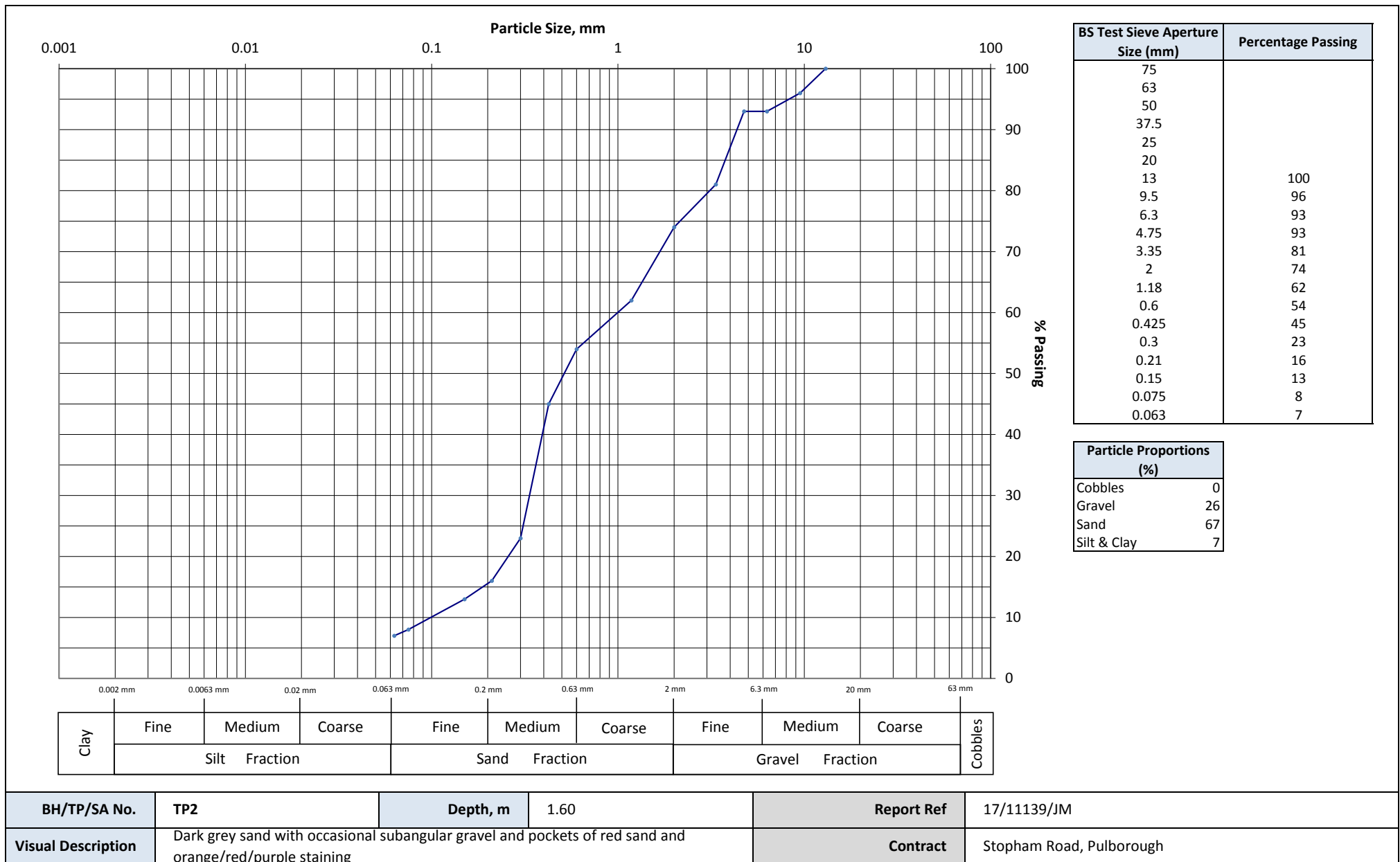
BH/TP/SA No.	TP1	Depth, m	0.50	Report Ref	17/11139/JM
Visual Description	Pale orange-brown silty sand, very occasional weak sandstone gravel and occasional roots/rootlets			Contract	Stopham Road, Pulborough



ALBURY S.I. LTD Miltons Yard, Petworth Road, Witley, Surrey GU8 5LH

PARTICLE SIZE DISTRIBUTION TEST

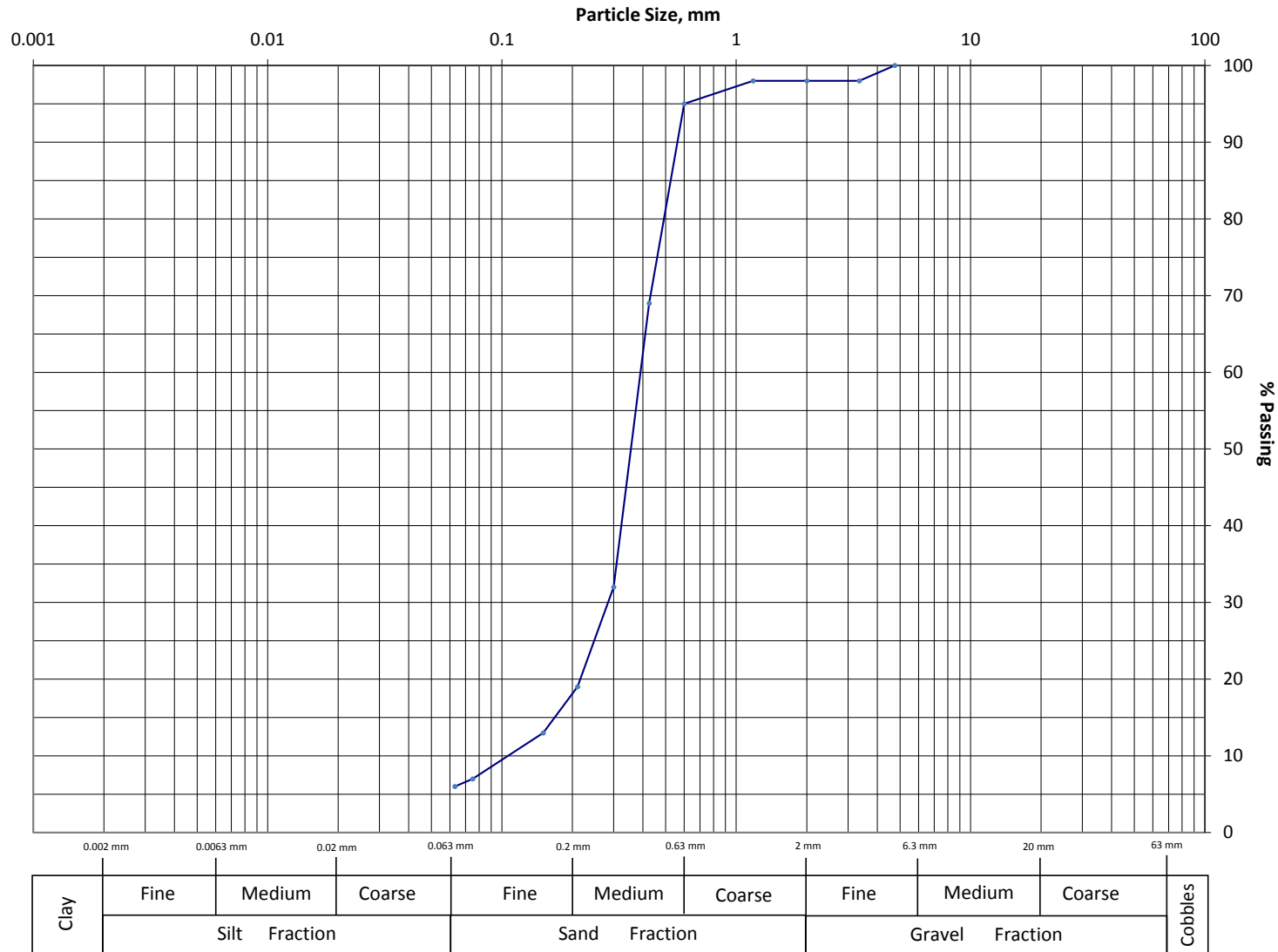
BS 1377 : Part 2 : Clauses 9.2, 9.3 : 1990 Particle Size Distribution by Wet/Dry Sieving Method



ALBURY S.I. LTD Miltons Yard, Petworth Road, Witley, Surrey GU8 5LH

PARTICLE SIZE DISTRIBUTION TEST

BS 1377 : Part 2 : Clauses 9.2, 9.3 : 1990 Particle Size Distribution by Wet/Dry Sieving Method



BS Test Sieve Aperture Size (mm)	Percentage Passing
75	
63	
50	
37.5	
25	
20	
13	
9.5	
6.3	
4.75	100
3.35	98
2	98
1.18	98
0.6	95
0.425	69
0.3	32
0.21	19
0.15	13
0.075	7
0.063	6

Particle Proportions (%)	
Cobbles	0
Gravel	2
Sand	92
Silt & Clay	6

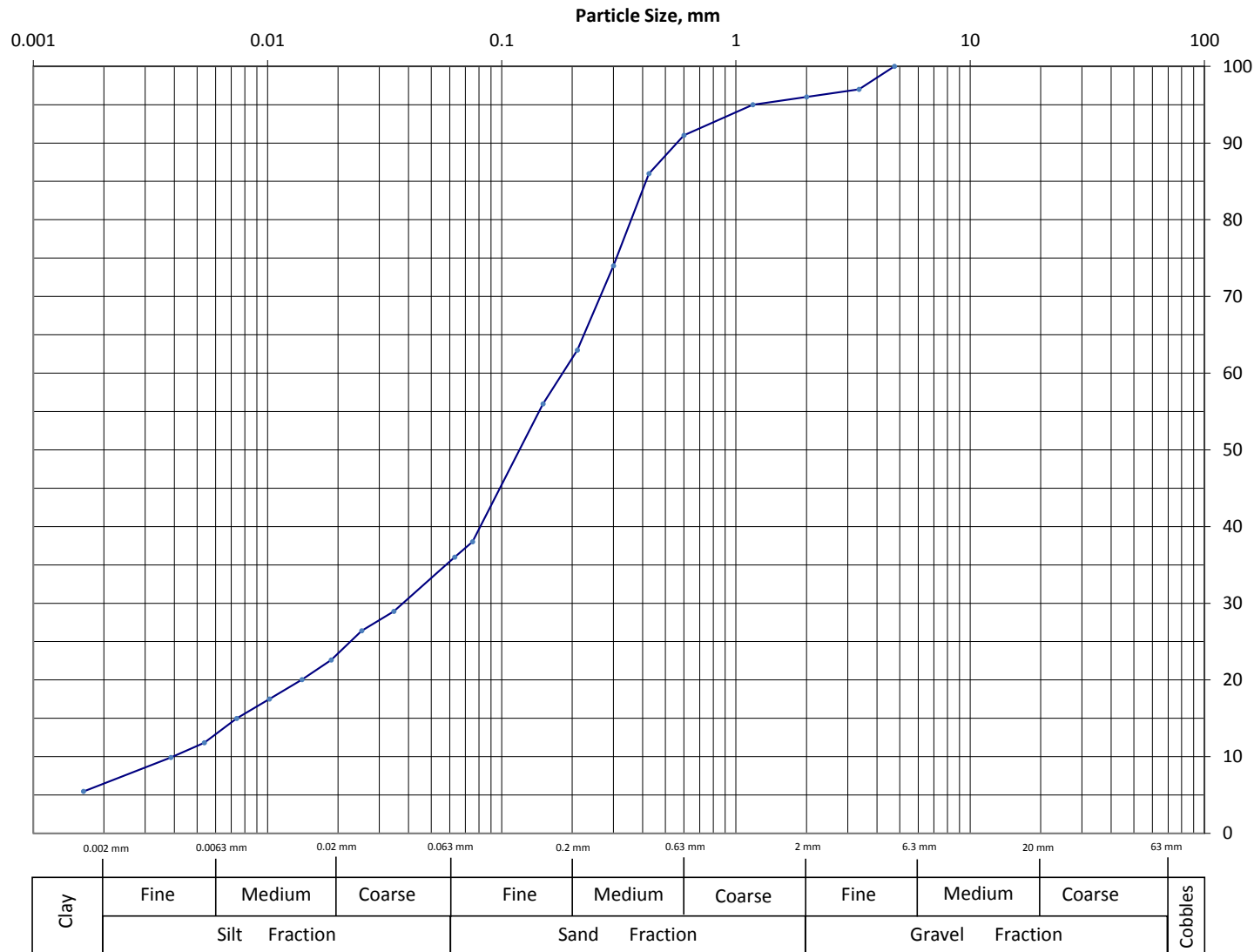
BH/TP/SA No.	TP3	Depth, m	2.00	Report Ref	17/11139/JM
Visual Description	Pale yellow-orange sand			Contract	Stopham Road, Pulborough



ALBURY S.I. LTD Miltons Yard, Petworth Road, Witley, Surrey GU8 5LH

PARTICLE SIZE DISTRIBUTION TEST

BS 1377 : Part 2 : Clauses 9.2 and 9.5 : 1990 Particle Size Distribution by Wet Sieving & Sedimentation by Hydrometer Method



Sieve Aperture/ Particle Size (mm)	Percentage Passing
75	
63	
50	
37.5	
25	
20	
13	
9.5	
6.3	
4.75	100
3.35	97
2	96
1.18	95
0.6	91
0.425	86
0.3	74
0.21	63
0.15	56
0.075	38
0.063	36
0.035	29
0.025	26
0.019	23
0.014	20
0.010	18
0.0074	15
0.0054	12
0.0039	10
0.0016	5

Sample Proportions (%)	
Cobbles	0
Gravel	4
Sand	60
Silt & Clay	36

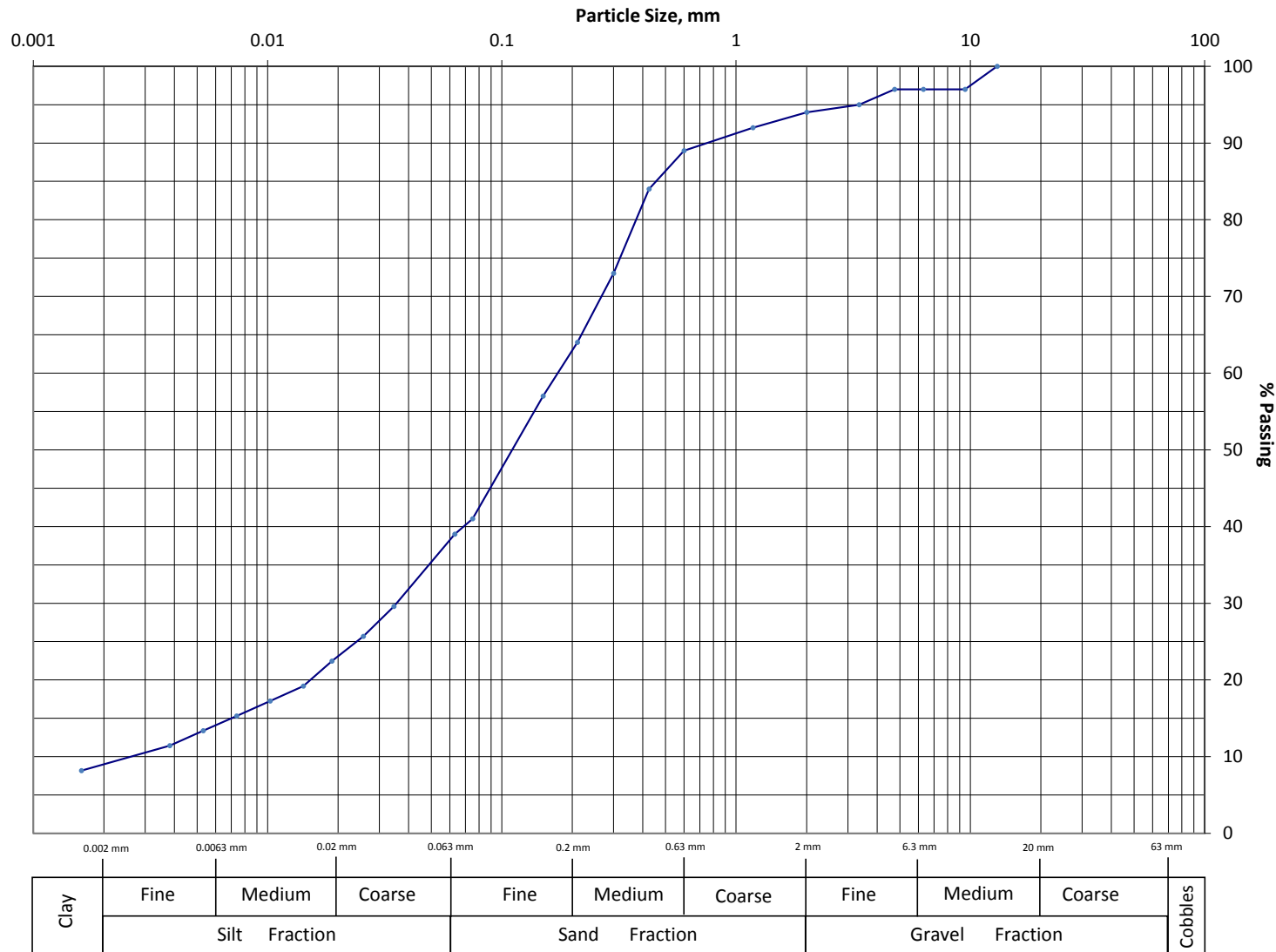
BH/TP/SA No.	TP4	Depth, m	0.50	Report Ref	17/11139/JM
Visual Description	Brown silty sand with very occasional fine gravel and roots			Contract	Stopham Road, Pulborough



ALBURY S.I. LTD Miltons Yard, Petworth Road, Witley, Surrey GU8 5LH

PARTICLE SIZE DISTRIBUTION TEST

BS 1377 : Part 2 : Clauses 9.2 and 9.5 : 1990 Particle Size Distribution by Wet Sieving & Sedimentation by Hydrometer Method



Sieve Aperture/ Particle Size (mm)	Percentage Passing
75	
63	
50	
37.5	
25	
20	
13	100
9.5	97
6.3	97
4.75	97
3.35	95
2	94
1.18	92
0.6	89
0.425	84
0.3	73
0.21	64
0.15	57
0.075	41
0.063	39
0.035	30
0.026	26
0.019	22
0.014	19
0.010	17
0.0074	15
0.0053	13
0.0038	11
0.0016	8

Sample Proportions (%)	
Cobbles	0
Gravel	6
Sand	55
Silt & Clay	39

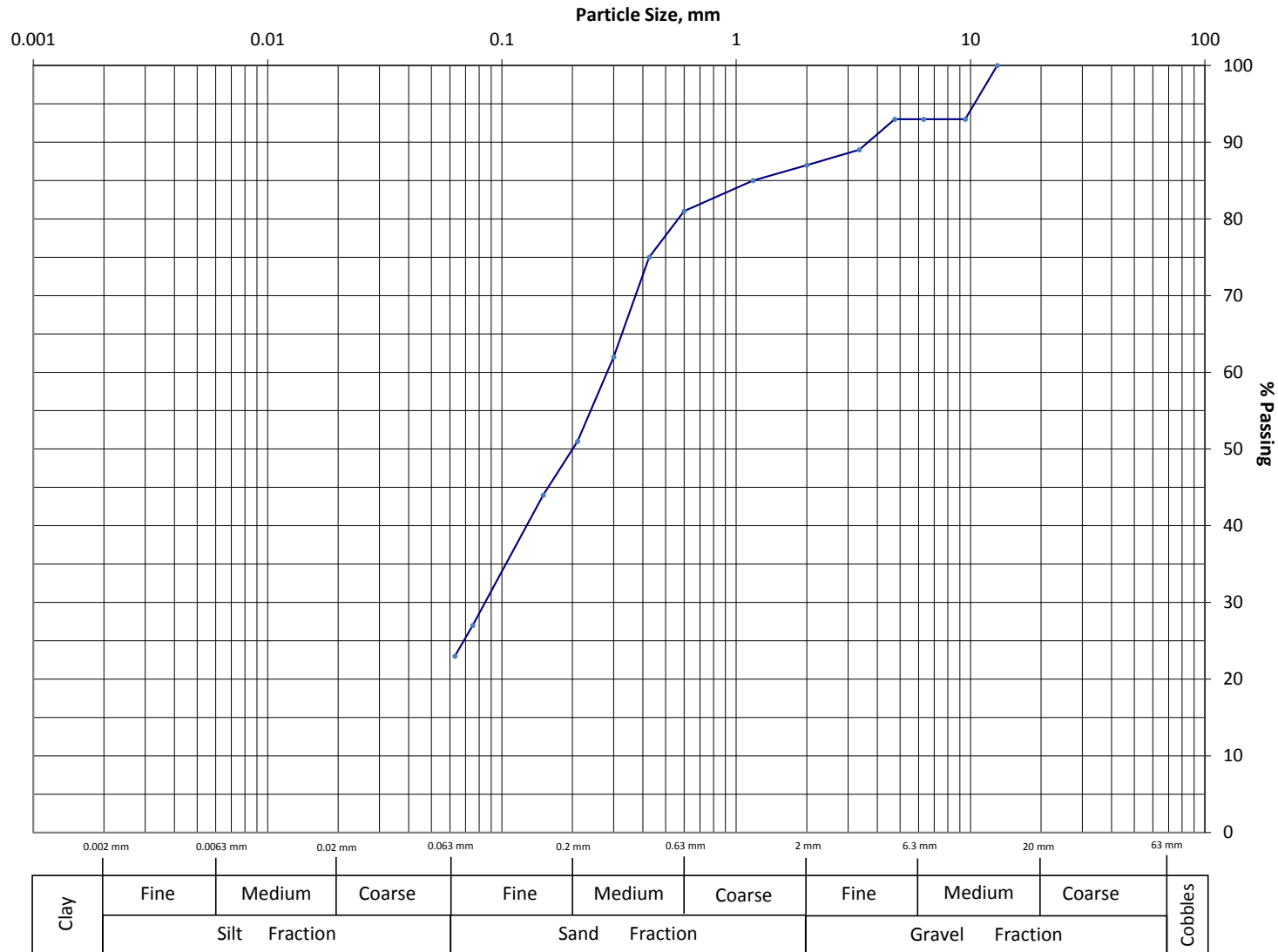
BH/TP/SA No.	TP5	Depth, m	1.00	Report Ref	17/11139/JM
Visual Description	Pale orange-brown silty sand with very occasional subangular sandstone gravel			Contract	Stopham Road, Pulborough



ALBURY S.I. LTD Miltons Yard, Petworth Road, Witley, Surrey GU8 5LH

PARTICLE SIZE DISTRIBUTION TEST

BS 1377 : Part 2 : Clauses 9.2, 9.3 : 1990 Particle Size Distribution by Wet/Dry Sieving Method



BS Test Sieve Aperture Size (mm)	Percentage Passing
75	
63	
50	
37.5	
25	
20	
13	100
9.5	93
6.3	93
4.75	93
3.35	89
2	87
1.18	85
0.6	81
0.425	75
0.3	62
0.21	51
0.15	44
0.075	27
0.063	23

