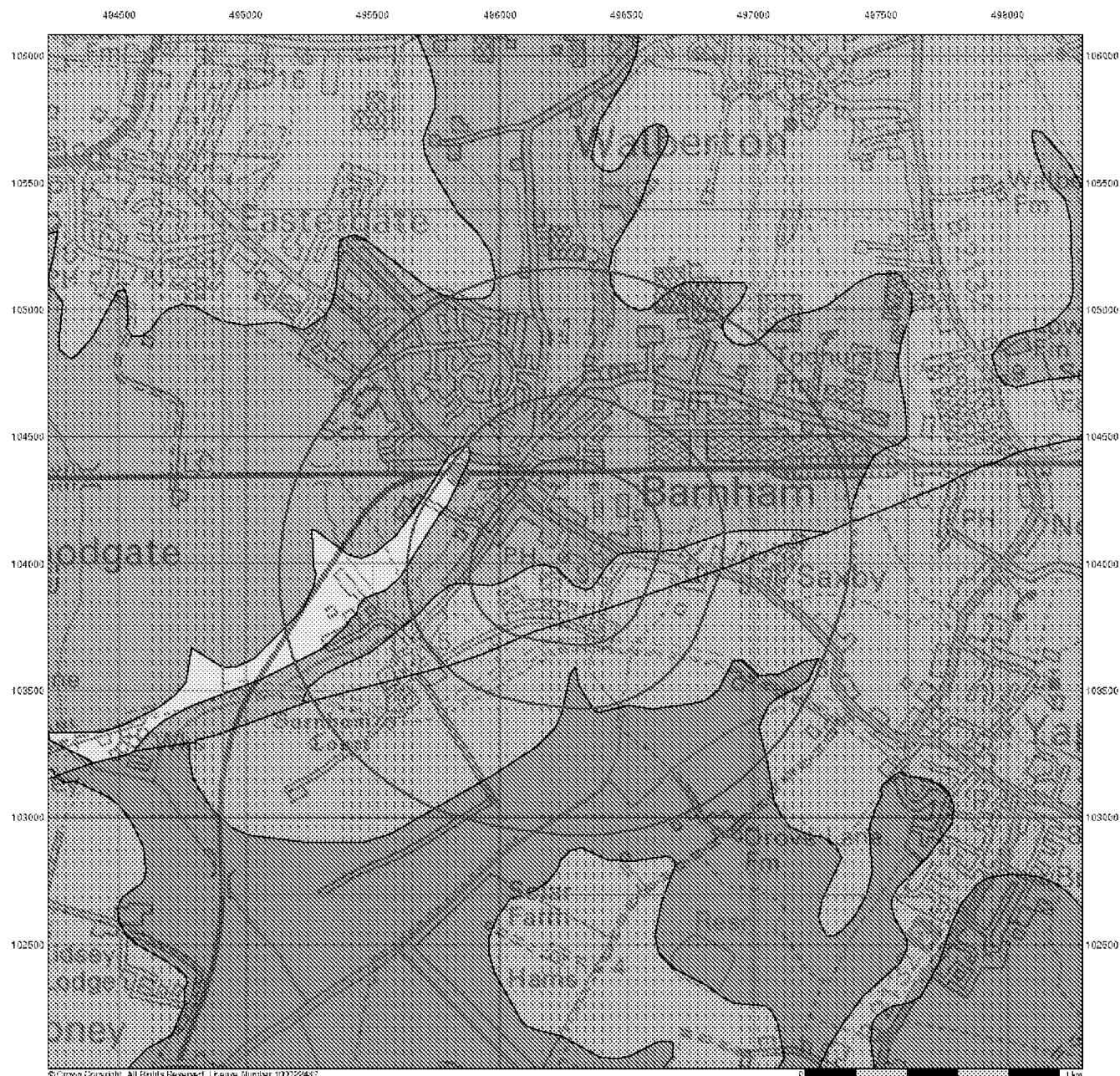


APPENDIX C

Envirocheck®



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TEC

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Groundwater Vulnerability

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

Agency and Hydrological

Geological Classes

**Major Aquifer
(Highly Permeable)**

**Minor Aquifer
(Variably Permeable)**

**Non Aquifer
(Negligibly Permeable)**