Particle Proportions (%)	
Cobbles	0
Gravel	13
Sand	64
Silt & Clay	23

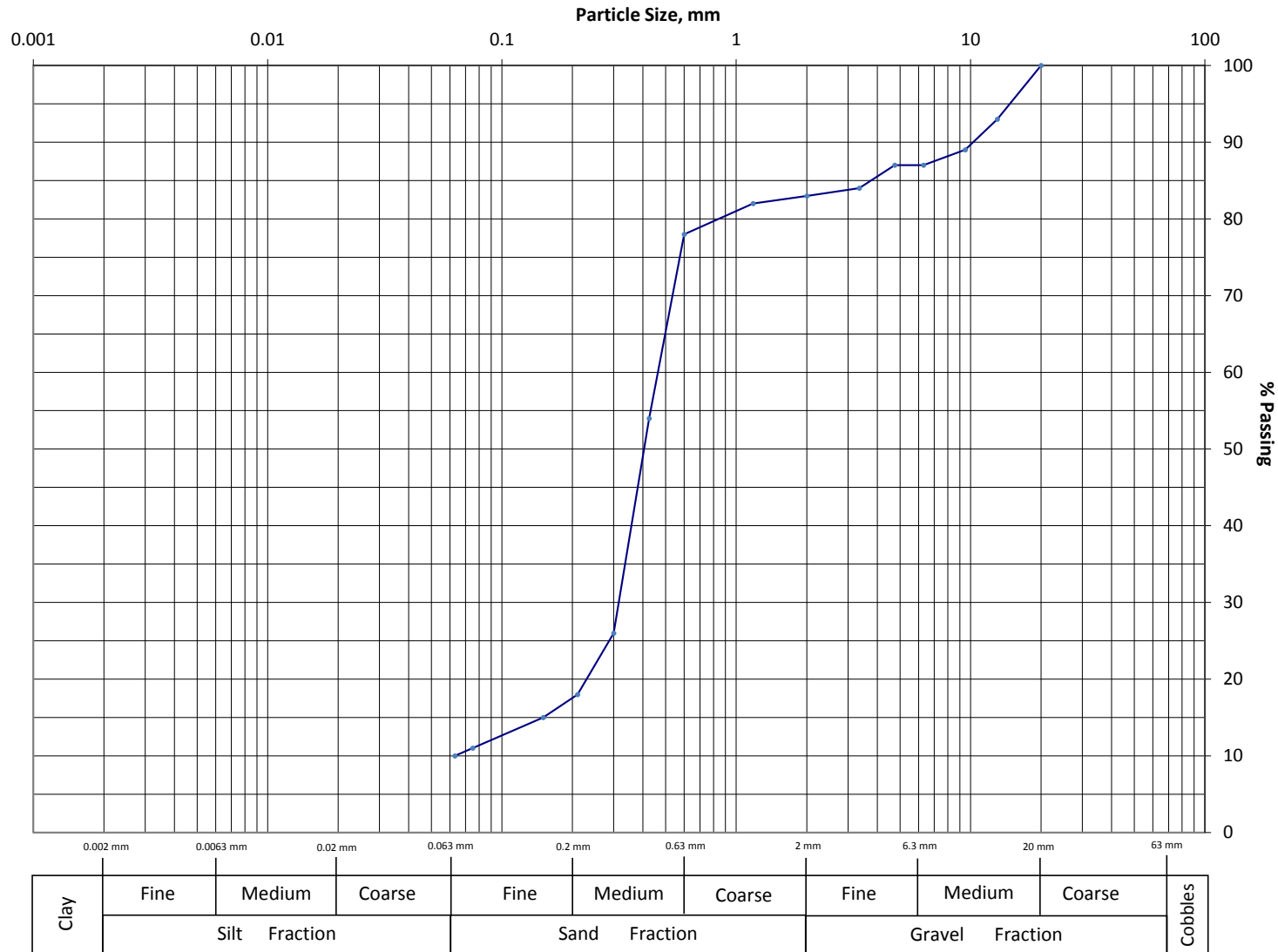
BH/TP/SA No.	TP6	Depth, m	1.50	Report Ref	17/11139/JM
Visual Description	Pale brown silty sand with very occasional fine to medium sandstone gravel			Contract	Stopham Road, Pulborough



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PARTICLE SIZE DISTRIBUTION TEST

BS 1377 : Part 2 : Clauses 9.2, 9.3 : 1990 Particle Size Distribution by Wet/Dry Sieving Method



BS Test Sieve Aperture Size (mm)	Percentage Passing
75	
63	
50	
37.5	
25	
20	100
13	93
9.5	89
6.3	87
4.75	87
3.35	84
2	83
1.18	82
0.6	78
0.425	54
0.3	26
0.21	18
0.15	15
0.075	11
0.063	10

Particle Proportions (%)	
Cobbles	0
Gravel	17
Sand	73
Silt & Clay	10

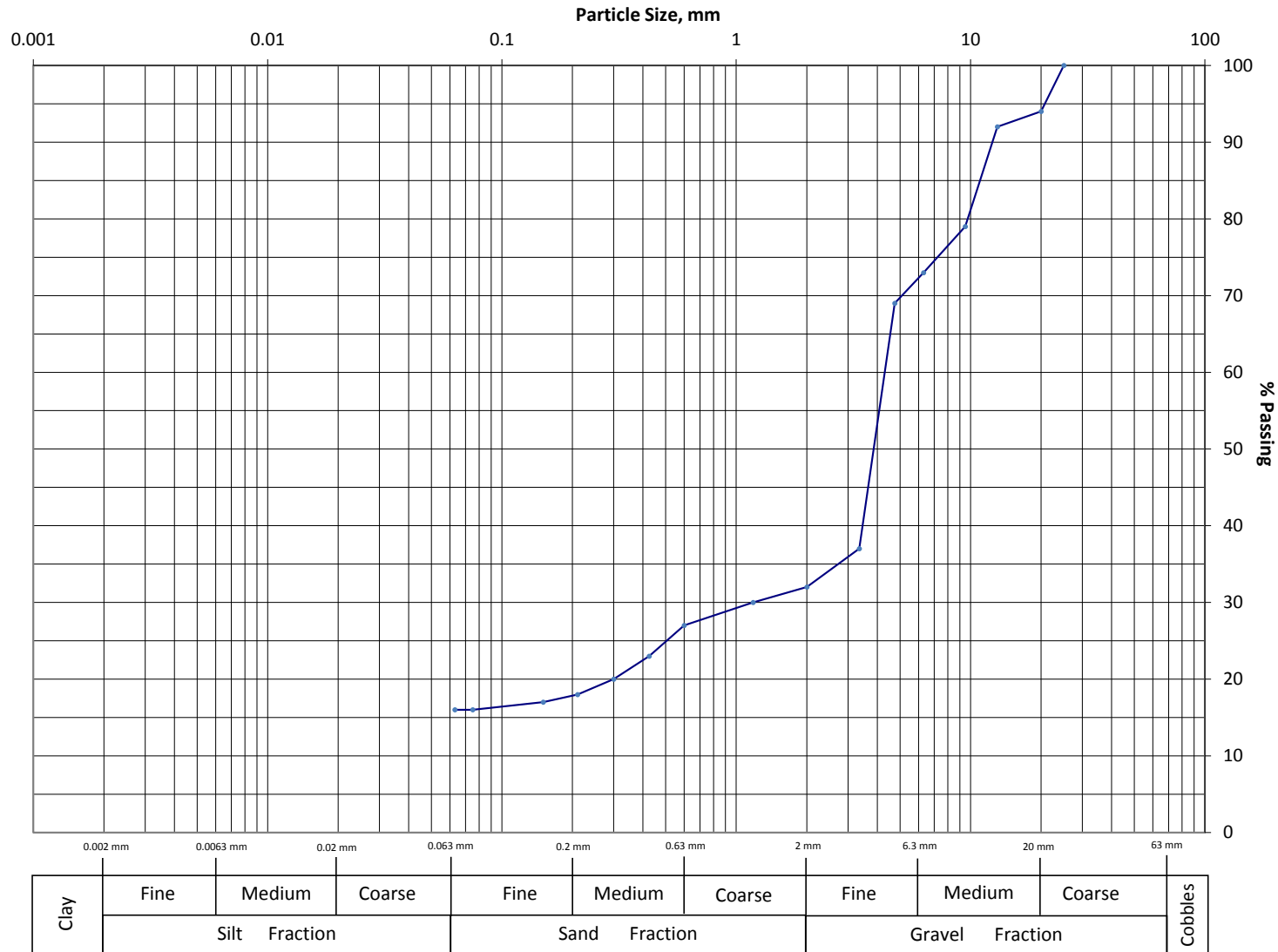
BH/TP/SA No.	TP7	Depth, m	1.00	Report Ref	17/11139/JM
Visual Description	Red-brown slightly silty sand with occasional purple-brown iron-stained sandstone gravel			Contract	Stopham Road, Pulborough



ALBURY S.I. LTD Miltons Yard, Petworth Road, Witley, Surrey GU8 5LH

PARTICLE SIZE DISTRIBUTION TEST

BS 1377 : Part 2 : Clauses 9.2, 9.3 : 1990 Particle Size Distribution by Wet/Dry Sieving Method



BS Test Sieve Aperture Size (mm)	Percentage Passing
75	
63	
50	
37.5	
25	100
20	94
13	92
9.5	79
6.3	73
4.75	69
3.35	37
2	32
1.18	30
0.6	27
0.425	23
0.3	20
0.21	18
0.15	17
0.075	16
0.063	16

Particle Proportions (%)	
Cobbles	0
Gravel	68
Sand	16
Silt & Clay	16

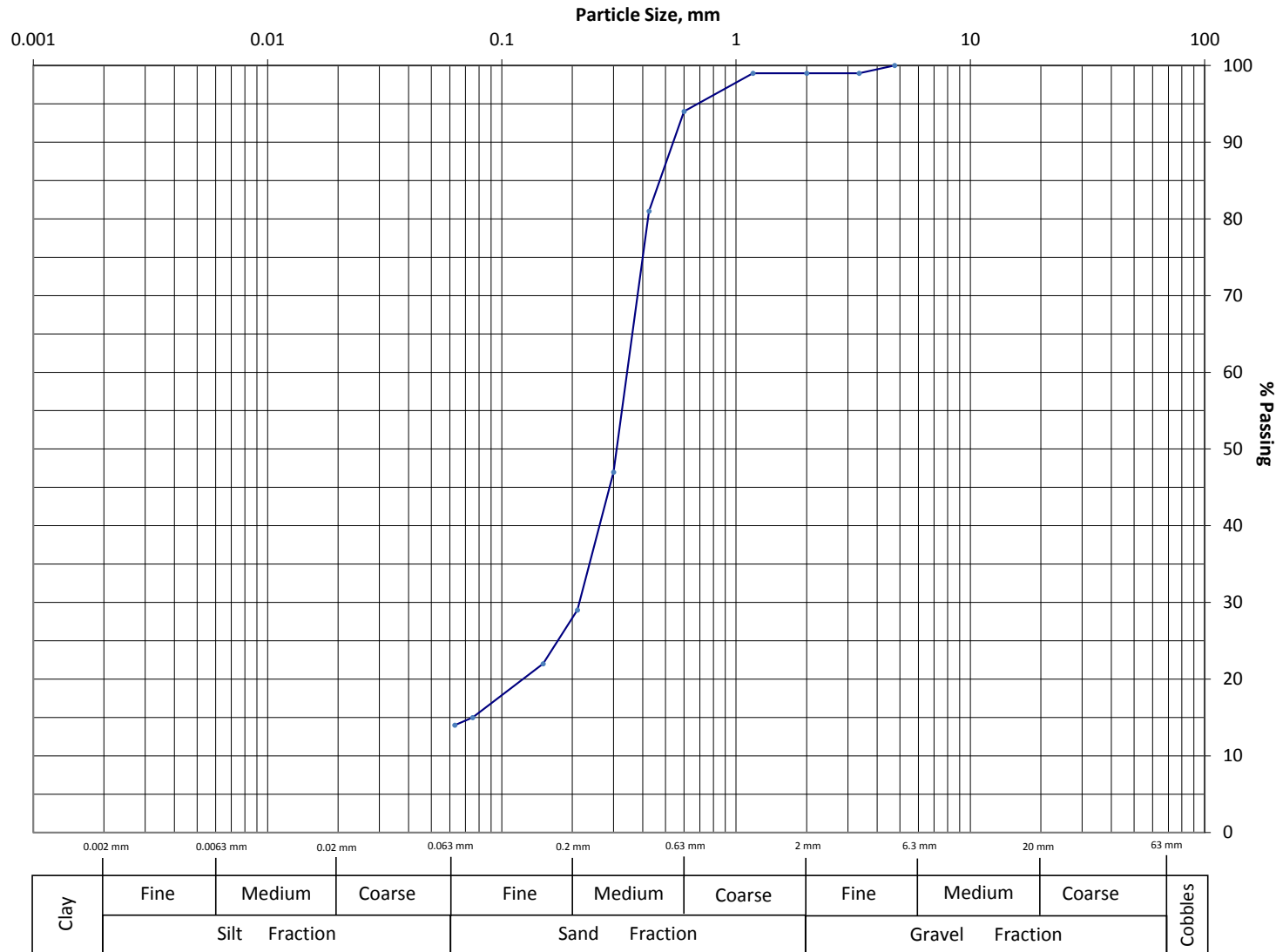
BH/TP/SA No.	TP8	Depth, m	1.00	Report Ref	17/11139/JM
Visual Description	Pale orange-brown silty sandy gravel			Contract	Stopham Road, Pulborough



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PARTICLE SIZE DISTRIBUTION TEST

BS 1377 : Part 2 : Clauses 9.2, 9.3 : 1990 Particle Size Distribution by Wet/Dry Sieving Method



BS Test Sieve Aperture Size (mm)	Percentage Passing
75	
63	
50	
37.5	
25	
20	
13	
9.5	
6.3	
4.75	100
3.35	99
2	99
1.18	99
0.6	94
0.425	81
0.3	47
0.21	29
0.15	22
0.075	15
0.063	14

Particle Proportions (%)	
Cobbles	0
Gravel	1
Sand	85
Silt & Clay	14

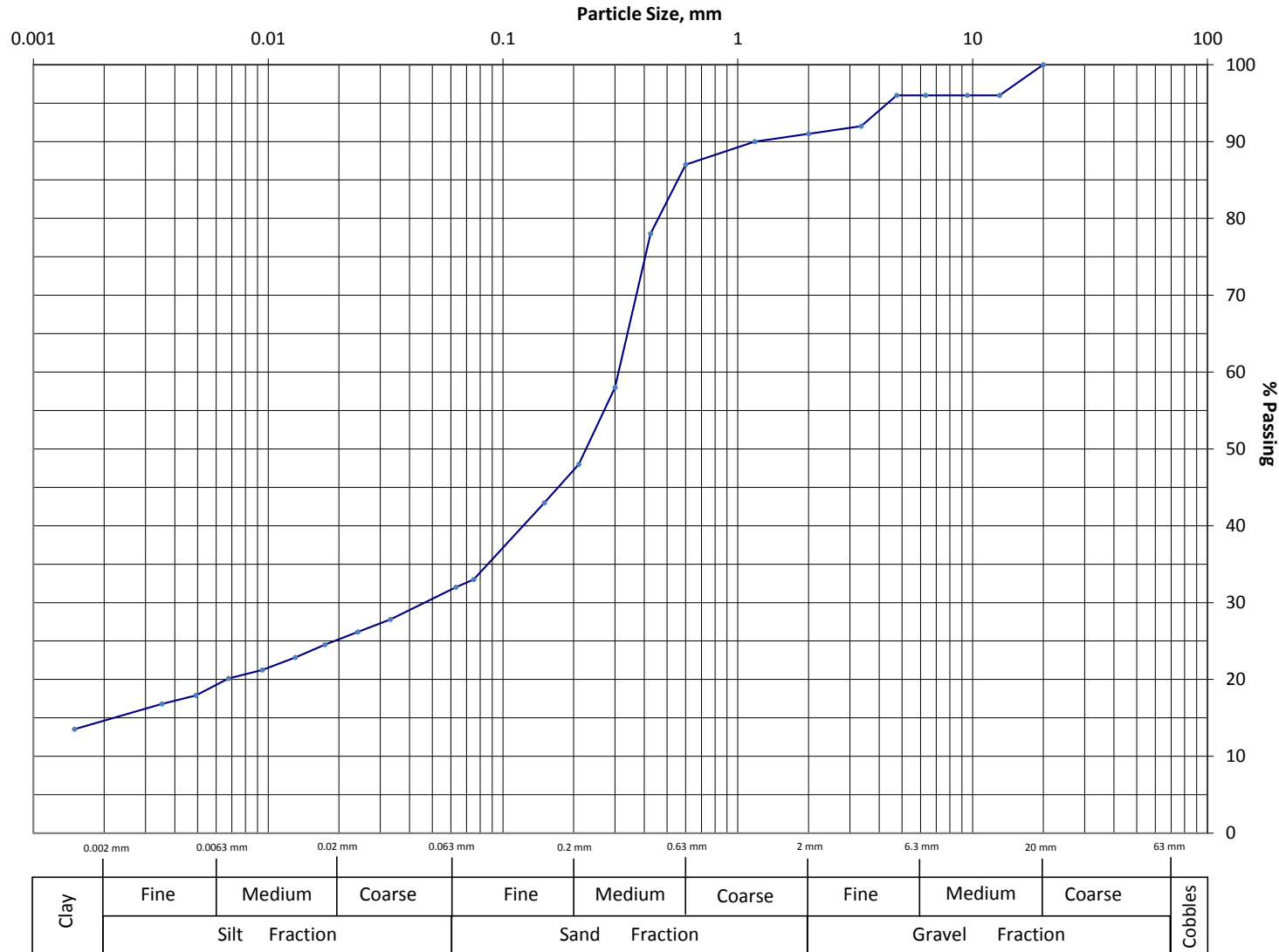
BH/TP/SA No.	TP9	Depth, m	2.00	Report Ref	17/11139/JM
Visual Description	Yellow-orange sand with occasional lenses of pale grey sandy clay			Contract	Stopham Road, Pulborough



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PARTICLE SIZE DISTRIBUTION TEST

BS 1377 : Part 2 : Clauses 9.2 and 9.5 : 1990 Particle Size Distribution by Wet Sieving & Sedimentation by Hydrometer Method



Sieve Aperture/ Particle Size (mm)	Percentage Passing
75	
63	
50	
37.5	
25	
20	100
13	96
9.5	96
6.3	96
4.75	96
3.35	92
2	91
1.18	90
0.6	87
0.425	78
0.3	58
0.21	48
0.15	43
0.075	33
0.063	32
0.033	28
0.024	26
0.017	25
0.013	23
0.009	21
0.0068	20
0.0049	18
0.0035	17
0.0015	14

Sample Proportions (%)	
Cobbles	0
Gravel	9
Sand	59
Silt & Clay	32

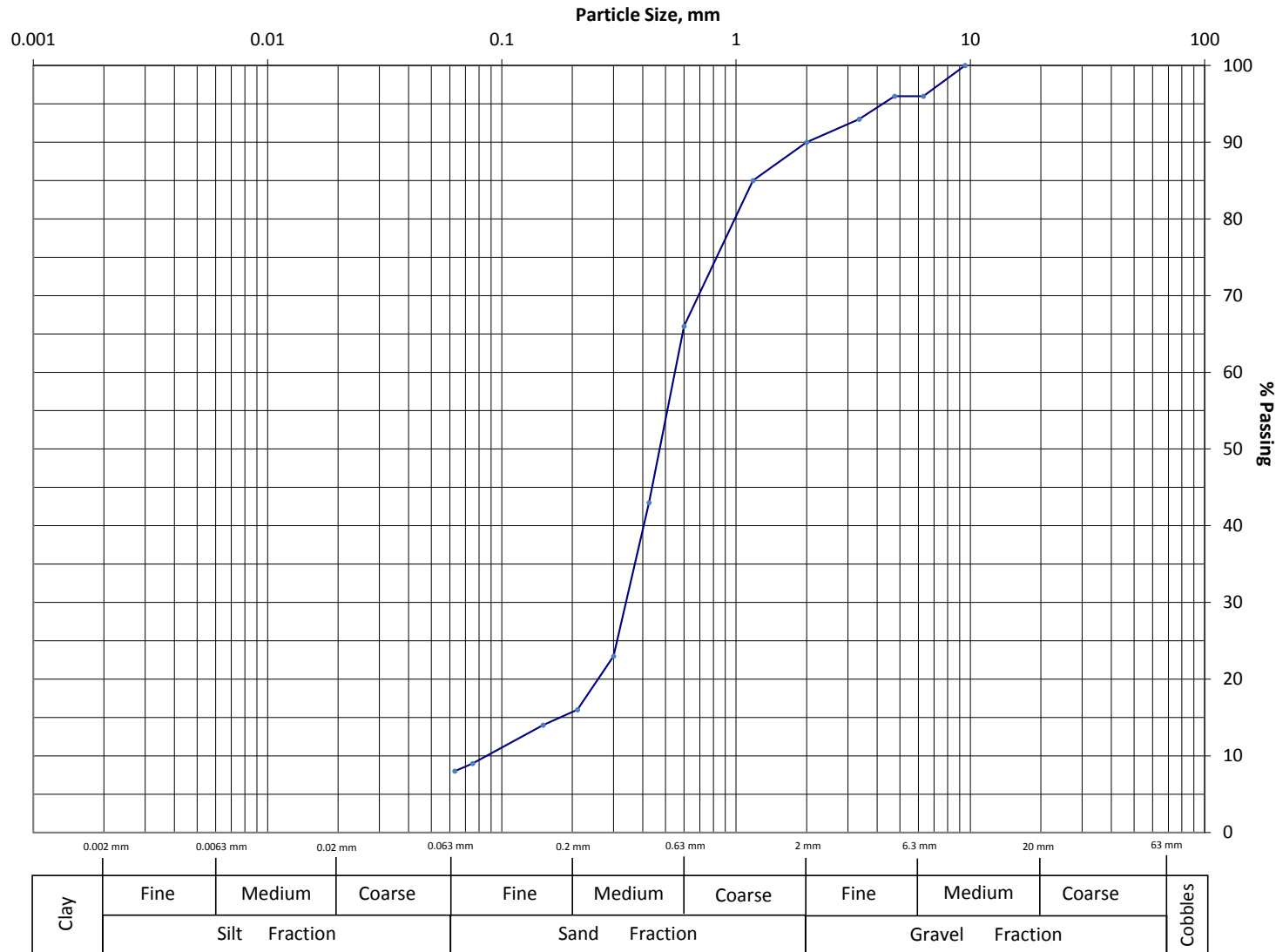
BH/TP/SA No.	TP10	Depth, m	1.50	Report Ref	17/11139/JM
Visual Description	Orange-brown silty sand with occasional lenses of grey sandy clay and very occasional gravel			Contract	Stopham Road, Pulborough



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PARTICLE SIZE DISTRIBUTION TEST

BS 1377 : Part 2 : Clauses 9.2, 9.3 : 1990 Particle Size Distribution by Wet/Dry Sieving Method



BS Test Sieve Aperture Size (mm)	Percentage Passing
75	
63	
50	
37.5	
25	
20	
13	
9.5	100
6.3	96
4.75	96
3.35	93
2	90
1.18	85
0.6	66
0.425	43
0.3	23
0.21	16
0.15	14
0.075	9
0.063	8

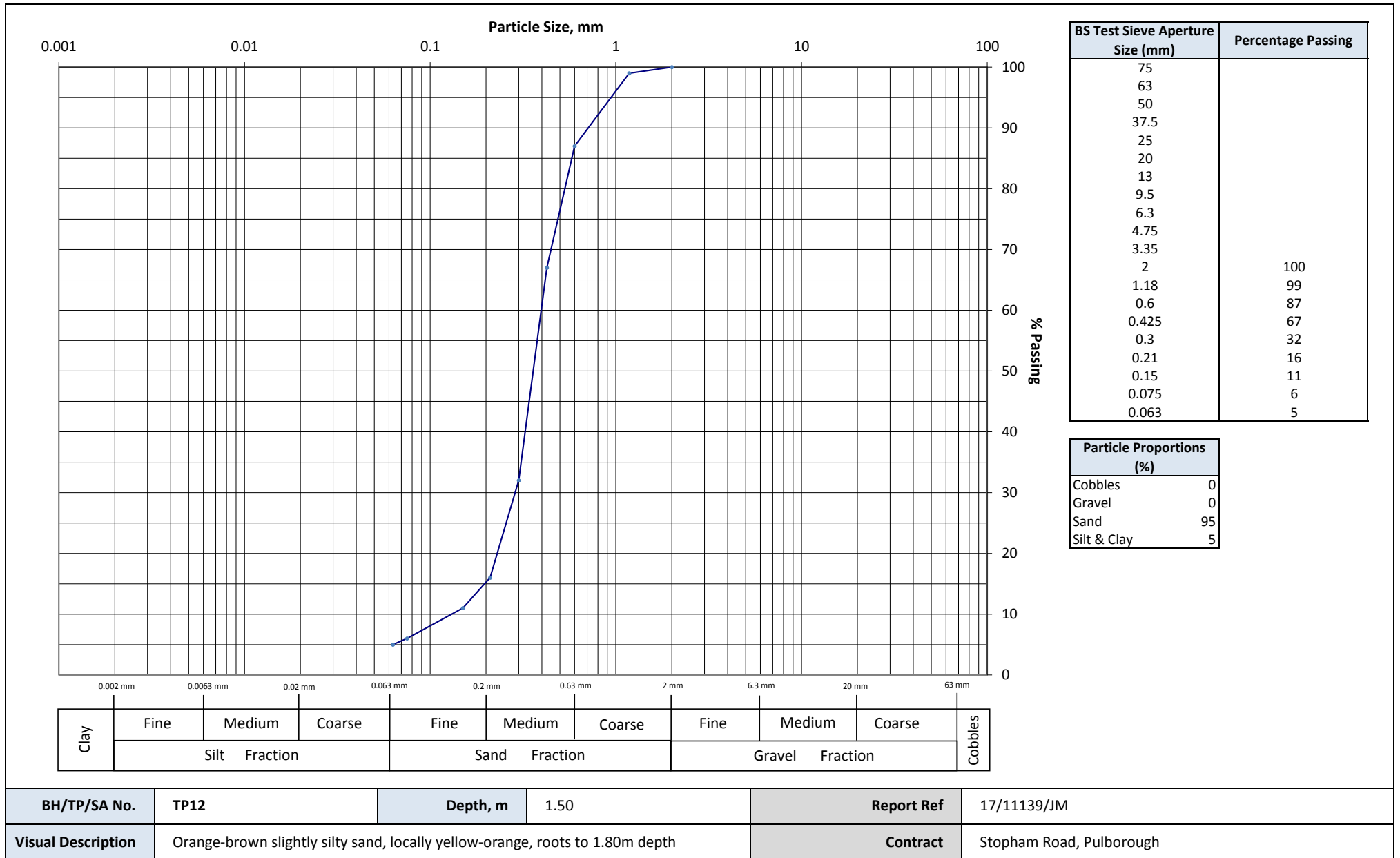
Particle Proportions (%)	
Cobbles	0
Gravel	10
Sand	82
Silt & Clay	8

BH/TP/SA No.	TP11	Depth, m	2.00	Report Ref	17/11139/JM
Visual Description	Orange-brown sand with very occasional fine and medium gravel			Contract	Stopham Road, Pulborough



PARTICLE SIZE DISTRIBUTION TEST

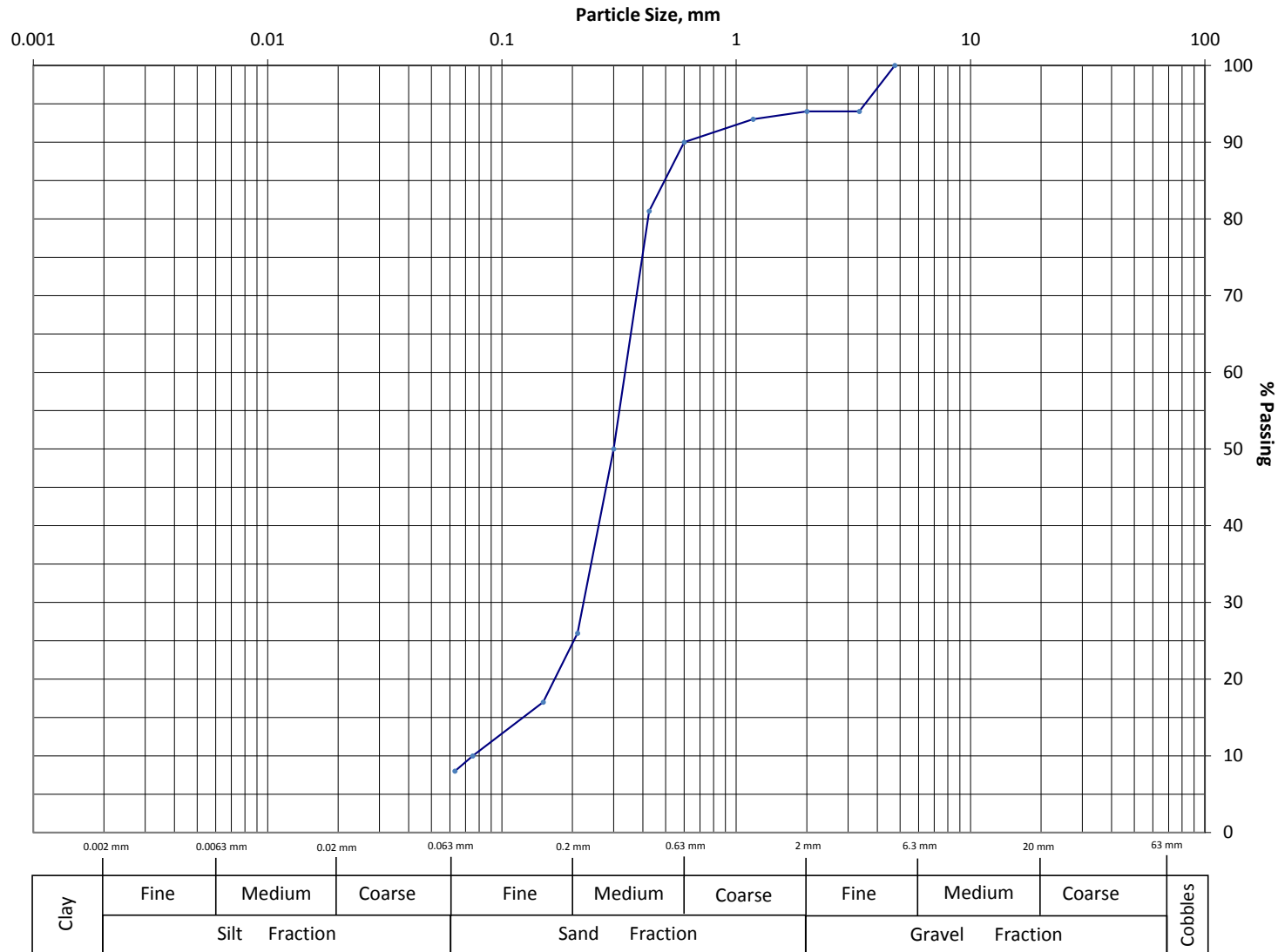
BS 1377 : Part 2 : Clauses 9.2, 9.3 : 1990 Particle Size Distribution by Wet/Dry Sieving Method



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PARTICLE SIZE DISTRIBUTION TEST

BS 1377 : Part 2 : Clauses 9.2, 9.3 : 1990 Particle Size Distribution by Wet/Dry Sieving Method



BS Test Sieve Aperture Size (mm)	Percentage Passing
75	
63	
50	
37.5	
25	
20	
13	
9.5	
6.3	
4.75	100
3.35	94
2	94
1.18	93
0.6	90
0.425	81
0.3	50
0.21	26
0.15	17
0.075	10
0.063	8

Particle Proportions (%)	
Cobbles	0
Gravel	6
Sand	86
Silt & Clay	8

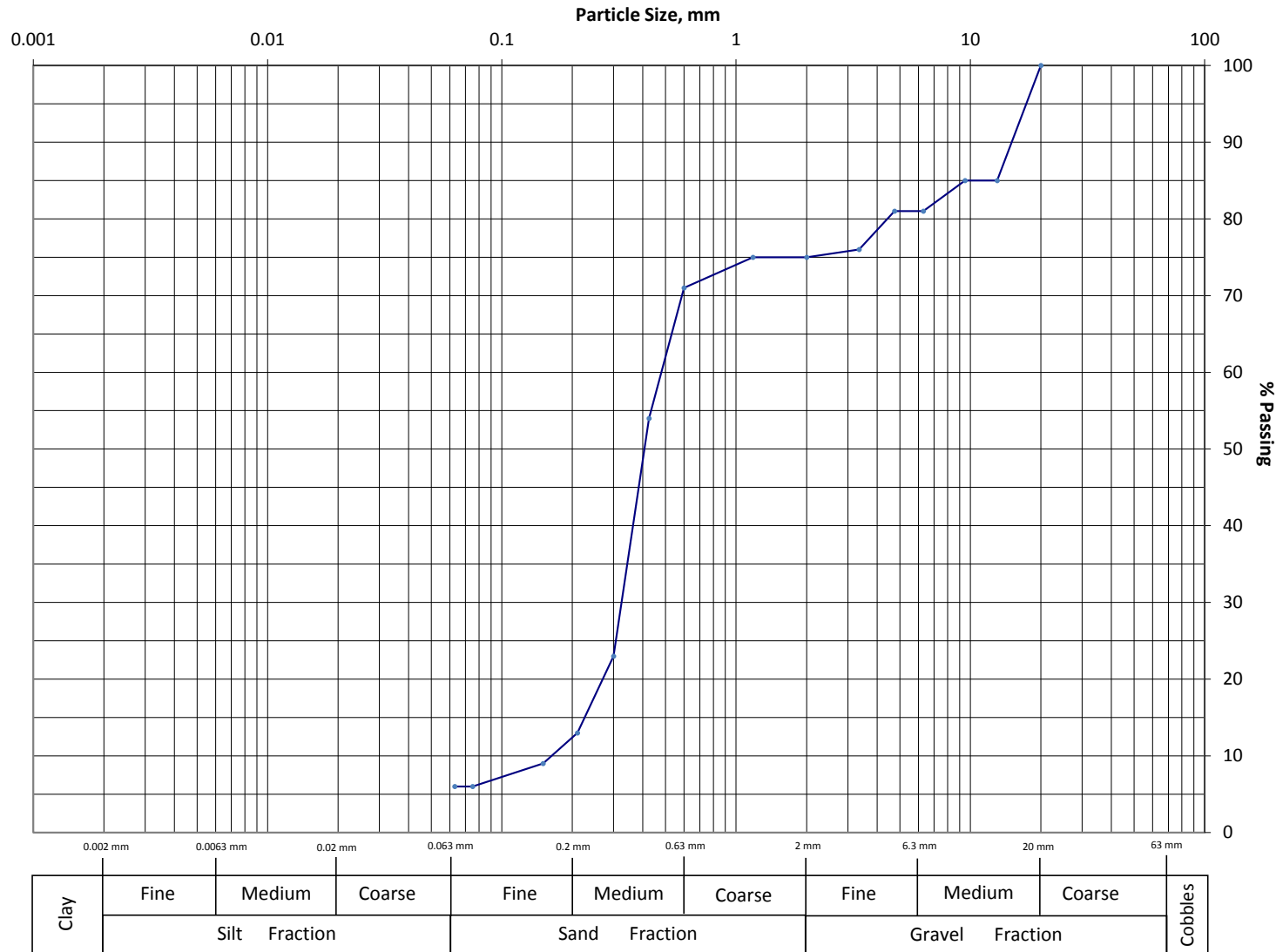
BH/TP/SA No.	TP13	Depth, m	1.00	Report Ref	17/11139/JM
Visual Description	Orange-brown slightly silty sand with very occasional fine gravel and pockets of red and yellow sand			Contract	Stopham Road, Pulborough



ALBURY S.I. LTD Miltons Yard, Petworth Road, Witley, Surrey GU8 5LH

PARTICLE SIZE DISTRIBUTION TEST

BS 1377 : Part 2 : Clauses 9.2, 9.3 : 1990 Particle Size Distribution by Wet/Dry Sieving Method



BS Test Sieve Aperture Size (mm)	Percentage Passing
75	
63	
50	
37.5	
25	
20	100
13	85
9.5	85
6.3	81
4.75	81
3.35	76
2	75
1.18	75
0.6	71
0.425	54
0.3	23
0.21	13
0.15	9
0.075	6
0.063	6

Particle Proportions (%)	
Cobbles	0
Gravel	25
Sand	69
Silt & Clay	6

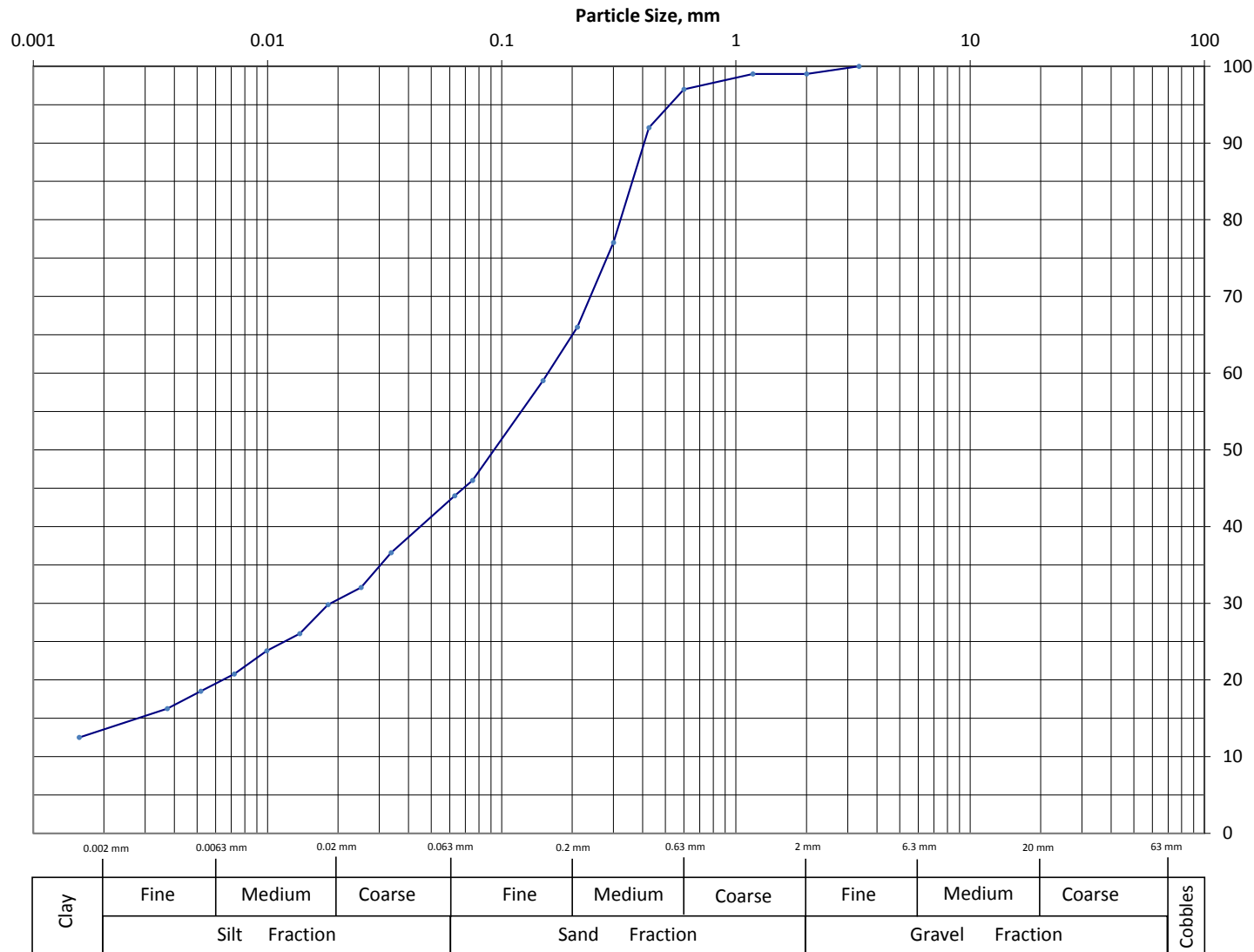
BH/TP/SA No.	TP14	Depth, m	3.00	Report Ref	17/11139/JM
Visual Description	Dark orange-brown/red slightly silty sand with occasional gravel			Contract	Stopham Road, Pulborough



ALBURY S.I. LTD Miltons Yard, Petworth Road, Witley, Surrey GU8 5LH

PARTICLE SIZE DISTRIBUTION TEST

BS 1377 : Part 2 : Clauses 9.2 and 9.5 : 1990 Particle Size Distribution by Wet Sieving & Sedimentation by Hydrometer Method



Sieve Aperture/ Particle Size (mm)	Percentage Passing
75	
63	
50	
37.5	
25	
20	
13	
9.5	
6.3	
4.75	
3.35	100
2	99
1.18	99
0.6	97
0.425	92
0.3	77
0.21	66
0.15	59
0.075	46
0.063	44
0.034	37
0.025	32
0.018	30
0.014	26
0.010	24
0.0072	21
0.0052	19
0.0037	16
0.0016	12

Sample Proportions (%)	
Cobbles	0
Gravel	1
Sand	55
Silt & Clay	44

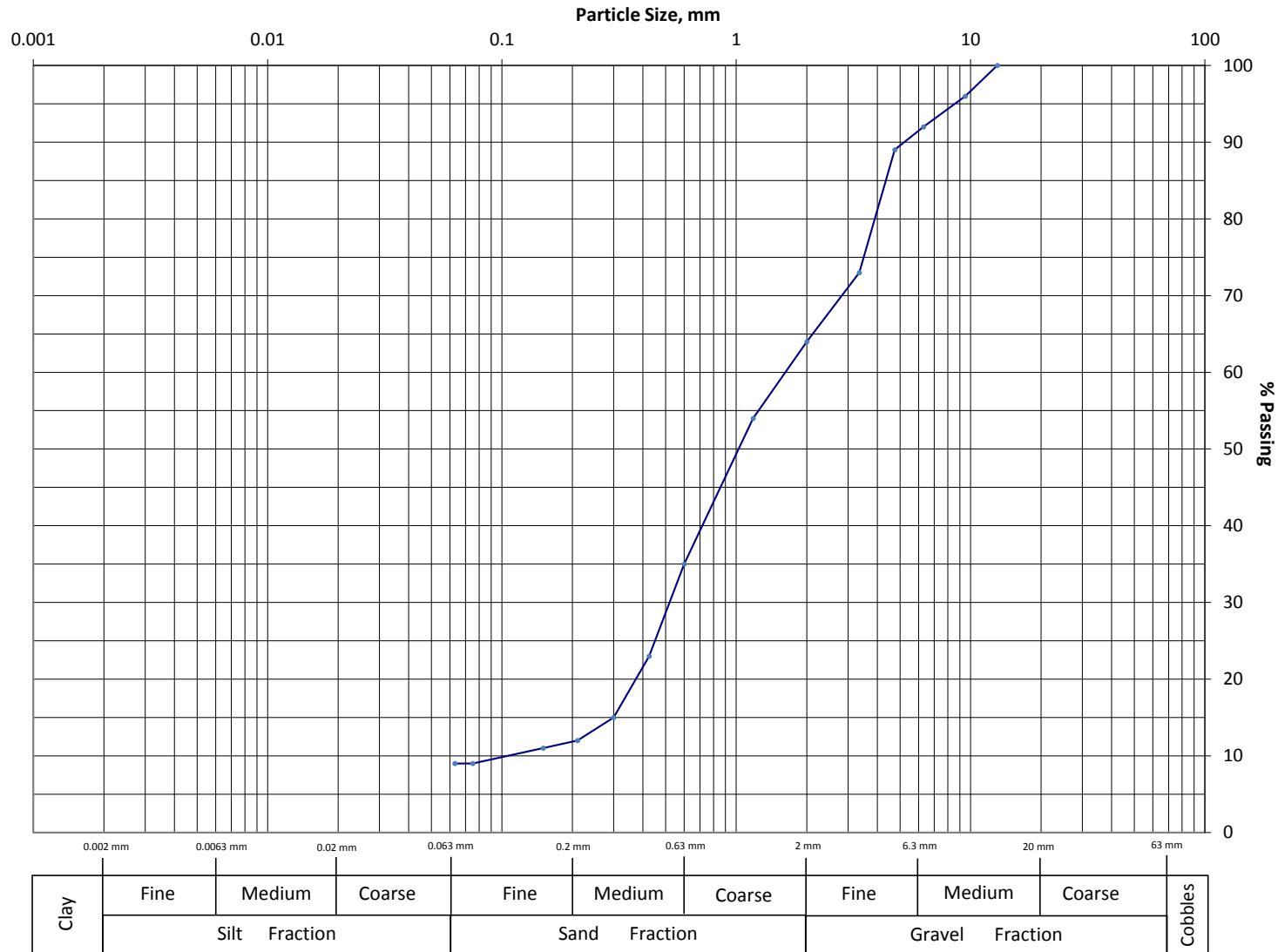
BH/TP/SA No.	SA1	Depth, m	1.00	Report Ref	17/11139/JM
Visual Description	Grey locally orange very silty sand			Contract	Stopham Road, Pulborough



ALBURY S.I. LTD Miltons Yard, Petworth Road, Witley, Surrey GU8 5LH

PARTICLE SIZE DISTRIBUTION TEST

BS 1377 : Part 2 : Clauses 9.2, 9.3 : 1990 Particle Size Distribution by Wet/Dry Sieving Method



BS Test Sieve Aperture Size (mm)	Percentage Passing
75	
63	
50	
37.5	
25	
20	
13	100
9.5	96
6.3	92
4.75	89
3.35	73
2	64
1.18	54
0.6	35
0.425	23
0.3	15
0.21	12
0.15	11
0.075	9
0.063	9

Particle Proportions (%)	
Cobbles	0
Gravel	36
Sand	55
Silt & Clay	9

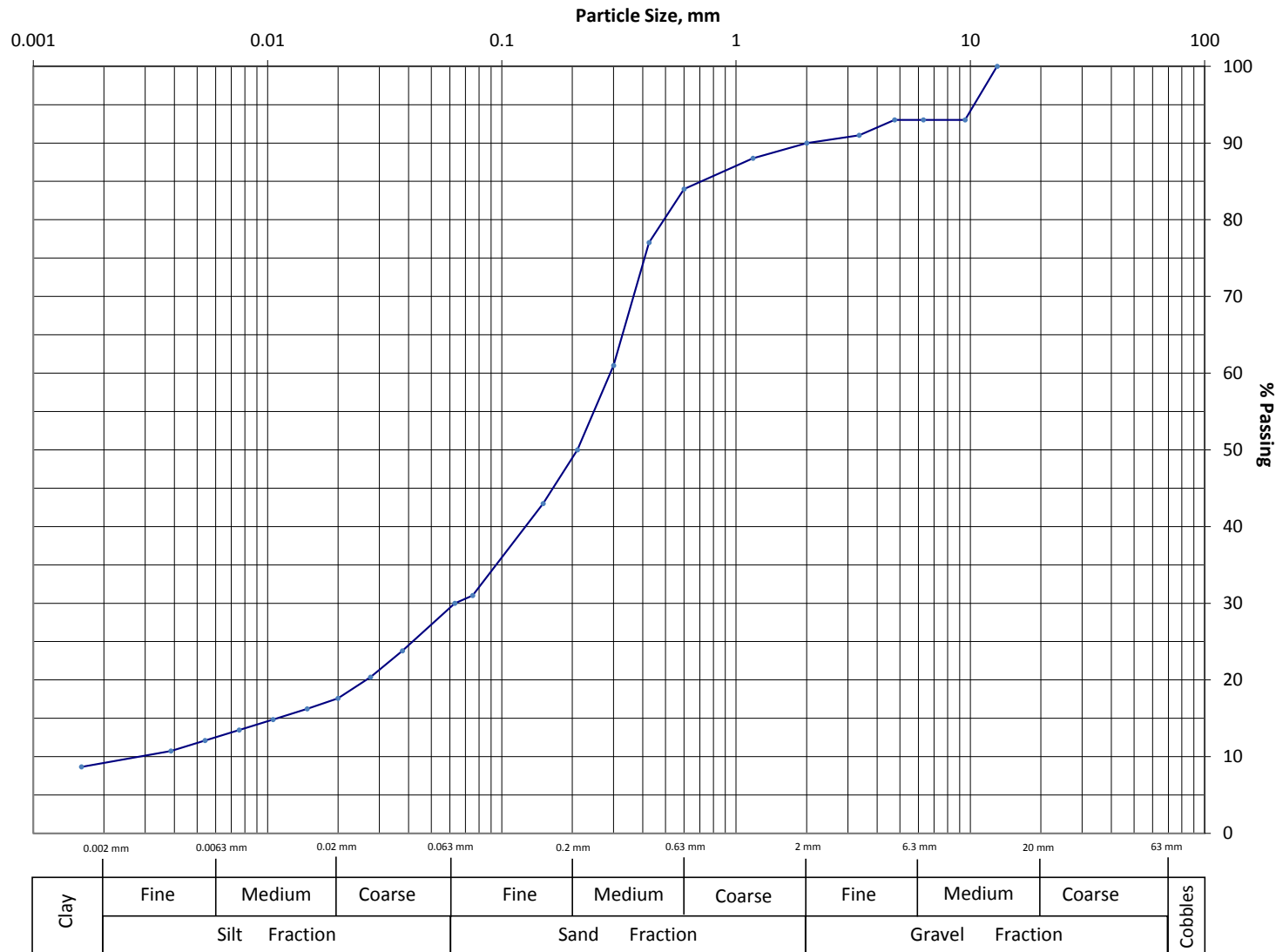
BH/TP/SA No.	SA1	Depth, m	1.60	Report Ref	17/11139/JM
Visual Description	Black slightly silty very sandy rounded gravel			Contract	Stopham Road, Pulborough