Water or Sea

Drift Deposit

Soil Classes

High (H) 1, 2, 3, U

Intermediate (I) 1, 2

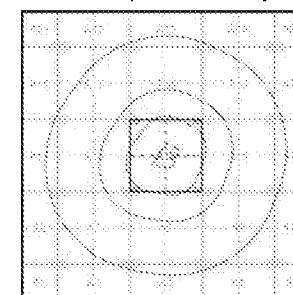
Low

High (H) 1, 2, 3, U

Intermediate (I) 1, 2

Low

Site Sensitivity Context Map - Slice A



Order Details

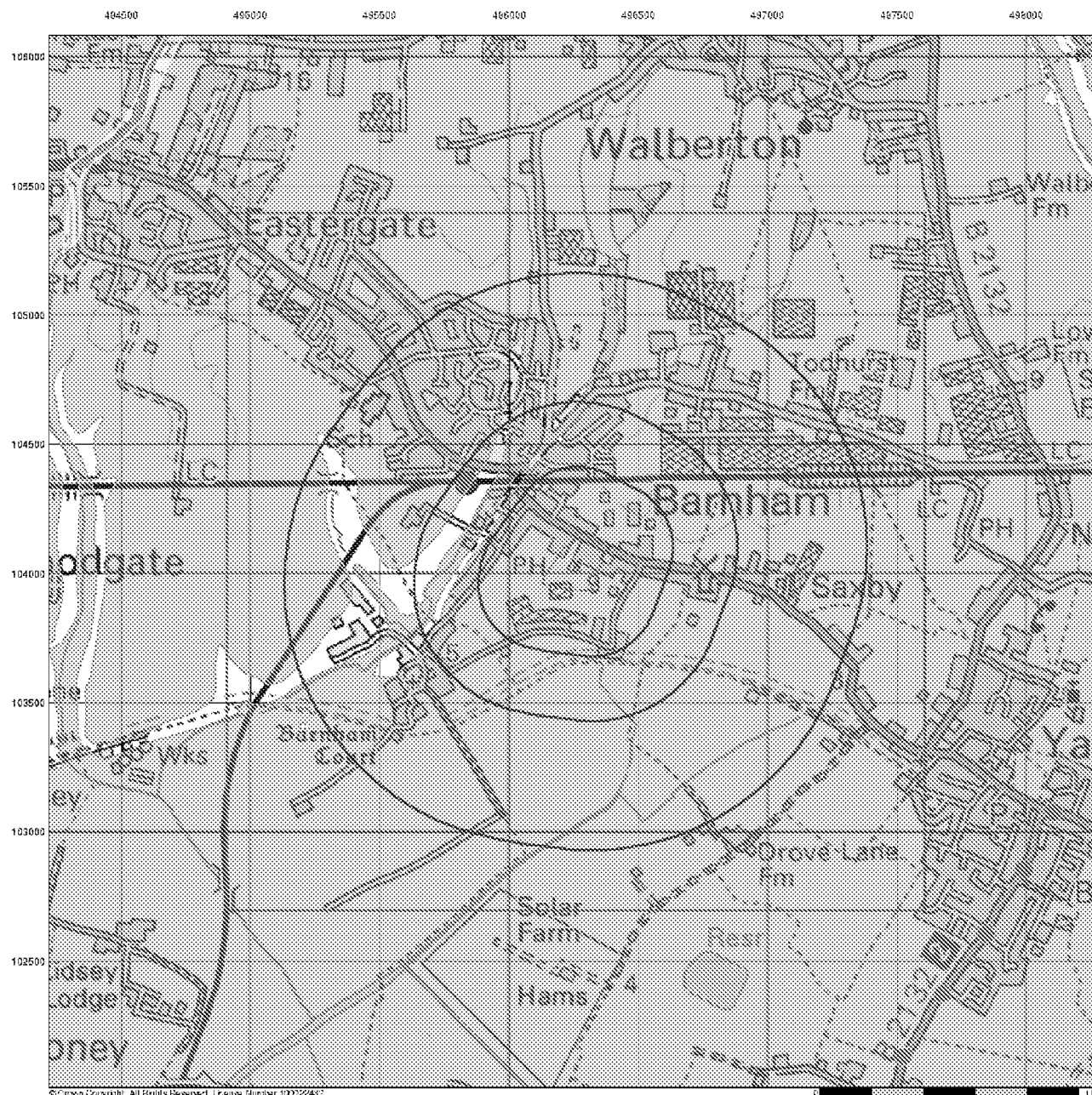
Order Number: 163503061_1.1
Customer Ref: 1801024.001
National Grid Reference: 496260, 104030
Slice: A
Site Area (Ha): 3.46
Search Buffer (m): 1000