ALBURY S.I. LTD Miltons Yard, Petworth Road, Witley, Surrey GU8 5LH

PARTICLE SIZE DISTRIBUTION TEST

BS 1377 : Part 2 : Clauses 9.2 and 9.5 : 1990 Particle Size Distribution by Wet Sieving & Sedimentation by Hydrometer Method



Sieve Aperture/ Particle Size (mm)	Percentage Passing
75	
63	
50	
37.5	
25	
20	
13	100
9.5	93
6.3	93
4.75	93
3.35	91
2	90
1.18	88
0.6	84
0.425	77
0.3	61
0.21	50
0.15	43
0.075	31
0.063	30
0.038	24
0.028	20
0.020	18
0.015	16
0.011	15
0.0076	13
0.0054	12
0.0039	11
0.0016	9

Sample Proportions (%)	
Cobbles	0
Gravel	10
Sand	60
Silt & Clay	30

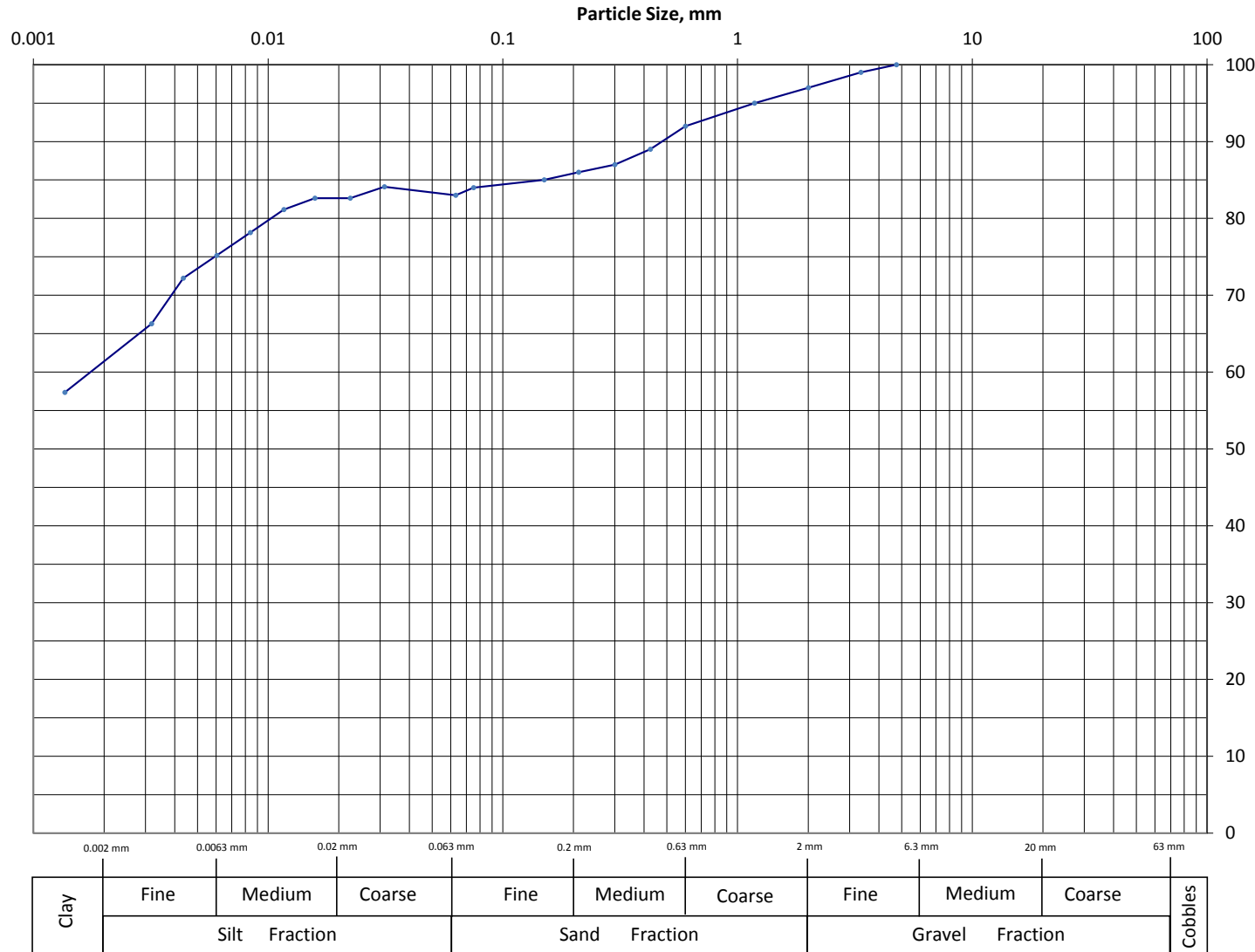
BH/TP/SA No.	SA2	Depth, m	2.00	Report Ref	17/11139/JM
Visual Description	Pale orange-brown silty sand with very occasional gravel			Contract	Stopham Road, Pulborough



ALBURY S.I. LTD Miltons Yard, Petworth Road, Witley, Surrey GU8 5LH

PARTICLE SIZE DISTRIBUTION TEST

BS 1377 : Part 2 : Clauses 9.2 and 9.5 : 1990 Particle Size Distribution by Wet Sieving & Sedimentation by Hydrometer Method



Sieve Aperture/ Particle Size (mm)	Percentage Passing
75	
63	
50	
37.5	
25	
20	
13	
9.5	
6.3	
4.75	100
3.35	99
2	97
1.18	95
0.6	92
0.425	89
0.3	87
0.21	86
0.15	85
0.075	84
0.063	83
0.031	84
0.022	83
0.016	83
0.012	81
0.008	78
0.0060	75
0.0044	72
0.0032	66
0.0014	57

Sample Proportions (%)	
Cobbles	0
Gravel	3
Sand	14
Silt & Clay	83

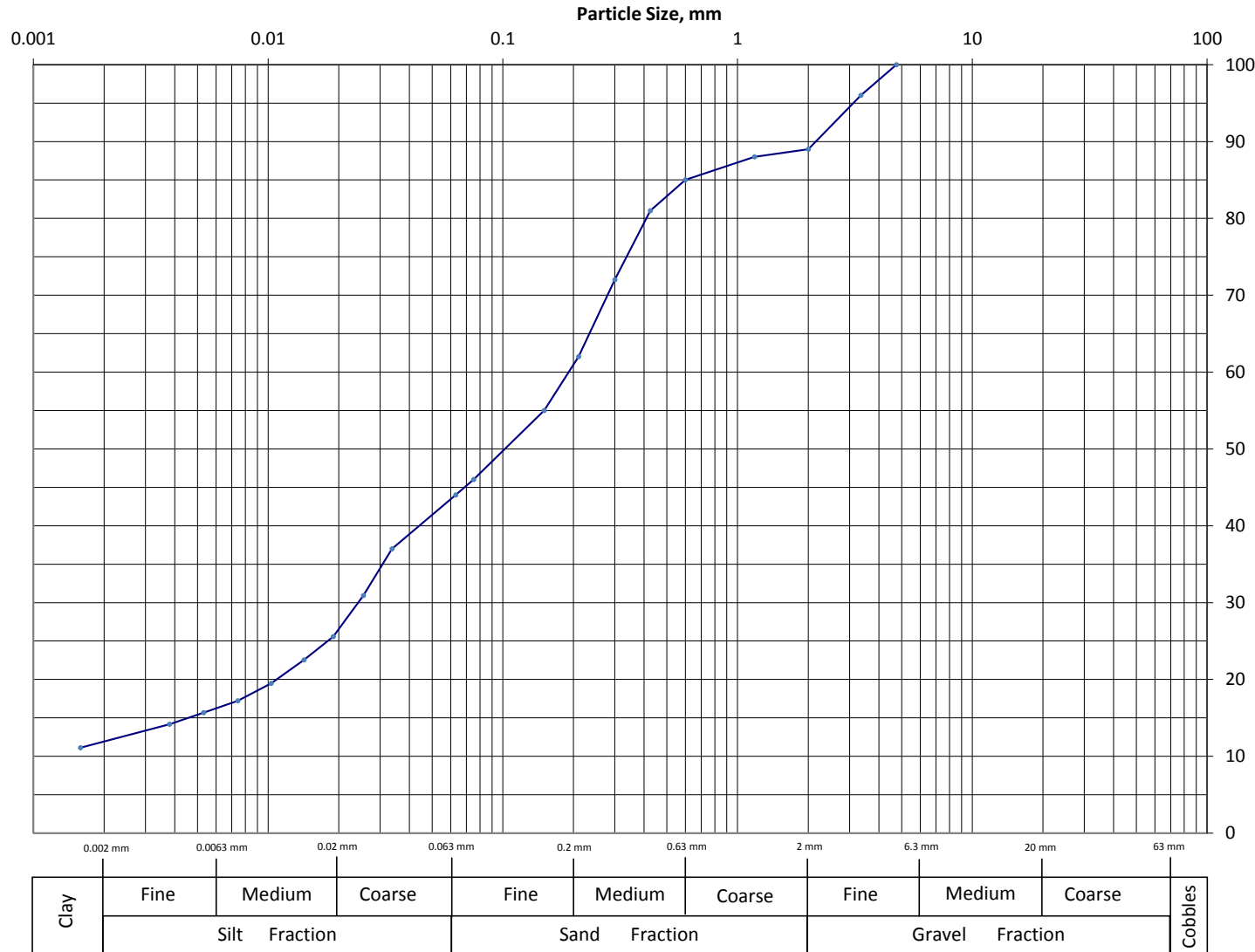
BH/TP/SA No.	SA3	Depth, m	1.75	Report Ref	17/11139/JM
Visual Description	Pale brown fissured clay with very occasional lenses of sand			Contract	Stopham Road, Pulborough



ALBURY S.I. LTD Miltons Yard, Petworth Road, Witley, Surrey GU8 5LH

PARTICLE SIZE DISTRIBUTION TEST

BS 1377 : Part 2 : Clauses 9.2 and 9.5 : 1990 Particle Size Distribution by Wet Sieving & Sedimentation by Hydrometer Method



Sieve Aperture/ Particle Size (mm)	Percentage Passing
75	
63	
50	
37.5	
25	
20	
13	
9.5	
6.3	
4.75	100
3.35	96
2	89
1.18	88
0.6	85
0.425	81
0.3	72
0.21	62
0.15	55
0.075	46
0.063	44
0.034	37
0.025	31
0.019	26
0.014	23
0.010	19
0.0074	17
0.0053	16
0.0038	14
0.0016	11

Sample Proportions (%)	
Cobbles	0
Gravel	11
Sand	45
Silt & Clay	44

BH/TP/SA No.	SA4	Depth, m	1.00	Report Ref	17/11139/JM
Visual Description	Pale brown very silty sand with very occasional fine gravel			Contract	Stopham Road, Pulborough



ALBURY S.I. LTD Miltons Yard, Petworth Road, Witley, Surrey GU8 5LH

LABORATORY CALIFORNIA BEARING RATIO TEST

BS 1377 : Part 4 : 1990

Report Ref	17/11139/JM	Contract	Stopham Road, Pulborough
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SA No.	Sample			Natural Condition		Laboratory		CBR		Remarks
	Depth m	Description	% retained on 20mm sieve	Bulk Density kg/cu.m	Water Content %	Dry Density kg/cu.m	Water Content %	Top %	Base %	
1	0.50	Orange-brown silty sand with very occasional iron-stained sandstone gravel and roots	12		9.7	2015	9.6	33	37	
2	0.50	Pale orange-brown silty sand	2.4		12.3	1870	12.5	18	17	
3	0.50	Pale brown silty sand with very occasional fine and medium gravel and roots	6.9		14.5	1915	14.3	1.8	1.7	
4	0.50	Pale brown very silty sand	2.1		14.6	1805	15.6	0.6	0.6	



SUMMARY OF CHEMICAL ANALYSES

BS 1377 : Part 3 : 1990. Clauses 3, 5 and 9

Determination of Soluble Sulphate Contents of Soil and Groundwater, Organic Matter Content and pH Value

Report Ref	17/11139/JM	Contract	Stopham Road, Pulborough
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TP/SA No.	Sample		Concentration of Sulphates expressed as SO ₄		pH Value	Organic Content %
	Depth m	Soil Type	2:1 Water:Soil Extract g/l	Groundwater g/l		
TP1	0.50	Silty sand	<0.25		6.3	
TP2	1.60	Sand and gravel	<0.25		7.1	
TP3	2.00	Sand	<0.25		7.4	
TP4	0.50	Silty sand and gravel	<0.25		7.3	
TP5	1.00	Silty sand and gravel	<0.25		7.3	
TP6	1.50	Silty sand and gravel	<0.25		7.1	
TP7	0.50	Clayey silty sand	<0.25		7.2	
TP8	1.00	Silty sandy gravel	<0.25		7.2	
TP9	2.00	Sand with clay	<0.25		7.8	
TP10	1.50	Silty sand with clay and gravel	<0.25		7.6	
TP11	2.00	Sand and gravel	<0.25		7.3	
TP12	1.50	Slightly silty sand	<0.25		7.3	
TP13	1.00	Slightly silty sand with gravel	<0.25		7.4	
TP14	2.50	Silty sand with clay	<0.25		7.6	



ALBURY S.I. LTD Miltons Yard, Petworth Road, Witley, Surrey GU8 5LH

SUMMARY OF CHEMICAL ANALYSES

BS 1377 : Part 3 : 1990. Clauses 3, 5 and 9

Determination of Soluble Sulphate Contents of Soil and Groundwater, Organic Matter Content and pH Value

Report Ref	17/11139/JM	Contract	Stopham Road, Pulborough	<i>Continuation Sheet</i> 1
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TP/SA No.	Sample		Concentration of Sulphates expressed as SO ₄		pH Value	Organic Content %
	Depth m	Soil Type	2:1 Water:Soil Extract g/l	Groundwater g/l		
SA1	1.00	Very silty sand	<0.25		7.8	
SA2	2.00	silty sand with gravel	<0.25		7.3	
SA3	1.75	Clay with sand	<0.25		5.0	
SA4	1.00	Very silty sand with gravel	<0.25		6.5	



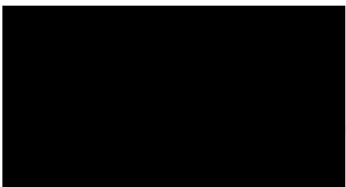
ALBURY S.I. LTD Miltons Yard, Petworth Road, Witley, Surrey GU8 5LH



2183

Final Report

Report No.:	17-27897-1		
Initial Date of Issue:	27-Oct-2017		
Client	Albury SI		
Client Address:	Miltons Yard Petworth Road Witley Surrey GU8 5LH		
Contact(s):	Jos Middleton		
Project	17/11139/JM Stopham Road, Pulborough		
Quotation No.:	Q16-07234	Date Received:	23-Oct-2017
Order No.:	12509	Date Instructed:	23-Oct-2017
No. of Samples:	14		
Turnaround (Wkdays):	5	Results Due:	27-Oct-2017
Date Approved:	27-Oct-2017		
Approved By:			


 Robert Monk, Technical Manager

Results - Soil

Client: Albury SI	Chemtest Job No.:				17-27897	17-27897	17-27897	17-27897	17-27897	17-27897	17-27897	17-27897
Quotation No.: Q16-07234	Chemtest Sample ID.:				528749	528750	528751	528752	528753	528754	528755	528756
Order No.: 12509	Client Sample Ref.:				TP1	TP2	TP3	TP4	TP5	TP6	TP7	TP8
	Sample Type:				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Top Depth (m):				0.2	0.2	0.1	0.1	0.2	0.1	0.2	0.2
	Date Sampled:				16-Oct-2017	16-Oct-2017	16-Oct-2017	16-Oct-2017	18-Oct-2017	18-Oct-2017	18-Oct-2017	18-Oct-2017
	Asbestos Lab:				COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	Accred.	SOP	Units	LOD								
ACM Type	U	2192		N/A	-	-	-	-	-	-	-	-
Asbestos Identification	U	2192	%	0.001	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
Moisture	N	2030	%	0.020	8.4	13	19	14	15	17	13	12
Chromatogram (TPH)	N			N/A	See Attached	See Attached	See Attached	See Attached	See Attached	See Attached	See Attached	See Attached
pH	U	2010		N/A	7.2	7.9	7.6	8.2	7.7	7.4	7.5	7.2
Boron (Hot Water Soluble)	U	2120	mg/kg	0.40	0.48	0.83	1.6	0.87	1.2	1.2	0.45	0.42
Sulphate (2:1 Water Soluble) as SO4	U	2120	g/l	0.010	0.030	< 0.010	0.026	0.027	0.12	0.026	< 0.010	0.017
Sulphur (Elemental)	U	2180	mg/kg	1.0	< 1.0	4.6	< 1.0	1.9	3.6	1.0	< 1.0	1.6
Cyanide (Total)	U	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Sulphide (Easily Liberatable)	U	2325	mg/kg	0.50	1.1	1.0	1.3	0.84	1.3	0.91	1.6	0.77
Sulphate (Total)	U	2430	%	0.010	0.015	0.036	0.12	0.043	0.072	0.070	< 0.010	0.015
Arsenic	U	2450	mg/kg	1.0	18	27	18	20	28	20	24	23
Beryllium	U	2450	mg/kg	1.0	< 1.0	1.3	< 1.0	< 1.0	1.1	1.0	1.2	1.1
Cadmium	U	2450	mg/kg	0.10	0.16	0.24	0.28	0.22	0.26	0.30	0.16	0.16
Chromium	U	2450	mg/kg	1.0	15	23	17	17	22	17	20	18
Vanadium	U	2450	mg/kg	5.0	38	53	39	41	64	41	48	43
Copper	U	2450	mg/kg	0.50	13	20	20	15	19	22	17	16
Mercury	U	2450	mg/kg	0.10	0.31	0.18	0.15	0.20	0.17	0.19	0.13	0.14
Nickel	U	2450	mg/kg	0.50	8.3	14	8.5	8.8	11	9.4	12	12
Lead	U	2450	mg/kg	0.50	27	64	30	31	47	45	28	32
Selenium	U	2450	mg/kg	0.20	0.98	0.83	0.93	0.78	0.93	0.89	0.57	0.71
Zinc	U	2450	mg/kg	0.50	46	69	120	61	83	95	55	57
Chromium (Trivalent)	N	2490	mg/kg	5.0	15	23	17	17	22	17	20	18
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Total Organic Carbon	U	2625	%	0.20	2.5	1.6	2.8	0.97	1.4	1.9	0.46	0.58
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C8-C10	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C10-C12	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C12-C16	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C21-C35	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	29	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	< 5.0	< 5.0	< 5.0	29	< 5.0	< 5.0	< 5.0
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C8-C10	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C10-C12	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Results - Soil

Client: Albury SI	Chemtest Job No.:				17-27897	17-27897	17-27897	17-27897	17-27897	17-27897	17-27897	17-27897
Quotation No.: Q16-07234	Chemtest Sample ID.:				528749	528750	528751	528752	528753	528754	528755	528756
Order No.: 12509	Client Sample Ref.:				TP1	TP2	TP3	TP4	TP5	TP6	TP7	TP8
	Sample Type:				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Top Depth (m):				0.2	0.2	0.1	0.1	0.2	0.1	0.2	0.2
	Date Sampled:				16-Oct-2017	16-Oct-2017	16-Oct-2017	16-Oct-2017	18-Oct-2017	18-Oct-2017	18-Oct-2017	18-Oct-2017
	Asbestos Lab:				COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	Accred.	SOP	Units	LOD								
Aromatic TPH >C12-C16	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.9	< 1.0	< 1.0	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0	4.4	8.2	7.5	31	3.7	2.9	< 1.0
Aromatic TPH >C21-C35	U	2680	mg/kg	1.0	< 1.0	25	32	18	210	21	12	< 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	29	40	26	240	25	15	< 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	< 10	29	40	26	270	25	15	< 10
Naphthalene	U	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene	U	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	U	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	U	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	U	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.86	0.24	< 0.10	< 0.10
Anthracene	U	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	U	2700	mg/kg	0.10	< 0.10	0.47	0.34	0.56	3.8	0.72	0.77	< 0.10
Pyrene	U	2700	mg/kg	0.10	< 0.10	0.61	0.24	0.40	3.9	0.86	0.84	< 0.10
Benzo[a]anthracene	U	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	1.9	< 0.10	< 0.10	< 0.10
Chrysene	U	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	2.3	< 0.10	< 0.10	< 0.10
Benzo[b]fluoranthene	U	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	3.2	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene	U	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	1.3	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene	U	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	3.5	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene	U	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	1.5	< 0.10	< 0.10	< 0.10
Dibenz(a,h)Anthracene	U	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene	U	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	1.5	< 0.10	< 0.10	< 0.10
Total Of 16 PAH's	U	2700	mg/kg	2.0	< 2.0	< 2.0	< 2.0	< 2.0	24	< 2.0	< 2.0	< 2.0
Total Phenols	U	2920	mg/kg	0.30	< 0.30	< 0.30	0.63	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30

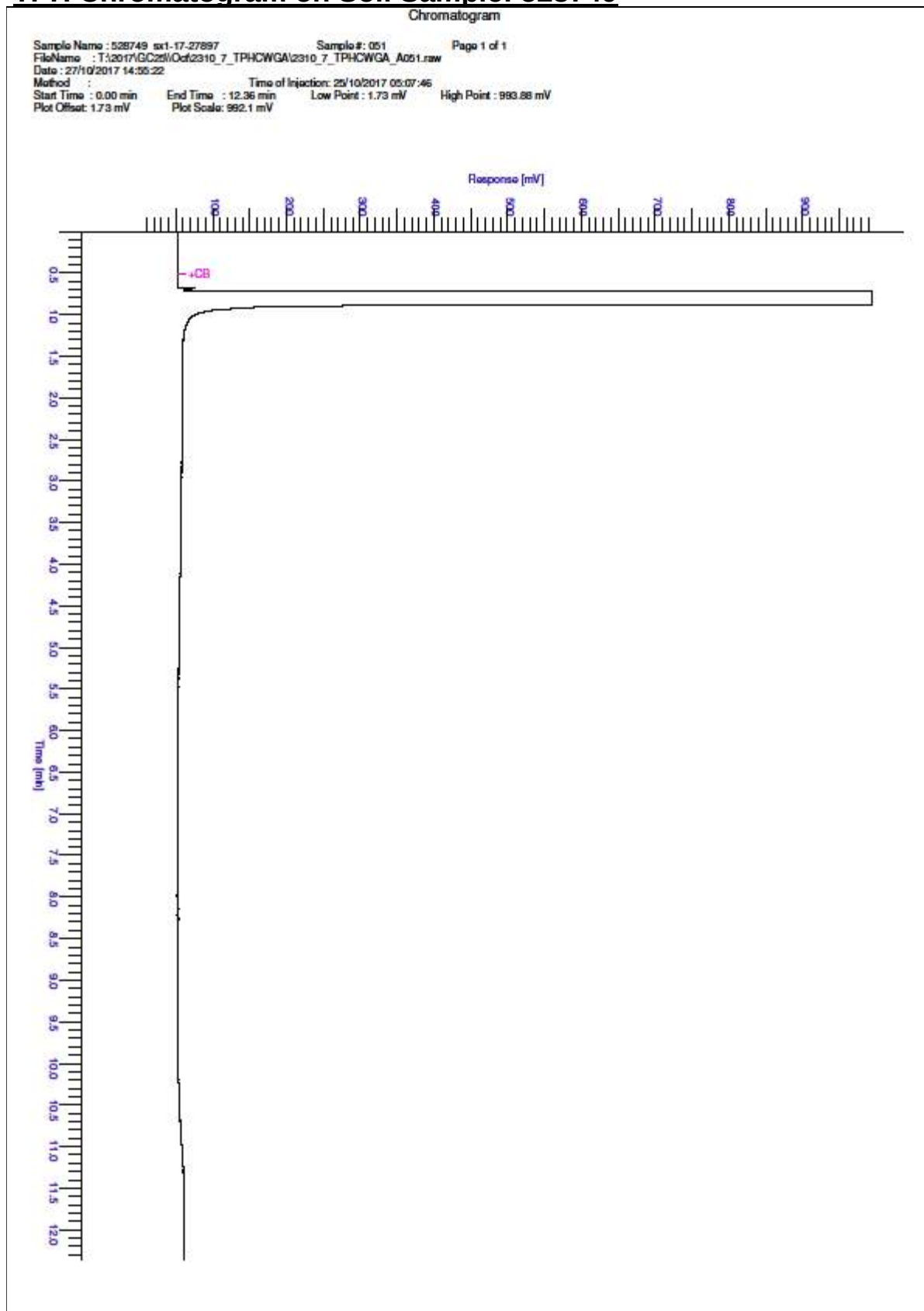
Results - Soil

Client: Albury SI	Chemtest Job No.:					17-27897	17-27897	17-27897	17-27897	17-27897	17-27897
Quotation No.: Q16-07234	Chemtest Sample ID.:					528757	528758	528759	528760	528761	528762
Order No.: 12509	Client Sample Ref.:					TP9	TP10	TP11	TP12	TP13	TP14
	Sample Type:					SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Top Depth (m):					0.2	0.1	0.2	0.1	0.2	0.1
	Date Sampled:					18-Oct-2017	18-Oct-2017	18-Oct-2017	18-Oct-2017	18-Oct-2017	18-Oct-2017
	Asbestos Lab:					COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	Accred.	SOP	Units	LOD							
ACM Type	U	2192		N/A	-	-	-	-	-	-	-
Asbestos Identification	U	2192	%	0.001	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
Moisture	N	2030	%	0.020	13	17	14	12	11	15	15
Chromatogram (TPH)	N			N/A	See Attached	See Attached	See Attached	See Attached	See Attached	See Attached	See Attached
pH	U	2010		N/A	7.5	6.3	6.3	7.8	6.9	7.6	7.6
Boron (Hot Water Soluble)	U	2120	mg/kg	0.40	0.57	0.51	0.55	0.41	0.52	0.69	0.69
Sulphate (2:1 Water Soluble) as SO ₄	U	2120	g/l	0.010	< 0.010	< 0.010	< 0.010	0.069	< 0.010	< 0.010	< 0.010
Sulphur (Elemental)	U	2180	mg/kg	1.0	< 1.0	2.3	1.2	< 1.0	< 1.0	2.4	2.4
Cyanide (Total)	U	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Sulphide (Easily Liberatable)	U	2325	mg/kg	0.50	0.99	0.91	0.94	1.0	1.1	0.97	0.97
Sulphate (Total)	U	2430	%	0.010	0.029	0.041	0.033	0.037	0.024	0.040	0.040
Arsenic	U	2450	mg/kg	1.0	33	26	24	21	22	30	30
Beryllium	U	2450	mg/kg	1.0	1.4	1.4	1.3	1.2	1.1	1.2	1.2
Cadmium	U	2450	mg/kg	0.10	0.23	0.22	0.26	0.17	0.22	0.24	0.24
Chromium	U	2450	mg/kg	1.0	19	20	21	17	19	20	20
Vanadium	U	2450	mg/kg	5.0	47	43	49	42	46	150	150
Copper	U	2450	mg/kg	0.50	19	23	23	16	15	23	23
Mercury	U	2450	mg/kg	0.10	0.16	0.17	0.22	0.14	0.31	0.18	0.18
Nickel	U	2450	mg/kg	0.50	13	13	13	12	11	12	12
Lead	U	2450	mg/kg	0.50	41	61	58	33	42	49	49
Selenium	U	2450	mg/kg	0.20	0.94	0.95	0.91	0.81	0.75	0.77	0.77
Zinc	U	2450	mg/kg	0.50	73	80	110	47	57	78	78
Chromium (Trivalent)	N	2490	mg/kg	5.0	19	20	21	17	19	20	20
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Total Organic Carbon	U	2625	%	0.20	0.87	2.4	1.1	0.68	0.82	3.4	3.4
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C8-C10	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C10-C12	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C12-C16	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C21-C35	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C8-C10	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C10-C12	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

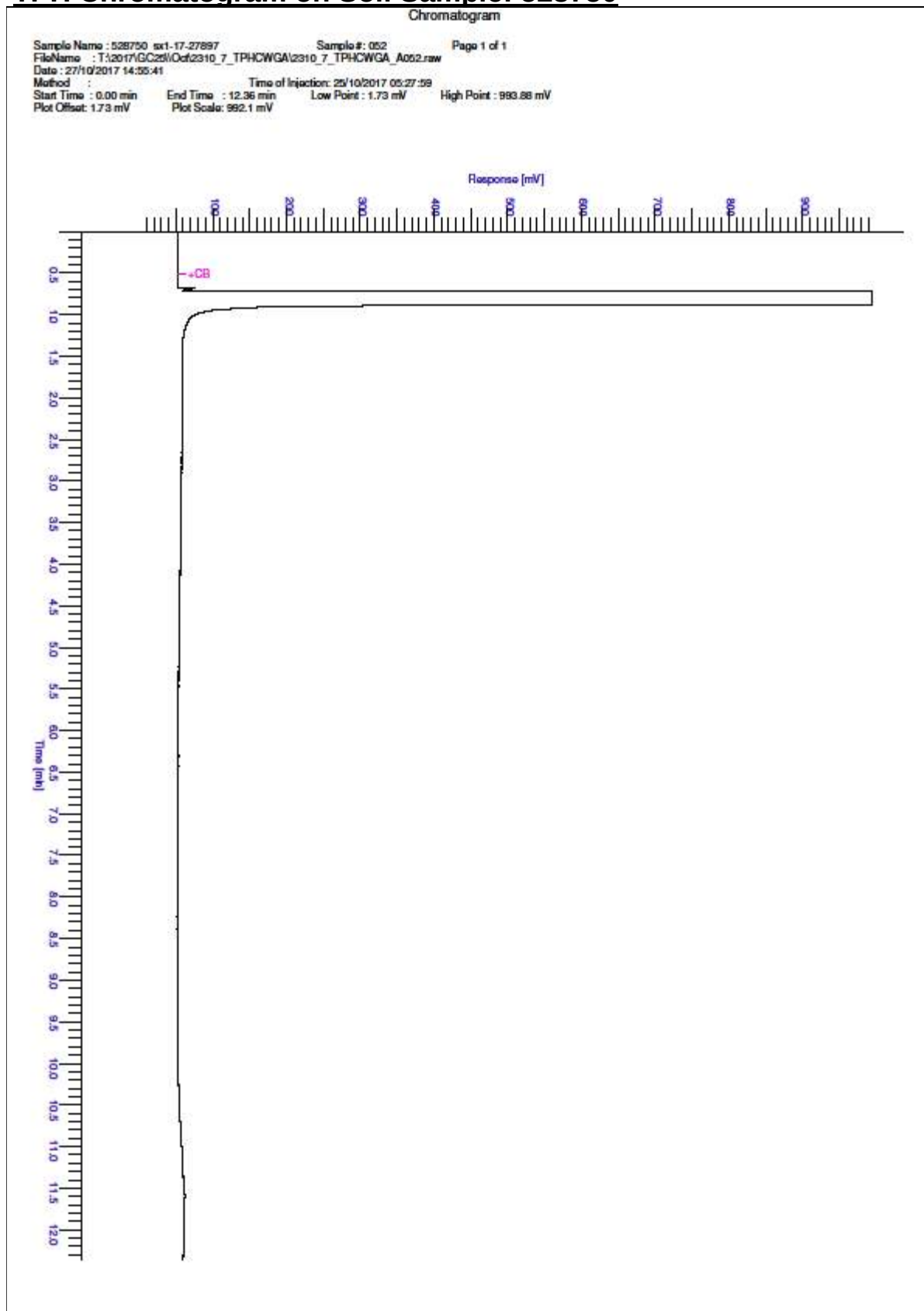
Results - Soil

Client: Albury SI	Chemtest Job No.:					17-27897	17-27897	17-27897	17-27897	17-27897	17-27897
Quotation No.: Q16-07234	Chemtest Sample ID.:					528757	528758	528759	528760	528761	528762
Order No.: 12509	Client Sample Ref.:					TP9	TP10	TP11	TP12	TP13	TP14
	Sample Type:					SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Top Depth (m):					0.2	0.1	0.2	0.1	0.2	0.1
	Date Sampled:					18-Oct-2017	18-Oct-2017	18-Oct-2017	18-Oct-2017	18-Oct-2017	18-Oct-2017
	Asbestos Lab:					COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	Accred.	SOP	Units	LOD							
Aromatic TPH >C12-C16	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0	9.1	< 1.0	4.2	< 1.0	< 1.0	4.4
Aromatic TPH >C21-C35	U	2680	mg/kg	1.0	< 1.0	27	< 1.0	13	< 1.0	< 1.0	15
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	36	< 5.0	17	< 5.0	< 5.0	19
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	< 10	36	< 10	17	< 10	< 10	19
Naphthalene	U	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene	U	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	U	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	U	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	U	2700	mg/kg	0.10	< 0.10	0.69	< 0.10	< 0.10	< 0.10	< 0.10	0.64
Anthracene	U	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	U	2700	mg/kg	0.10	0.43	2.1	0.51	< 0.10	< 0.10	< 0.10	2.2
Pyrene	U	2700	mg/kg	0.10	0.50	2.1	0.58	< 0.10	< 0.10	< 0.10	2.1
Benzo[a]anthracene	U	2700	mg/kg	0.10	< 0.10	1.6	< 0.10	< 0.10	< 0.10	< 0.10	0.71
Chrysene	U	2700	mg/kg	0.10	< 0.10	0.96	< 0.10	< 0.10	< 0.10	< 0.10	0.71
Benzo[b]fluoranthene	U	2700	mg/kg	0.10	< 0.10	1.6	< 0.10	< 0.10	< 0.10	< 0.10	0.97
Benzo[k]fluoranthene	U	2700	mg/kg	0.10	< 0.10	0.70	< 0.10	< 0.10	< 0.10	< 0.10	0.25
Benzo[a]pyrene	U	2700	mg/kg	0.10	< 0.10	1.1	< 0.10	< 0.10	< 0.10	< 0.10	0.46
Indeno(1,2,3-c,d)Pyrene	U	2700	mg/kg	0.10	< 0.10	0.63	< 0.10	< 0.10	< 0.10	< 0.10	0.52
Dibenz(a,h)Anthracene	U	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene	U	2700	mg/kg	0.10	< 0.10	0.86	< 0.10	< 0.10	< 0.10	< 0.10	0.72
Total Of 16 PAH's	U	2700	mg/kg	2.0	< 2.0	12	< 2.0	< 2.0	< 2.0	< 2.0	9.3
Total Phenols	U	2920	mg/kg	0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30