Site Details

Land off Yapton Road, Barnham, Barnham, BOGNOR REGIS, PO22 0AY

Landmark
A Landmark Information Group Service

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Web: www.evmsolutions.co.uk



TEC

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Superficial Aquifer Designation

General

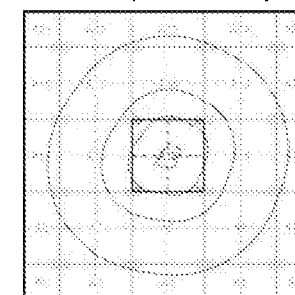
- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

Agency and Hydrological

Geological Classes

- Principal Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown
- Unknown (Lakes and Landslip)

Site Sensitivity Context Map - Slice A



Order Details

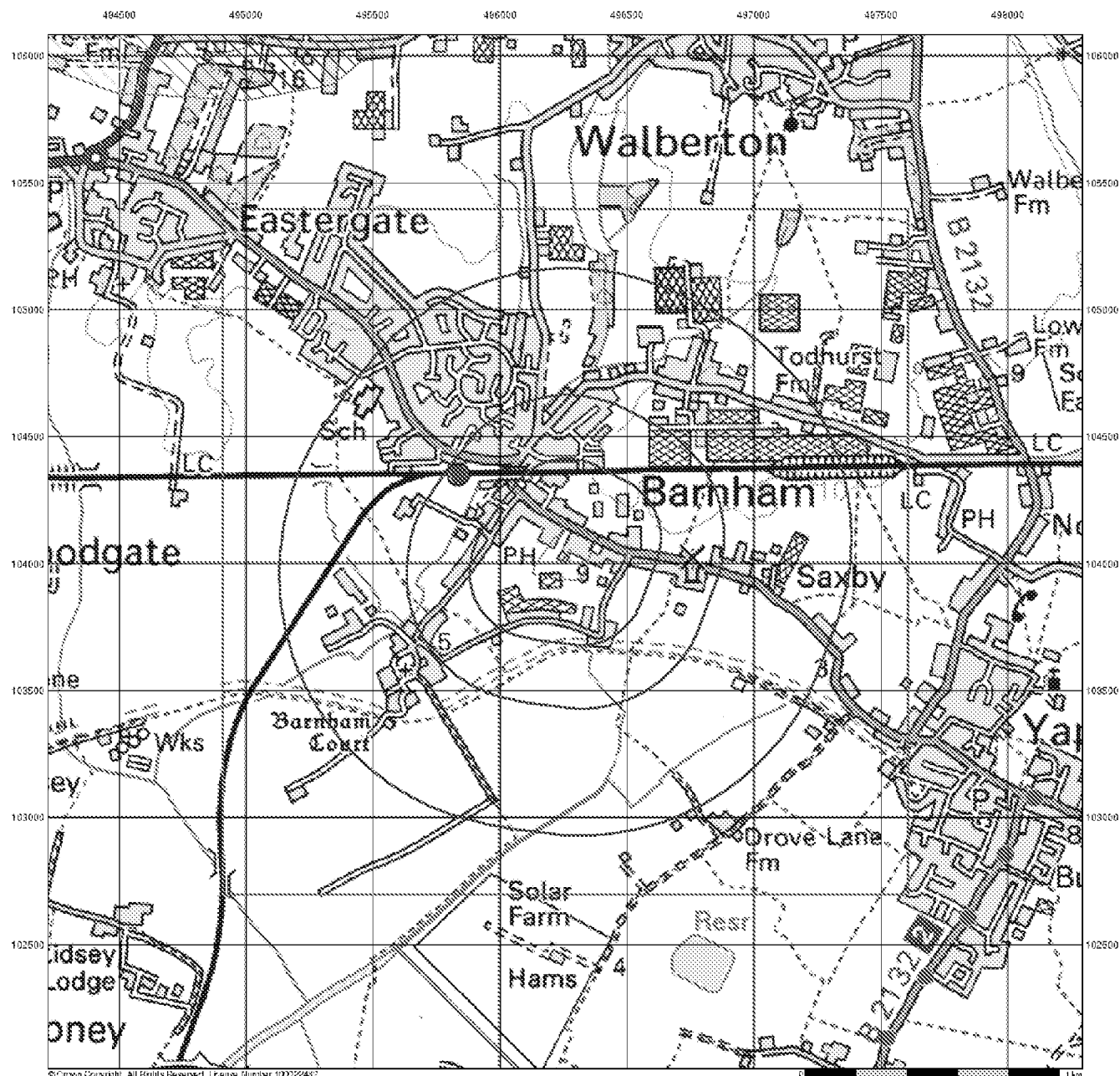
Order Number: 163503061_1_1
 Customer Ref: 1801024.001
 National Grid Reference: 496260, 104030
 Slice: A
 Site Area (Ha): 3.46
 Search Buffer (m): 1000