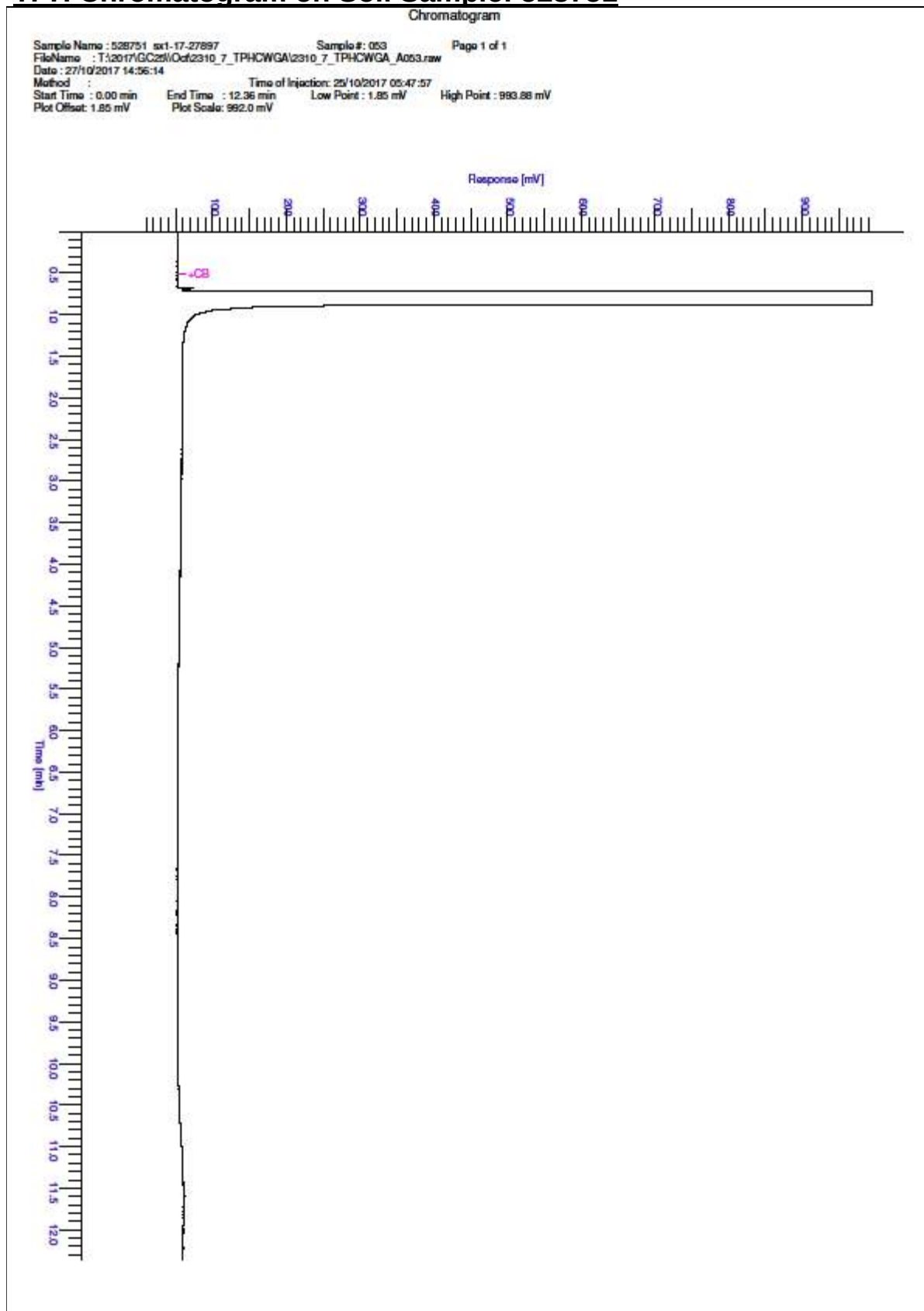
TPH Chromatogram on Soil Sample: 528749



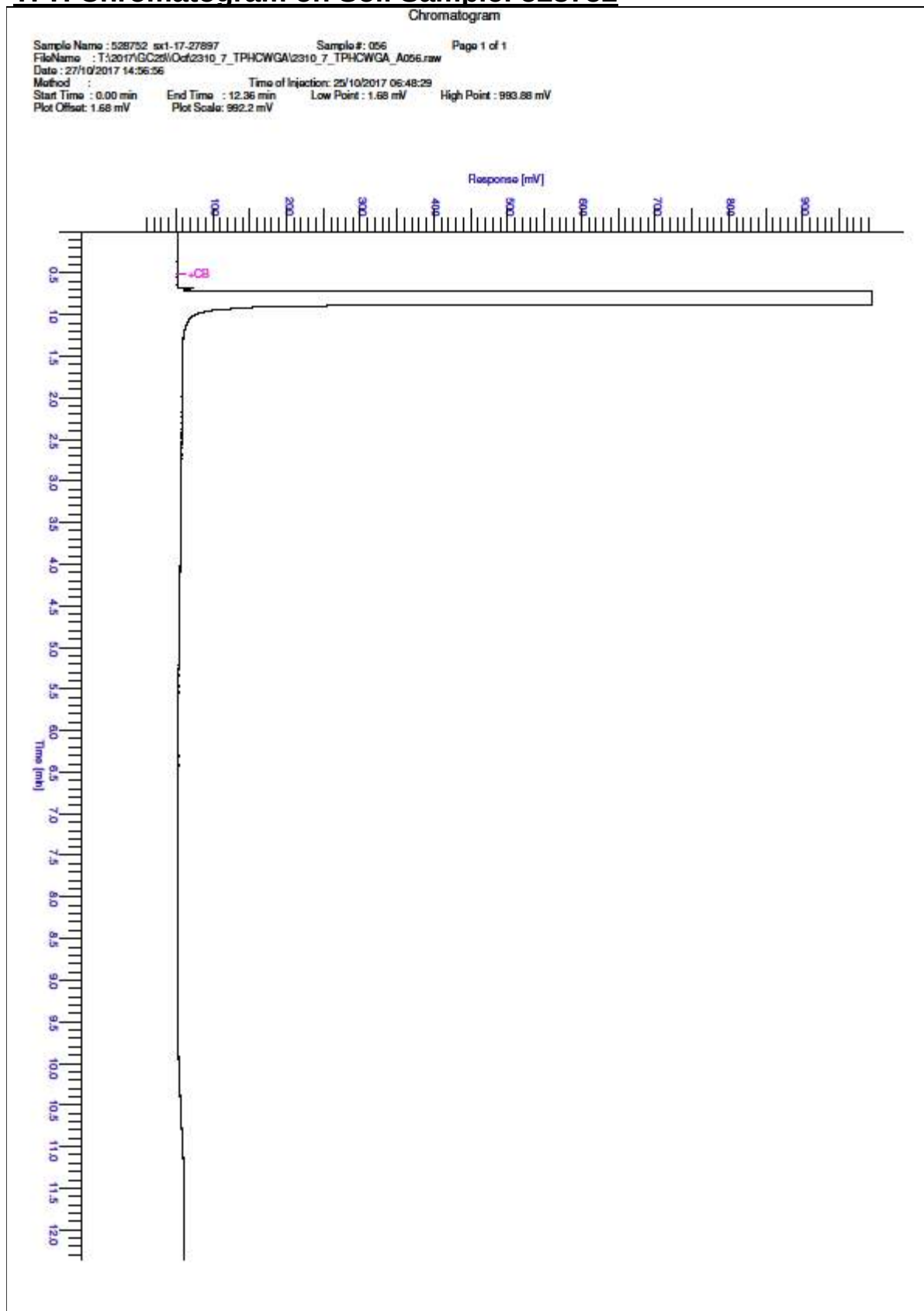
TPH Chromatogram on Soil Sample: 528750



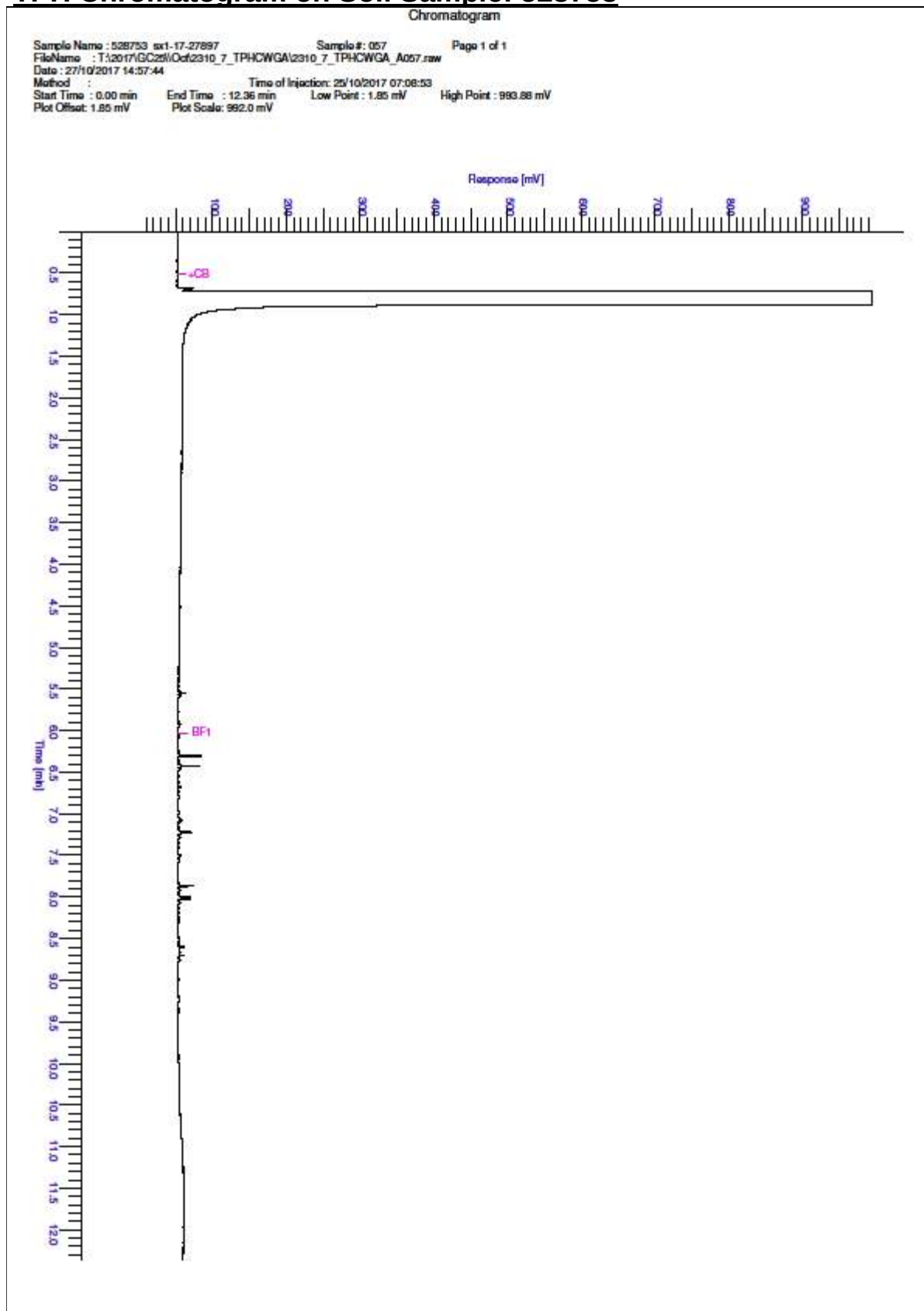
TPH Chromatogram on Soil Sample: 528751



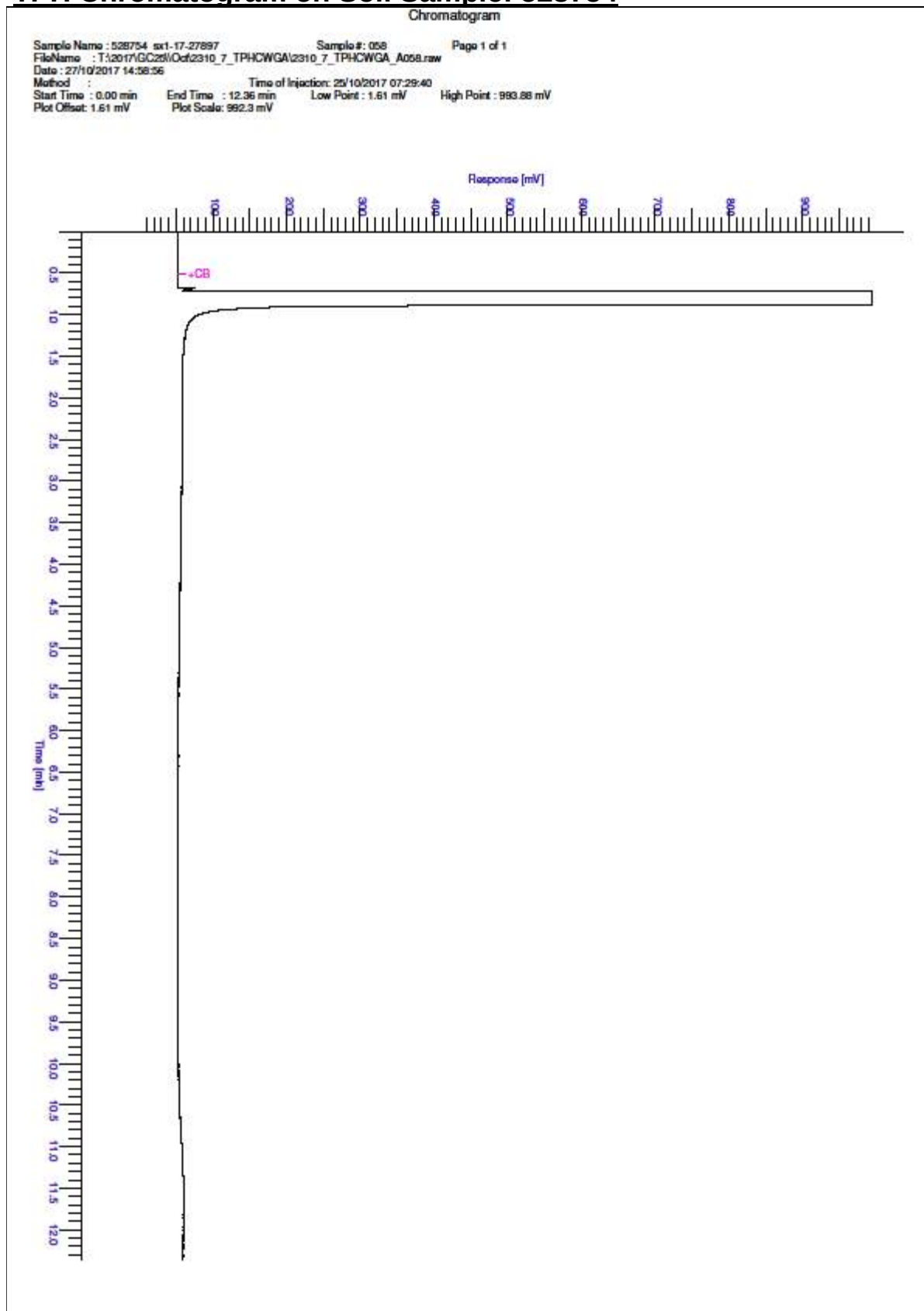
TPH Chromatogram on Soil Sample: 528752



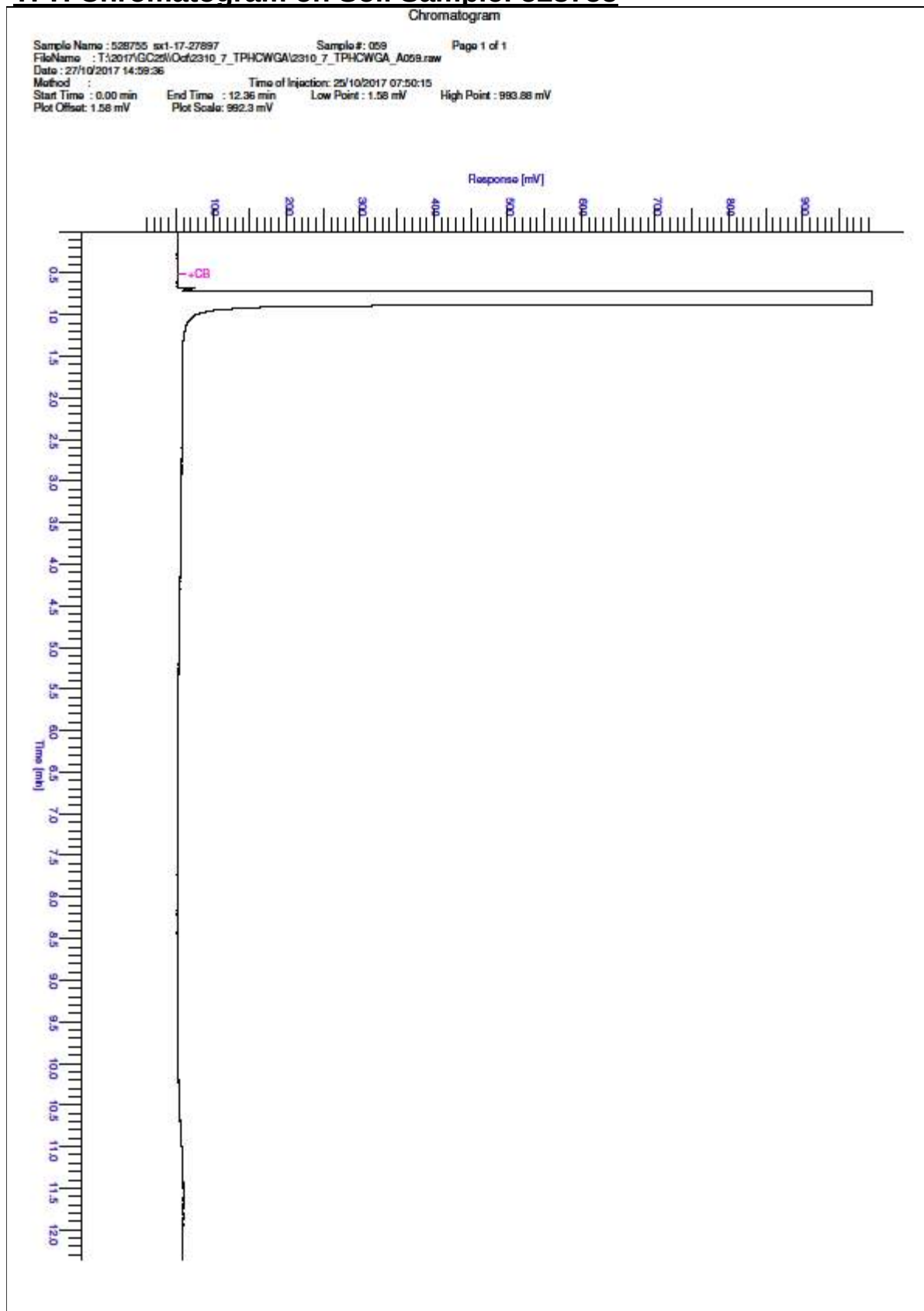
TPH Chromatogram on Soil Sample: 528753



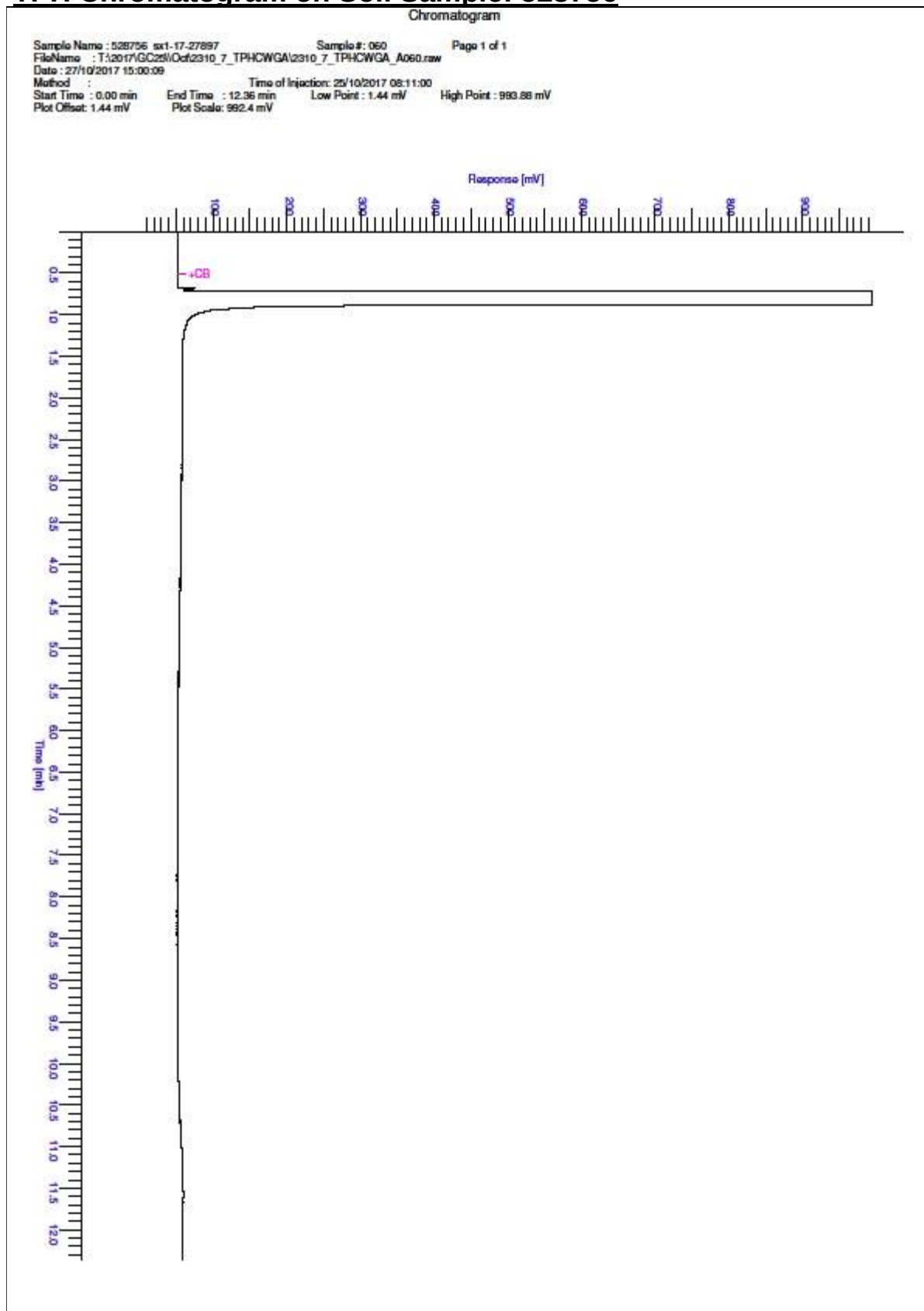
TPH Chromatogram on Soil Sample: 528754



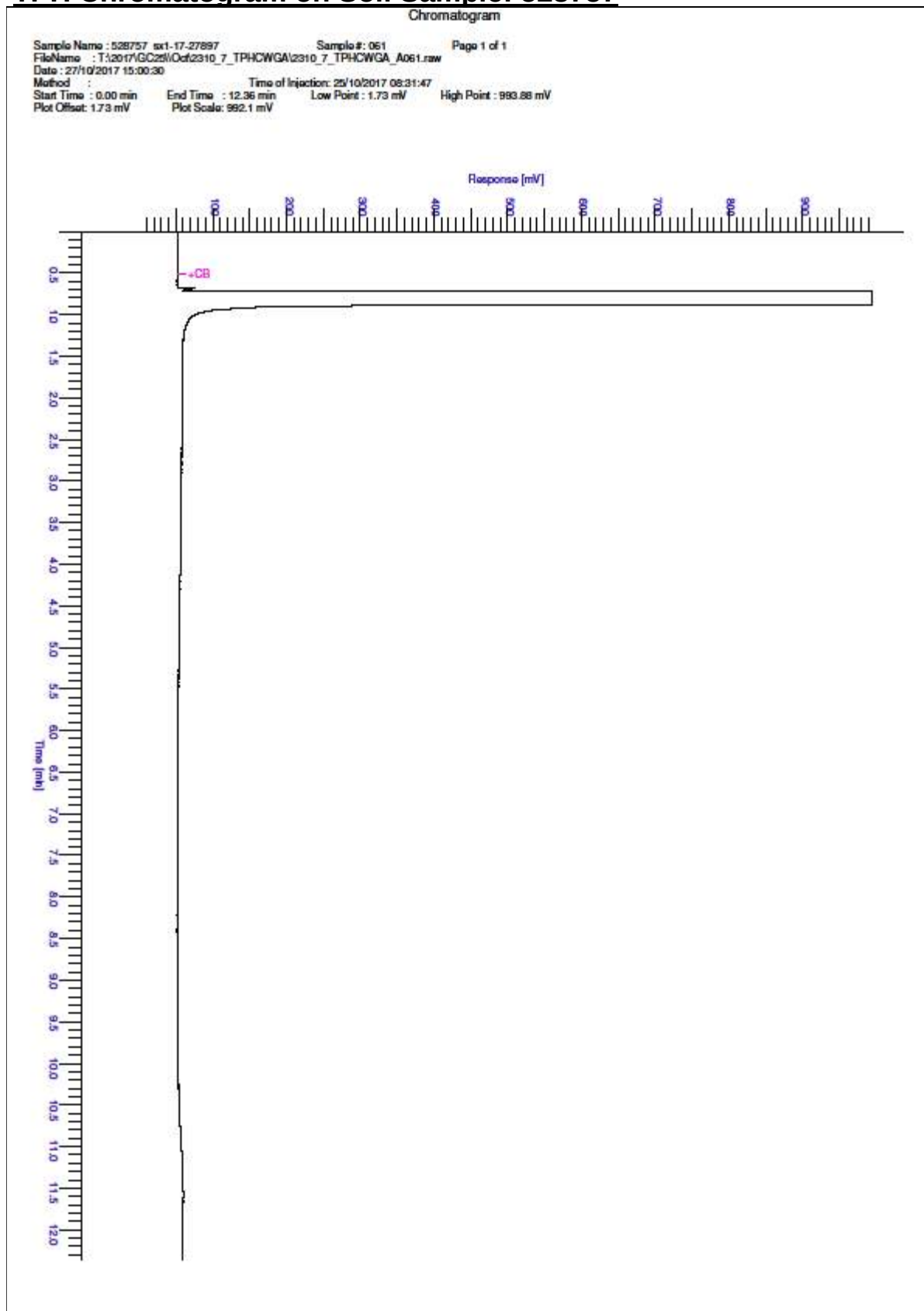
TPH Chromatogram on Soil Sample: 528755



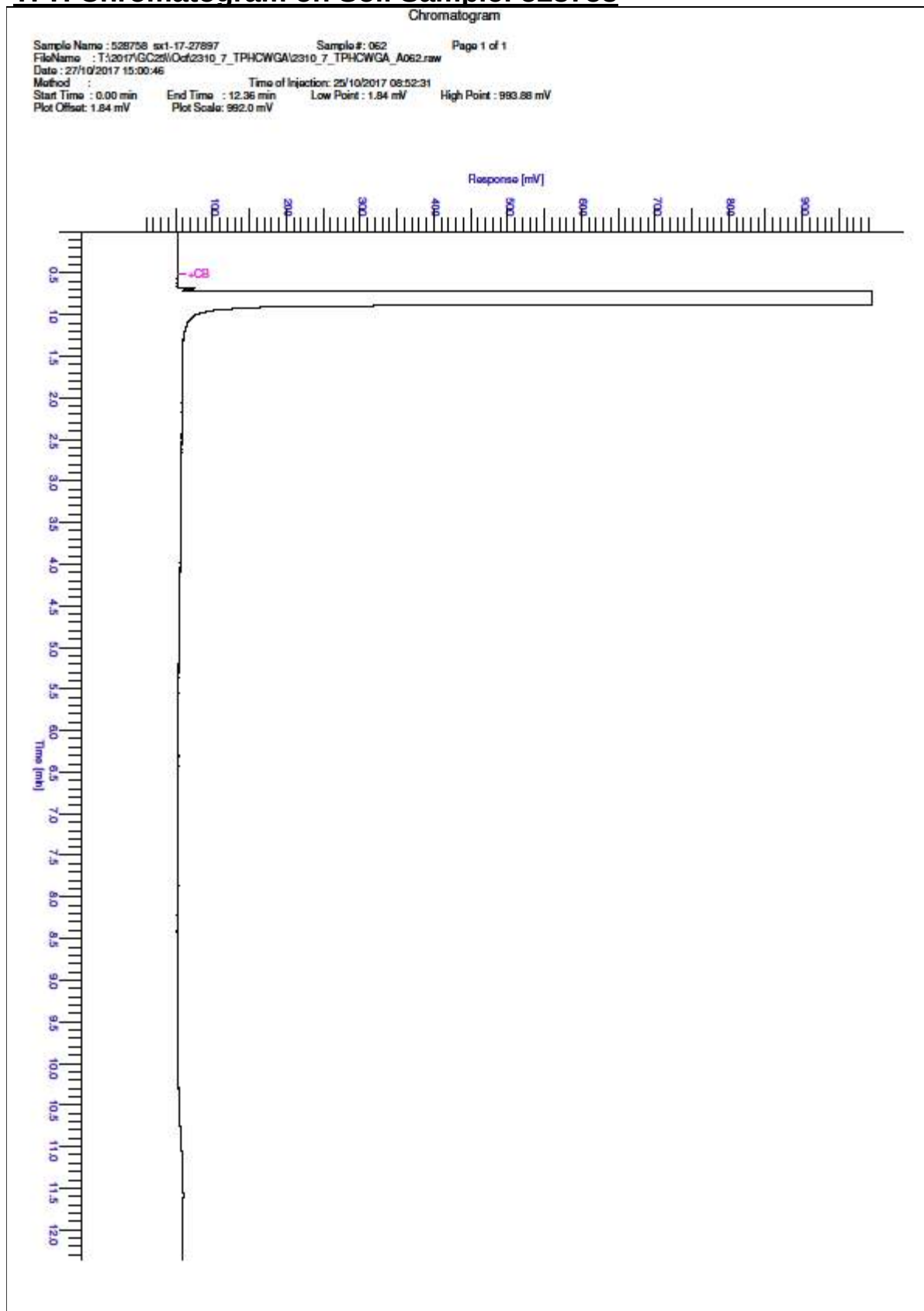
TPH Chromatogram on Soil Sample: 528756



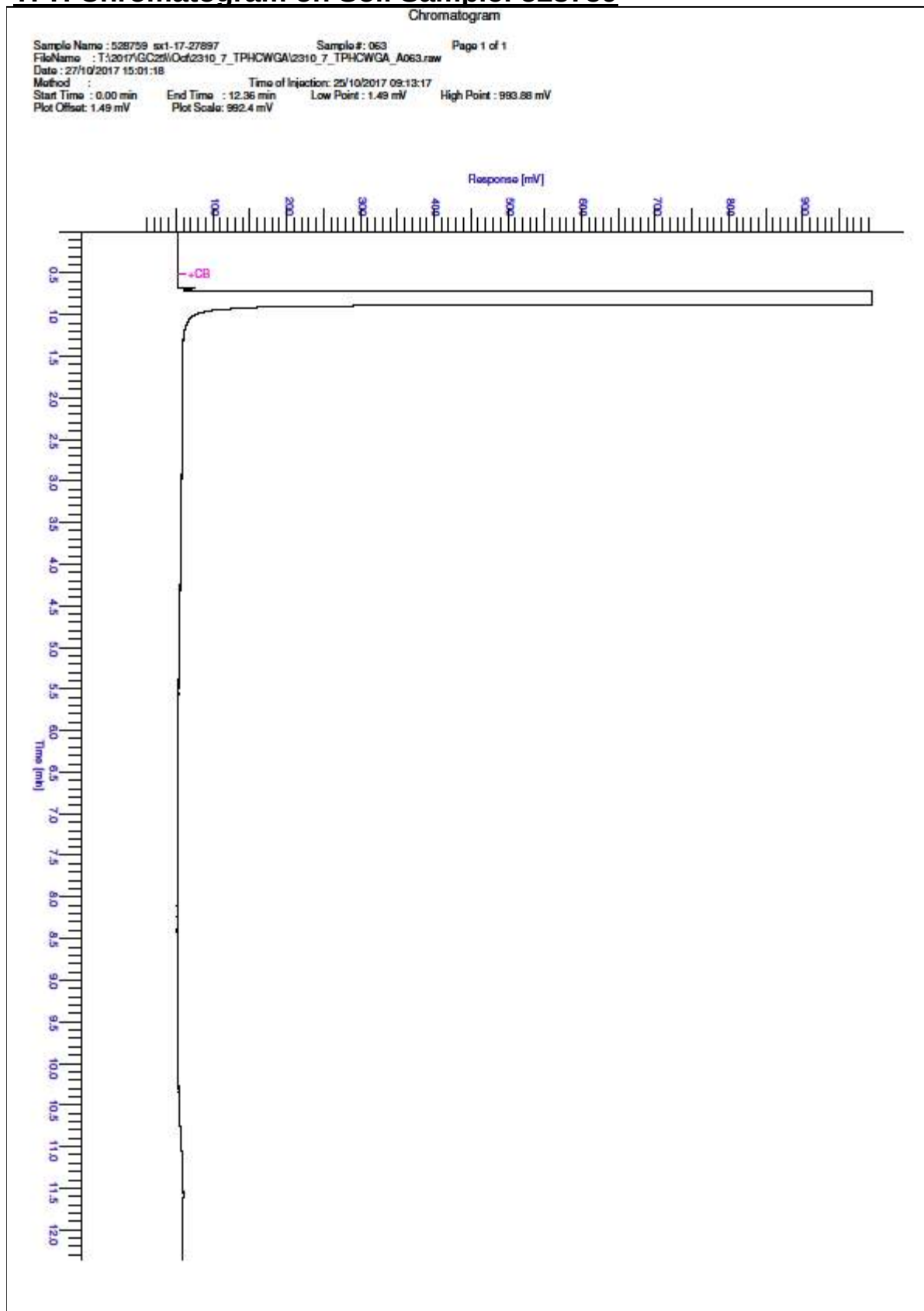
TPH Chromatogram on Soil Sample: 528757



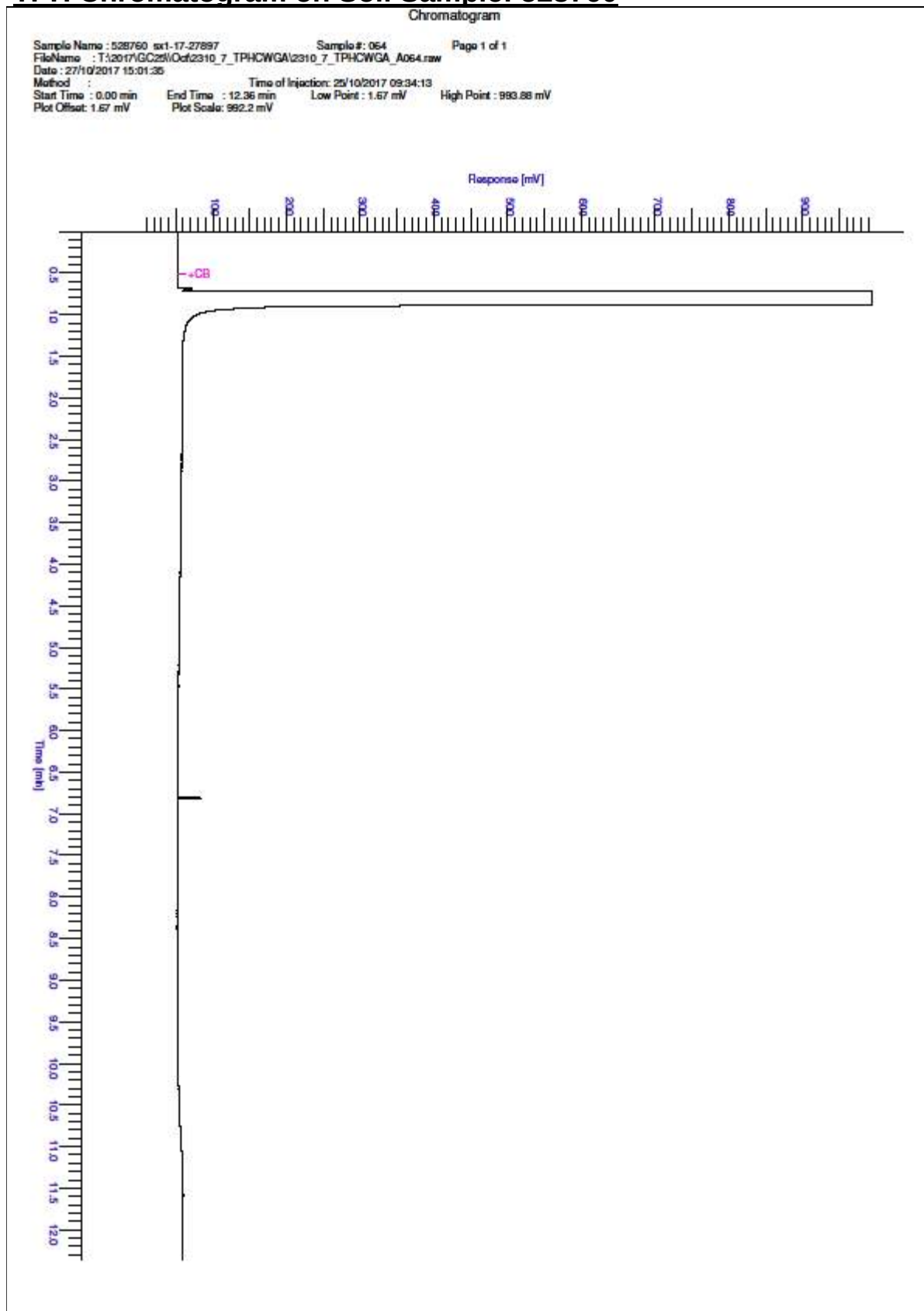
TPH Chromatogram on Soil Sample: 528758



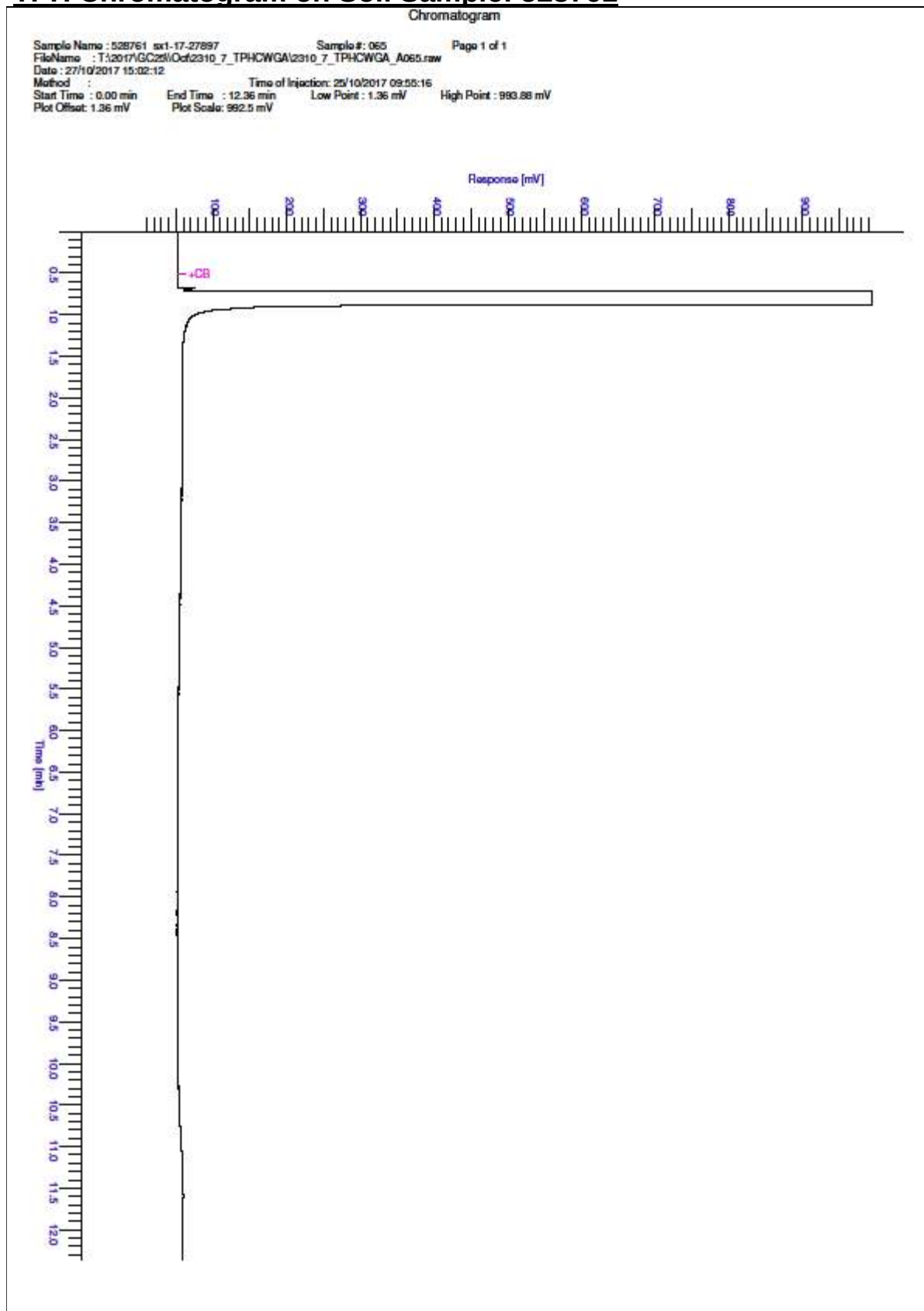
TPH Chromatogram on Soil Sample: 528759



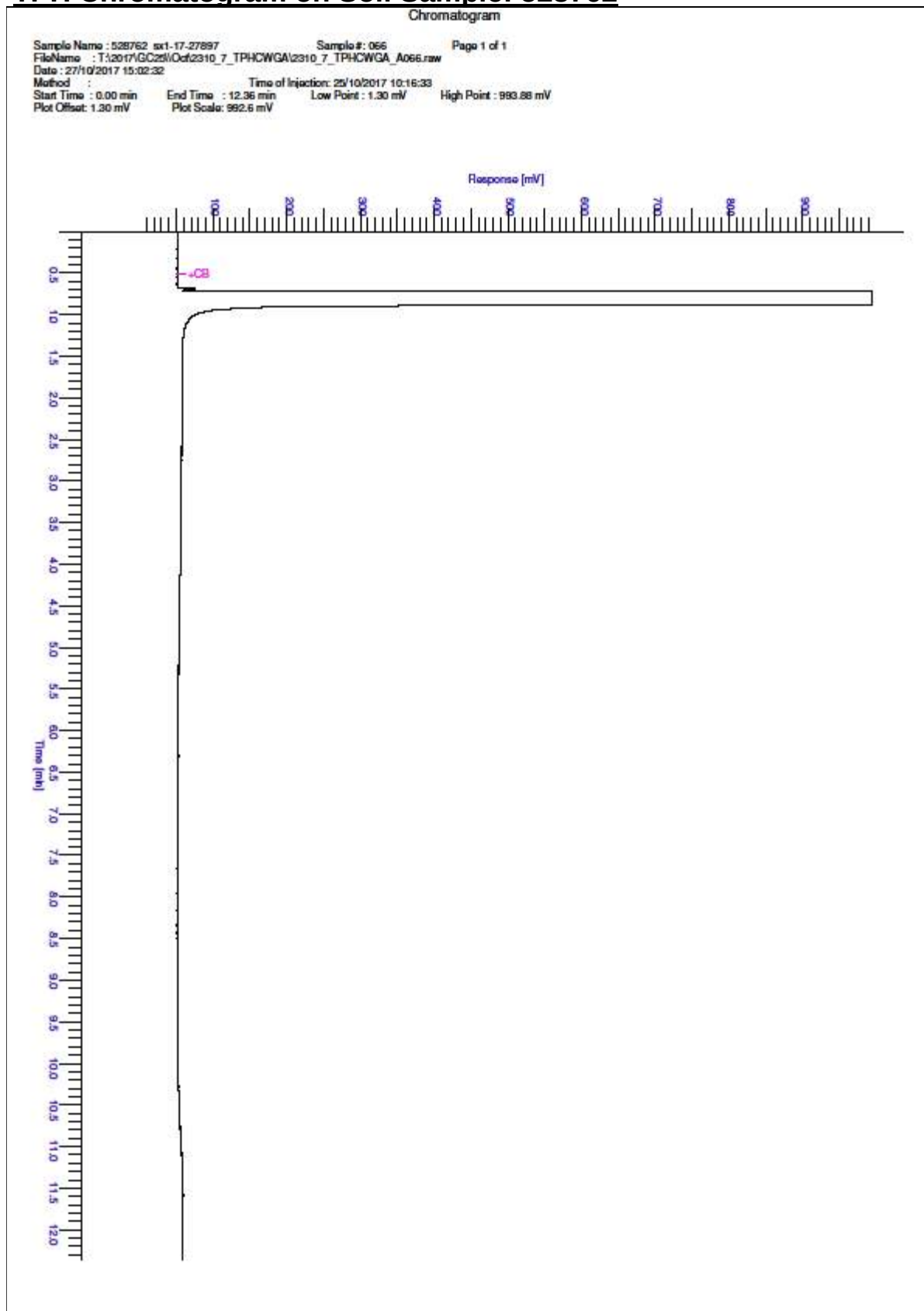
TPH Chromatogram on Soil Sample: 528760



TPH Chromatogram on Soil Sample: 528761



TPH Chromatogram on Soil Sample: 528762



Test Methods

SOP	Title	Parameters included	Method summary
2010	pH Value of Soils	pH	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 <37°C.
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES
2180	Sulphur (Elemental) in Soils by HPLC	Sulphur	Dichloromethane extraction / HPLC with UV detection
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Alkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N-dimethyl-p-phenylenediamine.
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.
2450	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2680	TPH A/A Split	Aliphatics: >C5–C6, >C6–C8,>C8–C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Dichloromethane extraction / GCxGC FID detection
2700	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-FID	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenzo[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Dichloromethane extraction / GC-FID
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.

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"

Comments or interpretations are beyond the scope of UKAS accreditation

The results relate only to the items tested

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 TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°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

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 45 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

If you require extended retention of samples, please email your requirements to:

customerservices@chemtest.co.uk

APPENDIX 3

WASTE

WASTE CLASSIFICATION

The European Waste Framework Directive is implemented in the UK by the 2002 Landfill Regulations, together with a number of other acts and regulations. A key part of this process is to establish the hazardous properties of potential waste. The classification and definition of hazardous waste is interpreted within the Environment Agency guidance WM3 and all wastes require classifying in accordance with the European Waste Catalogue [EWC]. The EWC is a detailed list of typical industry waste types and each has a 6 digit code. Typically the appropriate EWC codes for excavated soil being disposed off site are:

- 17 05 03* soil and stones containing dangerous substances, or
- 17 05 04 soil and stones other than those mentioned in 17 05 03

If excavated soils are to be discarded or exported from site then they would be considered controlled waste and require classification. However, if soils can be re-used on site then they are not considered to be controlled waste. A Desk Study, soil descriptions, laboratory chemical analysis and risk assessment can all contribute to basic waste characterisation. Depending upon the chemical composition or levels of contaminants in the waste (e.g. metals, TPH, asbestos), soil and stones can either be hazardous or non-hazardous. Waste Acceptance Criteria [WAC] test results are used to determine the suitability of the waste intended for disposal against the acceptance criteria for a particular class of landfill site. WAC tests are not used for the classification of waste soils and are only required for inert or hazardous excavated material which is destined for landfill.

Wastes containing asbestos with a concentration of >0.10% weight/weight (w/w) are generally considered to be hazardous. While waste with <0.10% w/w of asbestos are considered non-hazardous. Where free fibres or fibrous asbestos is present at concentrations of >0.001% then these are considered to pose a risk to human health and are deemed hazardous waste. These waste materials also require a suitably licensed company to handle them.

Waste Treatment

It is a requirement of the 2002 Landfill Regulations that all wastes must undergo some form of pre-treatment prior to disposal at an appropriately licensed landfill. Treatment is defined using a 'three-point test' and can include physical, chemical, biological or thermal processes, which must change the characteristics of the waste in order to:

- reduce its volume, or
- reduce its hazardous nature, or
- facilitate its handling, or
- enhance its recovery.

The exceptions to this are:

- inert waste for which treatment is not technically feasible.
- it is waste other than inert waste and treatment would not reduce its quantity or its hazards to human health or the environment.

The waste producer should either treat their own waste or ensure that the waste will be treated by a subsequent handler. The waste producer should record the type and amount of pre-treatment undertaken prior to disposal.

Examples of treatment include mechanical segregation or sorting, composting, soil treatment hubs and incineration. This can include physical sorting of waste soil types into separate stockpiles at the producer site, e.g. topsoil, made ground and natural clay, sand or gravels.

Site Name	Pulborough
Location	Stopham Road, Pulborough
Site ID	17-27897-1
Job Number	17/11139/JM
Date	30/10/2017
User Name	alburysi@gmail.com
Company Name	Albury S.I Ltd

Hole ID	Sample Depth	Hazardous Waste Y/N	HP1	HP2	HP3	HP4	HP5	HP6	HP7	HP8	HP9
TP1	0.2m	N	No	No	No	No	No	No	No	No	No
TP2	0.2m	N	No	No	No	No	No	No	No	No	No
TP3	0.1m	N	No	No	No	No	No	No	No	No	No
TP4	0.1m	N	No	No	No	No	No	No	No	No	No
TP5	0.2m	N	No	No	No	No	No	No	No	No	No
TP6	0.1m	N	No	No	No	No	No	No	No	No	No
TP7	0.2m	N	No	No	No	No	No	No	No	No	No
TP8	0.2m	N	No	No	No	No	No	No	No	No	No
TP9	0.2m	N	No	No	No	No	No	No	No	No	No
TP10	0.1m	N	No	No	No	No	No	No	No	No	No
TP11	0.2m	N	No	No	No	No	No	No	No	No	No
TP12	0.1m	N	No	No	No	No	No	No	No	No	No
TP13	0.2m	N	No	No	No	No	No	No	No	No	No
TP14	0.1m	N	No	No	No	No	No	No	No	No	No
Hole ID	Sample Depth	Hazardous Waste Y/N	HP10	HP11	HP12	HP13	HP14	HP15	HP16		
TP1	0.2m	N	No	No	No	No	No	No	No		