Site Details

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 Environmental Services

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TEC

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Source Protection Zones

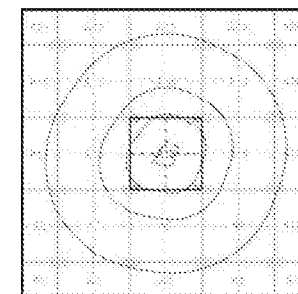
General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

Agency and Hydrological

- Inner zone (Zone 1)
- Inner zone - subsurface activity only (Zone 1c)
- Outer zone (Zone 2)
- Outer zone - subsurface activity only (Zone 2c)
- Total catchment (Zone 3)
- Total catchment - subsurface activity only (Zone 3c)
- Special interest (Zone 4)

Site Sensitivity Context Map - Slice A



Order Details

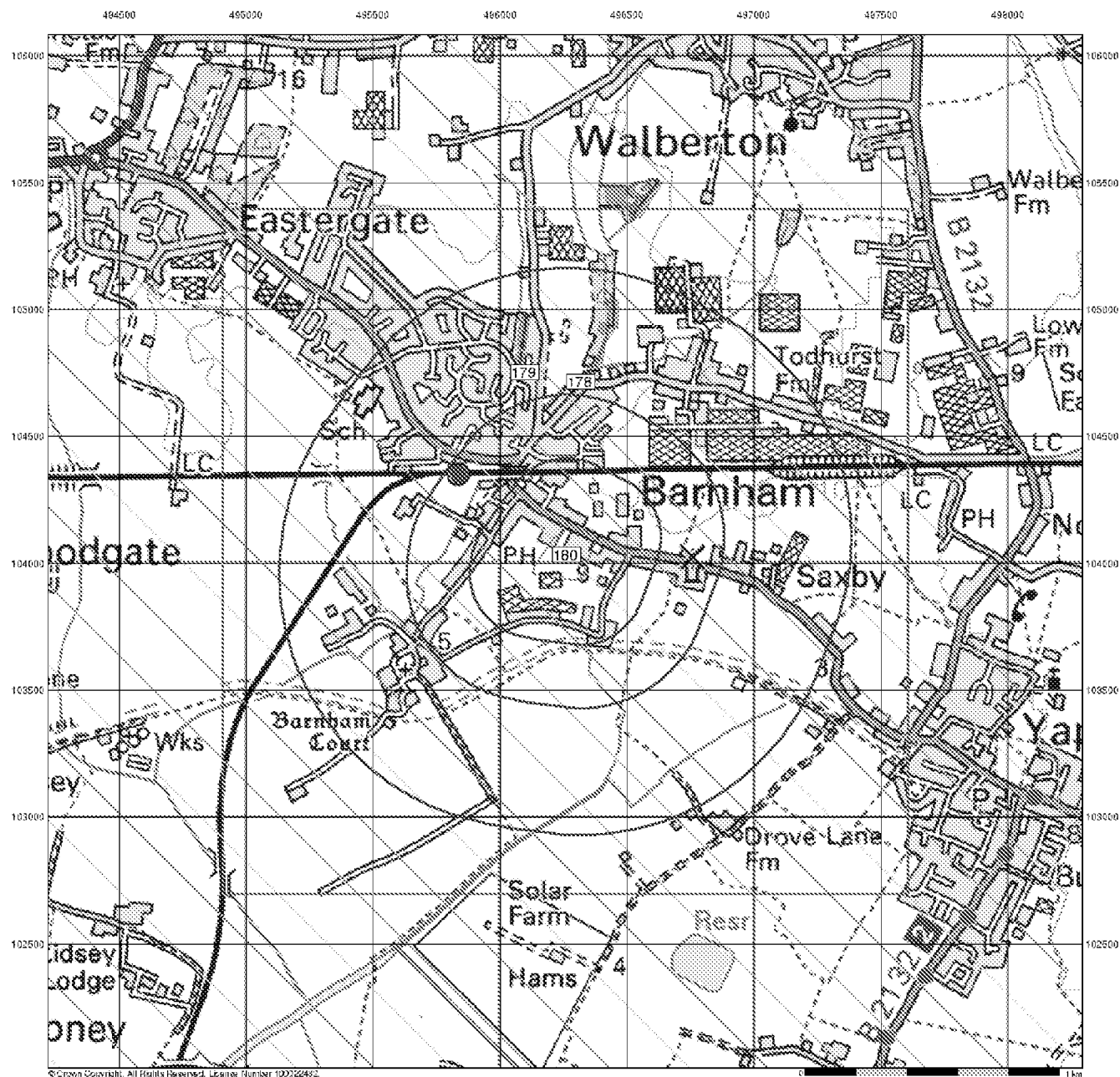
Order Number: 163503061_1_1
 Customer Ref: 1801024.001
 National Grid Reference: 496260, 104030
 Slice: A
 Site Area (Ha): 3.46
 Search Buffer (m): 1000

Site Details

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 Consultants

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Sensitive Land Uses

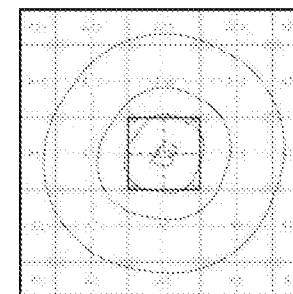
General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

Sensitive Land Uses

- Ancient Woodlands
- Area of Adopted Green Belt
- Area of Unadopted Green Belt
- Area of Outstanding Natural Beauty
- Environmentally Sensitive Area
- Forest Park
- Local Nature Reserve
- Marine Nature Reserve
- National Nature Reserve
- National Park
- Nitrate Sensitive Area
- Nitrate Vulnerable Zone
- Ramsar Site
- Site of Special Scientific Interest
- Special Area of Conservation
- Special Protection Area
- World Heritage Sites