TP2	0.2m	N	No	No	No	No	No	No	No		
TP3	0.1m	N	No	No	No	No	No	No	No		
TP4	0.1m	N	No	No	No	No	No	No	No		
TP5	0.2m	N	No	No	No	No	No	No	No		
TP6	0.1m	N	No	No	No	No	No	No	No		
TP7	0.2m	N	No	No	No	No	No	No	No		
TP8	0.2m	N	No	No	No	No	No	No	No		
TP9	0.2m	N	No	No	No	No	No	No	No		
TP10	0.1m	N	No	No	No	No	No	No	No		
TP11	0.2m	N	No	No	No	No	No	No	No		
TP12	0.1m	N	No	No	No	No	No	No	No		
TP13	0.2m	N	No	No	No	No	No	No	No		
TP14	0.1m	N	No	No	No	No	No	No	No		

Site Name	Pulborough
Location	Stopham Road, Pulborough
Site ID	17-27897-1
Job Number	17/11139/JM
Date	30/10/2017
User Name	alburysi@gmail.com
Company Name	Albury S.I Ltd

Hole ID	Sample Depth	Contaminant	Contaminant Concentration (%)	Hazardous Waste Y/N	Hazard Property	Individual Hazard Statements Exceeded	Cumulative Hazard Statements Exceeded	Additional Hazard Statements (see notes section)
TP1	0.2m	pH	0.00000	N				
TP1	0.2m	Naphthalene	0.00000	N				H228 test
TP1	0.2m	Acenaphthylene	0.00000	N				
TP1	0.2m	Acenaphthene	0.00000	N				
TP1	0.2m	Fluorene	0.00000	N				
TP1	0.2m	Phenanthrene	0.00000	N				
TP1	0.2m	Anthracene	0.00000	N				
TP1	0.2m	Fluoranthene	0.00000	N				
TP1	0.2m	Pyrene	0.00000	N				
TP1	0.2m	Benzo(a)anthracene	0.00000	N				
TP1	0.2m	Chrysene	0.00000	N				
TP1	0.2m	Benzo(b)fluoranthene	0.00000	N				
TP1	0.2m	Benzo(k)fluoranthene	0.00000	N				
TP1	0.2m	Benzo(a)pyrene	0.00000	N				
TP1	0.2m	Indeno(1,2,3-cd)pyrene	0.00000	N				
TP1	0.2m	Di-benz(a,h.)anthracene	0.00000	N				
TP1	0.2m	Benzo(g,h,i)perylene	0.00000	N				
TP1	0.2m	Phenol	0.00000	N				
TP1	0.2m	Unknown hydrocarbon/oil with marker compound	0.00000	N				H225 test
TP1	0.2m	Arsenic	0.00276	N				
TP1	0.2m	Boron	0.00111	N				
TP1	0.2m	Cadmium	0.00003	N				
TP1	0.2m	Hexavalent Chromium	0.00000	N				
TP1	0.2m	Chromium (Total)	0.00219	N				
TP1	0.2m	Copper	0.00327	N				
TP1	0.2m	Lead	0.00270	N				
TP1	0.2m	Mercury	0.00003	N				
TP1	0.2m	Nickel	0.00219	N				
TP1	0.2m	Selenium	0.00037	N				
TP1	0.2m	Zinc	0.00000	N				
TP1	0.2m	Zincx	0.01136	N				
TP1	0.2m	Vanadium	0.00678	N				
TP2	0.2m	pH	0.00000	N				
TP2	0.2m	Naphthalene	0.00000	N				H228 test

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Job Number	17/11139/JM
Date	30/10/2017
User Name	alburysi@gmail.com
Company Name	Albury S.I Ltd

Hole ID	Sample Depth	Contaminant	Contaminant Concentration (%)	Hazardous Waste Y/N	Hazard Property	Individual Hazard Statements Exceeded	Cumulative Hazard Statements Exceeded	Additional Hazard Statements (see notes section)
TP2	0.2m	Acenaphthylene	0.00000	N				
TP2	0.2m	Acenaphthene	0.00000	N				
TP2	0.2m	Fluorene	0.00000	N				
TP2	0.2m	Phenanthrene	0.00000	N				
TP2	0.2m	Anthracene	0.00000	N				
TP2	0.2m	Fluoranthene	0.00005	N				
TP2	0.2m	Pyrene	0.00006	N				
TP2	0.2m	Benzo(a)anthracene	0.00000	N				
TP2	0.2m	Chrysene	0.00000	N				
TP2	0.2m	Benzo(b)fluoranthene	0.00000	N				
TP2	0.2m	Benzo(k)fluoranthene	0.00000	N				
TP2	0.2m	Benzo(a)pyrene	0.00000	N				
TP2	0.2m	Indeno(1,2,3-cd)pyrene	0.00000	N				
TP2	0.2m	Di-benz(a,h.)anthracene	0.00000	N				
TP2	0.2m	Benzo(g,h,i)perylene	0.00000	N				
TP2	0.2m	Phenol	0.00000	N				
TP2	0.2m	Unknown hydrocarbon/oil with marker compound	0.00290	N				H225 test
TP2	0.2m	Arsenic	0.00414	N				
TP2	0.2m	Boron	0.00192	N				
TP2	0.2m	Cadmium	0.00004	N				
TP2	0.2m	Hexavalent Chromium	0.00000	N				
TP2	0.2m	Chromium (Total)	0.00336	N				
TP2	0.2m	Copper	0.00502	N				
TP2	0.2m	Lead	0.00640	N				
TP2	0.2m	Mercury	0.00002	N				
TP2	0.2m	Nickel	0.00369	N				
TP2	0.2m	Selenium	0.00031	N				
TP2	0.2m	Zinc	0.00000	N				
TP2	0.2m	Zincx	0.01704	N				
TP2	0.2m	Vanadium	0.00946	N				
TP3	0.1m	pH	0.00000	N				
TP3	0.1m	Naphthalene	0.00000	N				H228 test
TP3	0.1m	Acenaphthylene	0.00000	N				
TP3	0.1m	Acenaphthene	0.00000	N				

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Hole ID	Sample Depth	Contaminant	Contaminant Concentration (%)	Hazardous Waste Y/N	Hazard Property	Individual Hazard Statements Exceeded	Cumulative Hazard Statements Exceeded	Additional Hazard Statements (see notes section)
TP3	0.1m	Fluorene	0.00000	N				
TP3	0.1m	Phenanthrene	0.00000	N				
TP3	0.1m	Anthracene	0.00000	N				
TP3	0.1m	Fluoranthene	0.00003	N				
TP3	0.1m	Pyrene	0.00002	N				
TP3	0.1m	Benzo(a)anthracene	0.00000	N				
TP3	0.1m	Chrysene	0.00000	N				
TP3	0.1m	Benzo(b)fluoranthene	0.00000	N				
TP3	0.1m	Benzo(k)fluoranthene	0.00000	N				
TP3	0.1m	Benzo(a)pyrene	0.00000	N				
TP3	0.1m	Indeno(1,2,3-cd)pyrene	0.00000	N				
TP3	0.1m	Di-benz(a,h.)anthracene	0.00000	N				
TP3	0.1m	Benzo(g,h,i)perylene	0.00000	N				
TP3	0.1m	Phenol	0.00006	N				
TP3	0.1m	Unknown hydrocarbon/oil with marker compound	0.00400	N				H225 test
TP3	0.1m	Arsenic	0.00276	N				
TP3	0.1m	Boron	0.00370	N				
TP3	0.1m	Cadmium	0.00005	N				
TP3	0.1m	Hexavalent Chromium	0.00000	N				
TP3	0.1m	Chromium (Total)	0.00248	N				
TP3	0.1m	Copper	0.00502	N				
TP3	0.1m	Lead	0.00300	N				
TP3	0.1m	Mercury	0.00002	N				
TP3	0.1m	Nickel	0.00224	N				
TP3	0.1m	Selenium	0.00035	N				
TP3	0.1m	Zinc	0.00000	N				
TP3	0.1m	Zincx	0.02963	N				
TP3	0.1m	Vanadium	0.00696	N				
TP4	0.1m	pH	0.00000	N				
TP4	0.1m	Naphthalene	0.00000	N				H228 test
TP4	0.1m	Acenaphthylene	0.00000	N				
TP4	0.1m	Acenaphthene	0.00000	N				
TP4	0.1m	Fluorene	0.00000	N				
TP4	0.1m	Phenanthrene	0.00000	N				

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User Name	alburysi@gmail.com
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Hole ID	Sample Depth	Contaminant	Contaminant Concentration (%)	Hazardous Waste Y/N	Hazard Property	Individual Hazard Statements Exceeded	Cumulative Hazard Statements Exceeded	Additional Hazard Statements (see notes section)
TP4	0.1m	Anthracene	0.00000	N				
TP4	0.1m	Fluoranthene	0.00006	N				
TP4	0.1m	Pyrene	0.00004	N				
TP4	0.1m	Benzo(a)anthracene	0.00000	N				
TP4	0.1m	Chrysene	0.00000	N				
TP4	0.1m	Benzo(b)fluoranthene	0.00000	N				
TP4	0.1m	Benzo(k)fluoranthene	0.00000	N				
TP4	0.1m	Benzo(a)pyrene	0.00000	N				
TP4	0.1m	Indeno(1,2,3-cd)pyrene	0.00000	N				
TP4	0.1m	Di-benz(a,h.)anthracene	0.00000	N				
TP4	0.1m	Benzo(g,h,i)perylene	0.00000	N				
TP4	0.1m	Phenol	0.00000	N				
TP4	0.1m	Unknown hydrocarbon/oil with marker compound	0.00260	N				H225 test
TP4	0.1m	Arsenic	0.00307	N				
TP4	0.1m	Boron	0.00201	N				
TP4	0.1m	Cadmium	0.00004	N				
TP4	0.1m	Hexavalent Chromium	0.00000	N				
TP4	0.1m	Chromium (Total)	0.00248	N				
TP4	0.1m	Copper	0.00377	N				
TP4	0.1m	Lead	0.00310	N				
TP4	0.1m	Mercury	0.00002	N				
TP4	0.1m	Nickel	0.00232	N				
TP4	0.1m	Selenium	0.00029	N				
TP4	0.1m	Zinc	0.00000	N				
TP4	0.1m	Zincx	0.01506	N				
TP4	0.1m	Vanadium	0.00732	N				
TP5	0.2m	pH	0.00000	N				
TP5	0.2m	Naphthalene	0.00000	N				H228 test
TP5	0.2m	Acenaphthylene	0.00000	N				
TP5	0.2m	Acenaphthene	0.00000	N				
TP5	0.2m	Fluorene	0.00000	N				
TP5	0.2m	Phenanthrene	0.00009	N				
TP5	0.2m	Anthracene	0.00000	N				
TP5	0.2m	Fluoranthene	0.00038	N				