Site Sensitivity Context Map - Slice A



Order Details

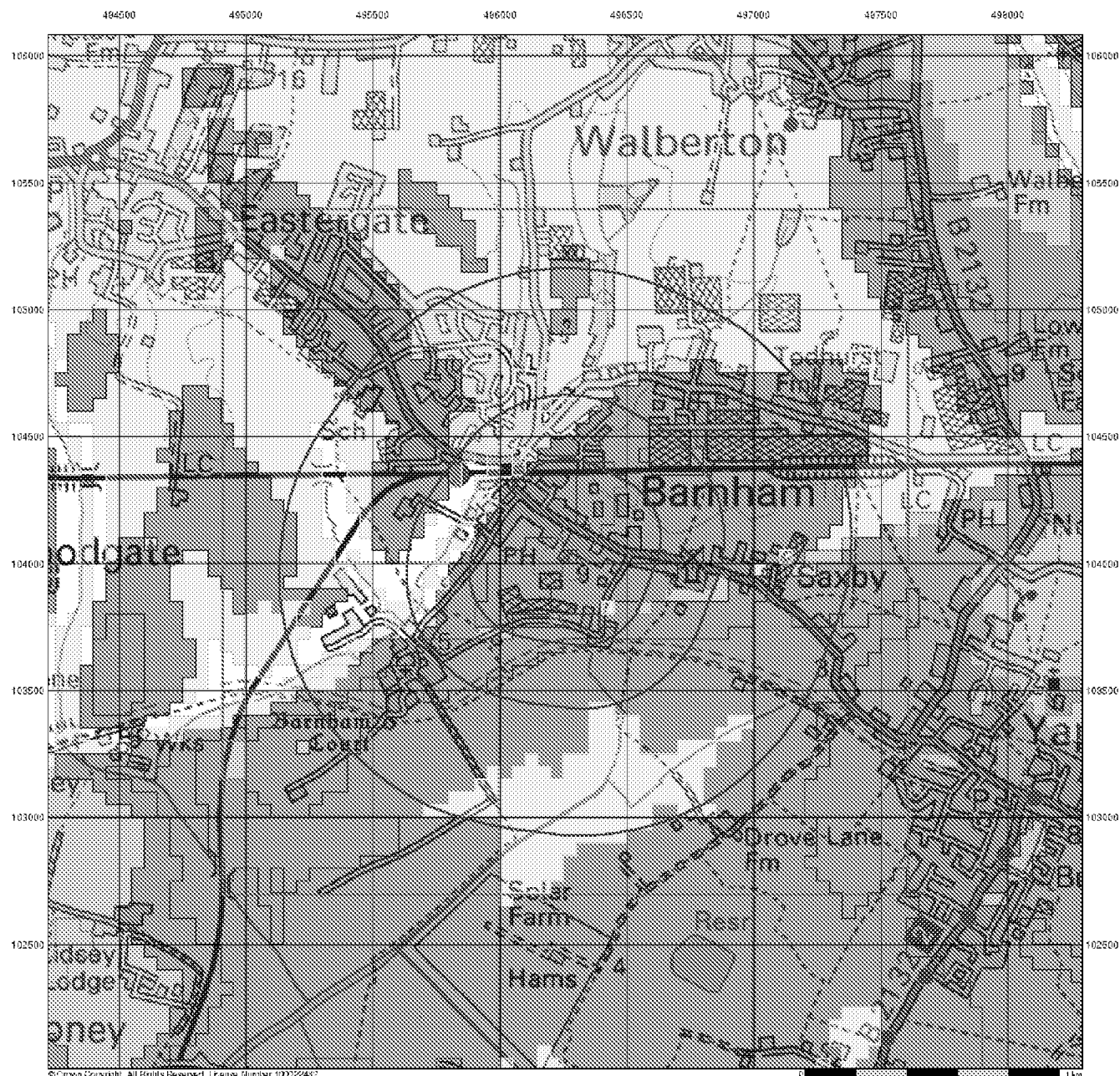
Order Number: 163503061_1.1
 Customer Ref: 1801024.001
 National Grid Reference: 496260, 104030
 Slice: A
 Site Area (Ha): 3.46
 Search Buffer (m): 1000

Site Details

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BGS Flood GFS Data

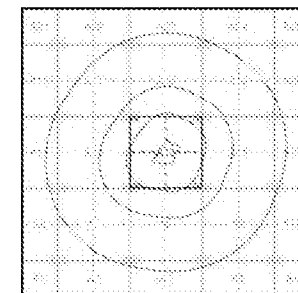
General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice

Agency and Hydrological (Flood)

- Limited Potential for Groundwater Flooding to Occur
- Potential for Groundwater Flooding of Property Situated Below Ground Level
- Potential for Groundwater Flooding to Occur at Surface

Site Sensitivity Context Map - Slice A



Order Details

Order Number: 163503061_1_1
 Customer Ref: 1801024.001
 National Grid Reference: 496260, 104030
 Slice: A
 Site Area (Ha): 3.46
 Search Buffer (m): 1000