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Hole ID	Sample Depth	Contaminant	Contaminant Concentration (%)	Hazardous Waste Y/N	Hazard Property	Individual Hazard Statements Exceeded	Cumulative Hazard Statements Exceeded	Additional Hazard Statements (see notes section)
TP5	0.2m	Pyrene	0.00039	N				
TP5	0.2m	Benzo(a)anthracene	0.00019	N				
TP5	0.2m	Chrysene	0.00023	N				
TP5	0.2m	Benzo(b)fluoranthene	0.00032	N				
TP5	0.2m	Benzo(k)fluoranthene	0.00013	N				
TP5	0.2m	Benzo(a)pyrene	0.00035	N				
TP5	0.2m	Indeno(1,2,3-cd)pyrene	0.00015	N				
TP5	0.2m	Di-benz(a,h)anthracene	0.00000	N				
TP5	0.2m	Benzo(g,h,i)perylene	0.00015	N				
TP5	0.2m	Phenol	0.00000	N				
TP5	0.2m	Unknown hydrocarbon/oil with marker compound	0.02700	N				H225 test
TP5	0.2m	Arsenic	0.00430	N				
TP5	0.2m	Boron	0.00278	N				
TP5	0.2m	Cadmium	0.00005	N				
TP5	0.2m	Hexavalent Chromium	0.00000	N				
TP5	0.2m	Chromium (Total)	0.00322	N				
TP5	0.2m	Copper	0.00477	N				
TP5	0.2m	Lead	0.00470	N				
TP5	0.2m	Mercury	0.00002	N				
TP5	0.2m	Nickel	0.00290	N				
TP5	0.2m	Selenium	0.00035	N				
TP5	0.2m	Zinc	0.00000	N				
TP5	0.2m	Zinc	0.02049	N				
TP5	0.2m	Vanadium	0.01143	N				
TP6	0.1m	pH	0.00000	N				
TP6	0.1m	Naphthalene	0.00000	N				H228 test
TP6	0.1m	Acenaphthylene	0.00000	N				
TP6	0.1m	Acenaphthene	0.00000	N				
TP6	0.1m	Fluorene	0.00000	N				
TP6	0.1m	Phenanthrene	0.00002	N				
TP6	0.1m	Anthracene	0.00000	N				
TP6	0.1m	Fluoranthene	0.00007	N				
TP6	0.1m	Pyrene	0.00009	N				
TP6	0.1m	Benzo(a)anthracene	0.00000	N				

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Hole ID	Sample Depth	Contaminant	Contaminant Concentration (%)	Hazardous Waste Y/N	Hazard Property	Individual Hazard Statements Exceeded	Cumulative Hazard Statements Exceeded	Additional Hazard Statements (see notes section)
TP6	0.1m	Chrysene	0.00000	N				
TP6	0.1m	Benzo(b)fluoranthene	0.00000	N				
TP6	0.1m	Benzo(k)fluoranthene	0.00000	N				
TP6	0.1m	Benzo(a)pyrene	0.00000	N				
TP6	0.1m	Indeno(1,2,3-cd)pyrene	0.00000	N				
TP6	0.1m	Di-benz(a,h.)anthracene	0.00000	N				
TP6	0.1m	Benzo(g,h,i)perylene	0.00000	N				
TP6	0.1m	Phenol	0.00000	N				
TP6	0.1m	Unknown hydrocarbon/oil with marker compound	0.00250	N				H225 test
TP6	0.1m	Arsenic	0.00307	N				
TP6	0.1m	Boron	0.00278	N				
TP6	0.1m	Cadmium	0.00006	N				
TP6	0.1m	Hexavalent Chromium	0.00000	N				
TP6	0.1m	Chromium (Total)	0.00248	N				
TP6	0.1m	Copper	0.00553	N				
TP6	0.1m	Lead	0.00450	N				
TP6	0.1m	Mercury	0.00002	N				
TP6	0.1m	Nickel	0.00248	N				
TP6	0.1m	Selenium	0.00033	N				
TP6	0.1m	Zinc	0.00000	N				
TP6	0.1m	Zinc	0.02346	N				
TP6	0.1m	Vanadium	0.00732	N				
TP7	0.2m	pH	0.00000	N				
TP7	0.2m	Naphthalene	0.00000	N				H228 test
TP7	0.2m	Acenaphthylene	0.00000	N				
TP7	0.2m	Acenaphthene	0.00000	N				
TP7	0.2m	Fluorene	0.00000	N				
TP7	0.2m	Phenanthrene	0.00000	N				
TP7	0.2m	Anthracene	0.00000	N				
TP7	0.2m	Fluoranthene	0.00008	N				
TP7	0.2m	Pyrene	0.00008	N				
TP7	0.2m	Benzo(a)anthracene	0.00000	N				
TP7	0.2m	Chrysene	0.00000	N				
TP7	0.2m	Benzo(b)fluoranthene	0.00000	N				

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Hole ID	Sample Depth	Contaminant	Contaminant Concentration (%)	Hazardous Waste Y/N	Hazard Property	Individual Hazard Statements Exceeded	Cumulative Hazard Statements Exceeded	Additional Hazard Statements (see notes section)
TP7	0.2m	Benzo(k)fluoranthene	0.00000	N				
TP7	0.2m	Benzo(a)pyrene	0.00000	N				
TP7	0.2m	Indeno(1,2,3-cd)pyrene	0.00000	N				
TP7	0.2m	Di-benz(a,h)anthracene	0.00000	N				
TP7	0.2m	Benzo(g,h,i)perylene	0.00000	N				
TP7	0.2m	Phenol	0.00000	N				
TP7	0.2m	Unknown hydrocarbon/oil with marker compound	0.00150	N				H225 test
TP7	0.2m	Arsenic	0.00368	N				
TP7	0.2m	Boron	0.00104	N				
TP7	0.2m	Cadmium	0.00003	N				
TP7	0.2m	Hexavalent Chromium	0.00000	N				
TP7	0.2m	Chromium (Total)	0.00292	N				
TP7	0.2m	Copper	0.00427	N				
TP7	0.2m	Lead	0.00280	N				
TP7	0.2m	Mercury	0.00001	N				
TP7	0.2m	Nickel	0.00316	N				
TP7	0.2m	Selenium	0.00021	N				
TP7	0.2m	Zinc	0.00000	N				
TP7	0.2m	Zincx	0.01358	N				
TP7	0.2m	Vanadium	0.00857	N				
TP8	0.2m	pH	0.00000	N				
TP8	0.2m	Naphthalene	0.00000	N				H228 test
TP8	0.2m	Acenaphthylene	0.00000	N				
TP8	0.2m	Acenaphthene	0.00000	N				
TP8	0.2m	Fluorene	0.00000	N				
TP8	0.2m	Phenanthrene	0.00000	N				
TP8	0.2m	Anthracene	0.00000	N				
TP8	0.2m	Fluoranthene	0.00000	N				
TP8	0.2m	Pyrene	0.00000	N				
TP8	0.2m	Benzo(a)anthracene	0.00000	N				
TP8	0.2m	Chrysene	0.00000	N				
TP8	0.2m	Benzo(b)fluoranthene	0.00000	N				
TP8	0.2m	Benzo(k)fluoranthene	0.00000	N				
TP8	0.2m	Benzo(a)pyrene	0.00000	N				

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Hole ID	Sample Depth	Contaminant	Contaminant Concentration (%)	Hazardous Waste Y/N	Hazard Property	Individual Hazard Statements Exceeded	Cumulative Hazard Statements Exceeded	Additional Hazard Statements (see notes section)
TP8	0.2m	Indeno(1,2,3-cd)pyrene	0.00000	N				
TP8	0.2m	Di-benz(a,h.)anthracene	0.00000	N				
TP8	0.2m	Benzo(g,h,i)perylene	0.00000	N				
TP8	0.2m	Phenol	0.00000	N				
TP8	0.2m	Unknown hydrocarbon/oil with marker compound	0.00000	N				H225 test
TP8	0.2m	Arsenic	0.00353	N				
TP8	0.2m	Boron	0.00097	N				
TP8	0.2m	Cadmium	0.00003	N				
TP8	0.2m	Hexavalent Chromium	0.00000	N				
TP8	0.2m	Chromium (Total)	0.00263	N				
TP8	0.2m	Copper	0.00402	N				
TP8	0.2m	Lead	0.00320	N				
TP8	0.2m	Mercury	0.00001	N				
TP8	0.2m	Nickel	0.00316	N				
TP8	0.2m	Selenium	0.00027	N				
TP8	0.2m	Zinc	0.00000	N				
TP8	0.2m	Zincx	0.01407	N				
TP8	0.2m	Vanadium	0.00768	N				
TP9	0.2m	pH	0.00000	N				
TP9	0.2m	Naphthalene	0.00000	N				H228 test
TP9	0.2m	Acenaphthylene	0.00000	N				
TP9	0.2m	Acenaphthene	0.00000	N				
TP9	0.2m	Fluorene	0.00000	N				
TP9	0.2m	Phenanthrene	0.00000	N				
TP9	0.2m	Anthracene	0.00000	N				
TP9	0.2m	Fluoranthene	0.00004	N				
TP9	0.2m	Pyrene	0.00005	N				
TP9	0.2m	Benzo(a)anthracene	0.00000	N				
TP9	0.2m	Chrysene	0.00000	N				
TP9	0.2m	Benzo(b)fluoranthene	0.00000	N				
TP9	0.2m	Benzo(k)fluoranthene	0.00000	N				
TP9	0.2m	Benzo(a)pyrene	0.00000	N				
TP9	0.2m	Indeno(1,2,3-cd)pyrene	0.00000	N				
TP9	0.2m	Di-benz(a,h.)anthracene	0.00000	N				

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Hole ID	Sample Depth	Contaminant	Contaminant Concentration (%)	Hazardous Waste Y/N	Hazard Property	Individual Hazard Statements Exceeded	Cumulative Hazard Statements Exceeded	Additional Hazard Statements (see notes section)
TP9	0.2m	Benzo(g,h,i)perylene	0.00000	N				
TP9	0.2m	Phenol	0.00000	N				
TP9	0.2m	Unknown hydrocarbon/oil with marker compound	0.00000	N				H225 test
TP9	0.2m	Arsenic	0.00506	N				
TP9	0.2m	Boron	0.00132	N				
TP9	0.2m	Cadmium	0.00004	N				
TP9	0.2m	Hexavalent Chromium	0.00000	N				
TP9	0.2m	Chromium (Total)	0.00278	N				
TP9	0.2m	Copper	0.00477	N				
TP9	0.2m	Lead	0.00410	N				
TP9	0.2m	Mercury	0.00002	N				
TP9	0.2m	Nickel	0.00343	N				
TP9	0.2m	Selenium	0.00035	N				
TP9	0.2m	Zinc	0.00000	N				
TP9	0.2m	Zincx	0.01802	N				
TP9	0.2m	Vanadium	0.00839	N				
TP10	0.1m	pH	0.00000	N				
TP10	0.1m	Naphthalene	0.00000	N				H228 test
TP10	0.1m	Acenaphthylene	0.00000	N				
TP10	0.1m	Acenaphthene	0.00000	N				
TP10	0.1m	Fluorene	0.00000	N				
TP10	0.1m	Phenanthrene	0.00007	N				
TP10	0.1m	Anthracene	0.00000	N				
TP10	0.1m	Fluoranthene	0.00021	N				
TP10	0.1m	Pyrene	0.00021	N				
TP10	0.1m	Benzo(a)anthracene	0.00016	N				
TP10	0.1m	Chrysene	0.00010	N				
TP10	0.1m	Benzo(b)fluoranthene	0.00016	N				
TP10	0.1m	Benzo(k)fluoranthene	0.00007	N				
TP10	0.1m	Benzo(a)pyrene	0.00011	N				
TP10	0.1m	Indeno(1,2,3-cd)pyrene	0.00006	N				
TP10	0.1m	Di-benz(a,h)anthracene	0.00000	N				
TP10	0.1m	Benzo(g,h,i)perylene	0.00009	N				
TP10	0.1m	Phenol	0.00000	N				

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Hole ID	Sample Depth	Contaminant	Contaminant Concentration (%)	Hazardous Waste Y/N	Hazard Property	Individual Hazard Statements Exceeded	Cumulative Hazard Statements Exceeded	Additional Hazard Statements (see notes section)
TP10	0.1m	Unknown hydrocarbon/oil with marker compound	0.00360	N				H225 test
TP10	0.1m	Arsenic	0.00399	N				
TP10	0.1m	Boron	0.00118	N				
TP10	0.1m	Cadmium	0.00004	N				
TP10	0.1m	Hexavalent Chromium	0.00000	N				
TP10	0.1m	Chromium (Total)	0.00292	N				
TP10	0.1m	Copper	0.00578	N				
TP10	0.1m	Lead	0.00610	N				
TP10	0.1m	Mercury	0.00002	N				
TP10	0.1m	Nickel	0.00343	N				
TP10	0.1m	Selenium	0.00036	N				
TP10	0.1m	Zinc	0.00000	N				
TP10	0.1m	Zincx	0.01975	N				
TP10	0.1m	Vanadium	0.00768	N				
TP11	0.2m	pH	0.00000	N				
TP11	0.2m	Naphthalene	0.00000	N				H228 test
TP11	0.2m	Acenaphthylene	0.00000	N				
TP11	0.2m	Acenaphthene	0.00000	N				
TP11	0.2m	Fluorene	0.00000	N				
TP11	0.2m	Phenanthrene	0.00000	N				
TP11	0.2m	Anthracene	0.00000	N				
TP11	0.2m	Fluoranthene	0.00005	N				
TP11	0.2m	Pyrene	0.00006	N				
TP11	0.2m	Benzo(a)anthracene	0.00000	N				
TP11	0.2m	Chrysene	0.00000	N				
TP11	0.2m	Benzo(b)fluoranthene	0.00000	N				
TP11	0.2m	Benzo(k)fluoranthene	0.00000	N				
TP11	0.2m	Benzo(a)pyrene	0.00000	N				
TP11	0.2m	Indeno(1,2,3-cd)pyrene	0.00000	N				
TP11	0.2m	Di-benz(a,h)anthracene	0.00000	N				
TP11	0.2m	Benzo(g,h,i)perylene	0.00000	N				
TP11	0.2m	Phenol	0.00000	N				
TP11	0.2m	Unknown hydrocarbon/oil with marker compound	0.00000	N				H225 test

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TP11	0.2m	Arsenic	0.00368	N				
TP11	0.2m	Boron	0.00127	N				
TP11	0.2m	Cadmium	0.00005	N				
TP11	0.2m	Hexavalent Chromium	0.00000	N				
TP11	0.2m	Chromium (Total)	0.00307	N				
TP11	0.2m	Copper	0.00578	N				
TP11	0.2m	Lead	0.00580	N				
TP11	0.2m	Mercury	0.00002	N				
TP11	0.2m	Nickel	0.00343	N				
TP11	0.2m	Selenium	0.00034	N				
TP11	0.2m	Zinc	0.00000	N				
TP11	0.2m	Zincx	0.02716	N				
TP11	0.2m	Vanadium	0.00875	N				
TP12	0.1m	pH	0.00000	N				
TP12	0.1m	Naphthalene	0.00000	N				H228 test
TP12	0.1m	Acenaphthylene	0.00000	N				
TP12	0.1m	Acenaphthene	0.00000	N				
TP12	0.1m	Fluorene	0.00000	N				
TP12	0.1m	Phenanthrene	0.00000	N				
TP12	0.1m	Anthracene	0.00000	N				
TP12	0.1m	Fluoranthene	0.00000	N				
TP12	0.1m	Pyrene	0.00000	N				
TP12	0.1m	Benzo(a)anthracene	0.00000	N				
TP12	0.1m	Chrysene	0.00000	N				
TP12	0.1m	Benzo(b)fluoranthene	0.00000	N				
TP12	0.1m	Benzo(k)fluoranthene	0.00000	N				
TP12	0.1m	Benzo(a)pyrene	0.00000	N				
TP12	0.1m	Indeno(1,2,3-cd)pyrene	0.00000	N				
TP12	0.1m	Di-benz(a,h)anthracene	0.00000	N				
TP12	0.1m	Benzo(g,h,i)perylene	0.00000	N				
TP12	0.1m	Phenol	0.00000	N				
TP12	0.1m	Unknown hydrocarbon/oil with marker compound	0.00170	N				H225 test
TP12	0.1m	Arsenic	0.00322	N				
TP12	0.1m	Boron	0.00095	N				

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Hole ID	Sample Depth	Contaminant	Contaminant Concentration (%)	Hazardous Waste Y/N	Hazard Property	Individual Hazard Statements Exceeded	Cumulative Hazard Statements Exceeded	Additional Hazard Statements (see notes section)
TP12	0.1m	Cadmium	0.00003	N				
TP12	0.1m	Hexavalent Chromium	0.00000	N				
TP12	0.1m	Chromium (Total)	0.00248	N				
TP12	0.1m	Copper	0.00402	N				
TP12	0.1m	Lead	0.00330	N				
TP12	0.1m	Mercury	0.00001	N				
TP12	0.1m	Nickel	0.00316	N				
TP12	0.1m	Selenium	0.00030	N				
TP12	0.1m	Zinc	0.00000	N				
TP12	0.1m	Zincx	0.01160	N				
TP12	0.1m	Vanadium	0.00750	N				
TP13	0.2m	pH	0.00000	N				
TP13	0.2m	Naphthalene	0.00000	N				H228 test
TP13	0.2m	Acenaphthylene	0.00000	N				
TP13	0.2m	Acenaphthene	0.00000	N				
TP13	0.2m	Fluorene	0.00000	N				
TP13	0.2m	Phenanthrene	0.00000	N				
TP13	0.2m	Anthracene	0.00000	N				
TP13	0.2m	Fluoranthene	0.00000	N				
TP13	0.2m	Pyrene	0.00000	N				
TP13	0.2m	Benzo(a)anthracene	0.00000	N				
TP13	0.2m	Chrysene	0.00000	N				
TP13	0.2m	Benzo(b)fluoranthene	0.00000	N				
TP13	0.2m	Benzo(k)fluoranthene	0.00000	N				
TP13	0.2m	Benzo(a)pyrene	0.00000	N				
TP13	0.2m	Indeno(1,2,3-cd)pyrene	0.00000	N				
TP13	0.2m	Di-benz(a,h)anthracene	0.00000	N				
TP13	0.2m	Benzo(g,h,i)perylene	0.00000	N				
TP13	0.2m	Phenol	0.00000	N				
TP13	0.2m	Unknown hydrocarbon/oil with marker compound	0.00000	N				H225 test
TP13	0.2m	Arsenic	0.00337	N				
TP13	0.2m	Boron	0.00120	N				
TP13	0.2m	Cadmium	0.00004	N				
TP13	0.2m	Hexavalent Chromium	0.00000	N				

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TP13	0.2m	Chromium (Total)	0.00278	N				
TP13	0.2m	Copper	0.00377	N				
TP13	0.2m	Lead	0.00420	N				
TP13	0.2m	Mercury	0.00003	N				
TP13	0.2m	Nickel	0.00290	N				
TP13	0.2m	Selenium	0.00028	N				
TP13	0.2m	Zinc	0.00000	N				
TP13	0.2m	Zincx	0.01407	N				
TP13	0.2m	Vanadium	0.00821	N				
TP14	0.1m	pH	0.00000	N				
TP14	0.1m	Naphthalene	0.00000	N				H228 test
TP14	0.1m	Acenaphthylene	0.00000	N				
TP14	0.1m	Acenaphthene	0.00000	N				
TP14	0.1m	Fluorene	0.00000	N				
TP14	0.1m	Phenanthrene	0.00006	N				
TP14	0.1m	Anthracene	0.00000	N				
TP14	0.1m	Fluoranthene	0.00022	N				
TP14	0.1m	Pyrene	0.00021	N				
TP14	0.1m	Benzo(a)anthracene	0.00007	N				
TP14	0.1m	Chrysene	0.00007	N				
TP14	0.1m	Benzo(b)fluoranthene	0.00010	N				
TP14	0.1m	Benzo(k)fluoranthene	0.00003	N				
TP14	0.1m	Benzo(a)pyrene	0.00005	N				
TP14	0.1m	Indeno(1,2,3-cd)pyrene	0.00005	N				
TP14	0.1m	Di-benz(a,h.)anthracene	0.00000	N				
TP14	0.1m	Benzo(g,h,i)perylene	0.00007	N				
TP14	0.1m	Phenol	0.00000	N				
TP14	0.1m	Unknown hydrocarbon/oil with marker compound	0.00190	N				H225 test
TP14	0.1m	Arsenic	0.00460	N				
TP14	0.1m	Boron	0.00160	N				
TP14	0.1m	Cadmium	0.00004	N				
TP14	0.1m	Hexavalent Chromium	0.00000	N				
TP14	0.1m	Chromium (Total)	0.00292	N				
TP14	0.1m	Copper	0.00578	N				

[illegible]

Hazardous Property	Description	Hazard Statement	Note
HP1	Explosive	H200, H201, H202, H203, H204, H240 and H241	A waste is assessed for HP1 via test methods, rather than a concentration limit. If you have substances or a mixture containing explosive properties the waste should be tested in accordance with the European Chemical Agency's guidance on the application of the CLP Criteria.
HP2	Oxidising	H270, H271, H272	A waste is assessed for HP2 via test methods, rather than a concentration limit. If you have substances or a mixture containing oxidising properties the waste should be tested in accordance with the European Chemical Agency's guidance on the application of the CLP Criteria.
HP3	Flammable	H220 to H226, H228, H242, H250, H251m, H252, H260, H261	A waste is assessed for HP3 via test methods, rather than a concentration limit. If you have substances or a mixture containing flammable properties the waste should be tested in accordance with the European Chemical Agency's guidance on the application of the CLP Criteria. If a waste contains either H220, H221, H260 or H261 a calculation can be performed to identify the minimum amount of that substance that will trigger HP3.
HP5	Specific Target Organ Toxicity (STOT)	H304	Should a waste contain two or more compounds displaying H304 (Asp. Tox 1) and equal or exceed its specific concentration limit of 10%, then a waste will be hazardous by HP5 if its kinematic viscosity exceeds 20.5 mm ² /s. Guidance should be sought from the CLP Criteria.
HP9	Infectious	N/A	A waste is assessed for HP9 via further testing, rather than a concentration limit. In cases where there is the potential for toxins to be present, further testing will be required. For healthcare waste reference should be made to the Department of health guidance: Safe management of healthcare waste.
HP12	Release of acute toxic gas	EUH029, EUH031, EUH032, H260 or H261	A waste is assessed for HP12 via test methods, rather than a concentration limit. If you have substances or a mixture that may release acute toxic gas the waste should be tested in accordance with the European Chemical Agency's guidance on the application of the CLP Criteria.
HP15	Explosive or explosive properties	H205, EUH001, EUH019 or EUH044	A waste is assessed for HP15 via test methods, rather than a concentration limit. If you have substances or a mixture that may exhibit explosive or explosive properties the waste should be tested in accordance with the European Chemical Agency's guidance on the application of the CLP Criteria.
HP16	Persistent organic pollutants	N/A	A waste is considered hazardous if the concentration of one or more compound (persistent organic pollutant) as listed in Appendix C of Environment Agency guidance WM3 is above its assigned concentration limit. For reference for dioxins and furans, this assessment incorporates the use of specific toxicity equivalent factors.