Site Details

Land off Yapton Road, Barnham, Barnham, BOGNOR REGIS, PO22 0AY

Landmark
 LANDMARK INFORMATION GROUP

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Page 6 of 6

Geology 1:50,000 Maps Legends

Superficial Geology

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	ALV	Alluvium	Clay, Silt, Sand and Gravel	Not Supplied - Holocene
	RTDU	River Terrace Deposits (Undifferentiated)	Sand, Silt and Clay	Not Supplied - Quaternary
	RBD1	Raised Beach Deposits, 1	Sand and Gravel	Not Supplied - Quaternary
	RMD	Raised Marine Deposits	Clay, Silt, Sand and Gravel	Not Supplied - Quaternary
	HEAD	Head	Gravel, Sand, Silt and Clay	Not Supplied - Quaternary
	HEAD	Head	Clay, Silt, Sand and Gravel	Not Supplied - Quaternary

Bedrock and Faults

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	LC	London Clay Formation	Clay, Silt and Sand	Not Supplied - Ypresian
	LMBE	Lambeth Group	Clay, Silt and Sand	Not Supplied - Thanetian
	LPCK	Lewes Nodular Chalk Formation, Seaford Chalk Formation, Newhaven Chalk Formation, Culver Chalk Formation and Portsdown Chalk Formation (Undifferentiated)	Chalk	Not Supplied - Turonian



TWEEDIE EVANS CONSULTING

Geology 1:50,000 Maps

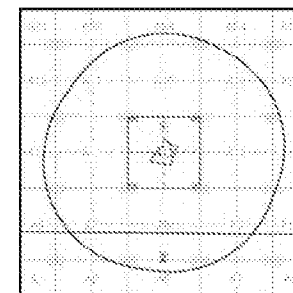
This report contains geological map extracts taken from the BGS Digital Geological map of Great Britain at 1:50,000 scale and is designed for users carrying out preliminary site assessments who require geological maps for the area around the site. This mapping may be more up to date than previously published paper maps.

The various geological layers - artificial and landslip deposits, superficial geology and solid (bedrock) geology are displayed in separate maps, but superimposed on the final 'Combined Surface Geology' map. All map legends feature on this page. Not all layers have complete nationwide coverage, so availability of data for relevant map sheets is indicated below.

Geology 1:50,000 Maps Coverage

Map ID:	2	Map ID:	1
Map Sheet No:	332	Map Sheet No:	317
Map Name:	Chichester and I	Map Name:	Chichester and I
Map Date:	1996	Map Date:	1996
Bedrock Geology:	Available	Bedrock Geology:	Available
Superficial Geology:	Available	Superficial Geology:	Available
Artificial Geology:	Available	Artificial Geology:	Available
Faults:	Not Supplied	Faults:	Not Supplied
Landslip:	Available	Landslip:	Available
Rock Segments:	Not Supplied	Rock Segments:	Not Supplied

Geology 1:50,000 Maps - Slice A

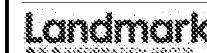


Order Details:

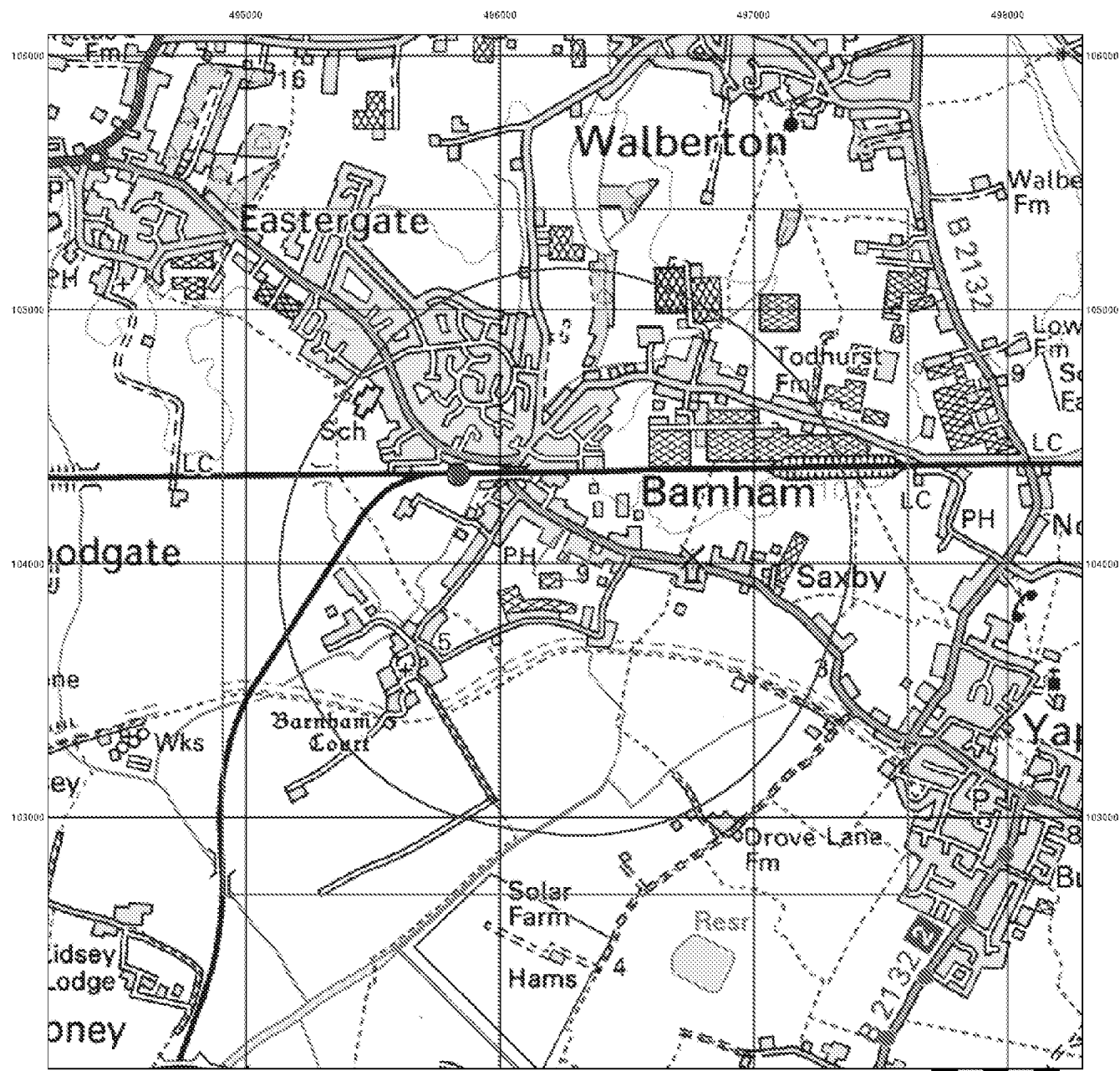
Order Number: 163503061_1_1
 Customer Reference: 1801024.001
 National Grid Reference: 496260, 104030
 Slice: A
 Site Area (Ha): 3.46
 Search Buffer (m): 1000

Site Details:

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TEC

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Artificial Ground and Landslip

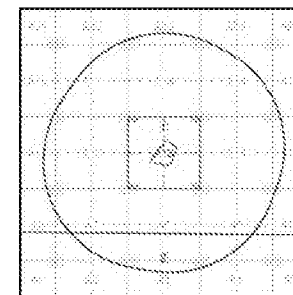
Artificial ground is a term used by BGS for those areas where the ground surface has been significantly modified by human activity. Information about previously developed ground is especially important, as it is often associated with potentially contaminated material, unpredictable engineering conditions and unstable ground.

Artificial ground includes:

- Made ground - man-made deposits such as embankments and spoil heaps on the natural ground surface.
- Worked ground - areas where the ground has been cut away such as quarries and road cuttings.
- Infilled ground - areas where the ground has been cut away then wholly or partially backfilled.
- Landscaped ground - areas where the surface has been reshaped.
- Disturbed ground - areas of ill-defined shallow or near surface mineral workings where it is impracticable to map made and worked ground separately.

Mass movement (landslip) deposits on BGS geological maps are primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground. The dataset also includes foundered strata, where the ground has collapsed due to subsidence.

Artificial Ground and Landslip Map - Slice A



Order Details:

Order Number: 163503061_1.1
 Customer Reference: 1801024.001
 National Grid Reference: 496260, 104030
 Slice: A
 Site Area (Ha): 3.46
 Search Buffer (m): 1000

Site Details:

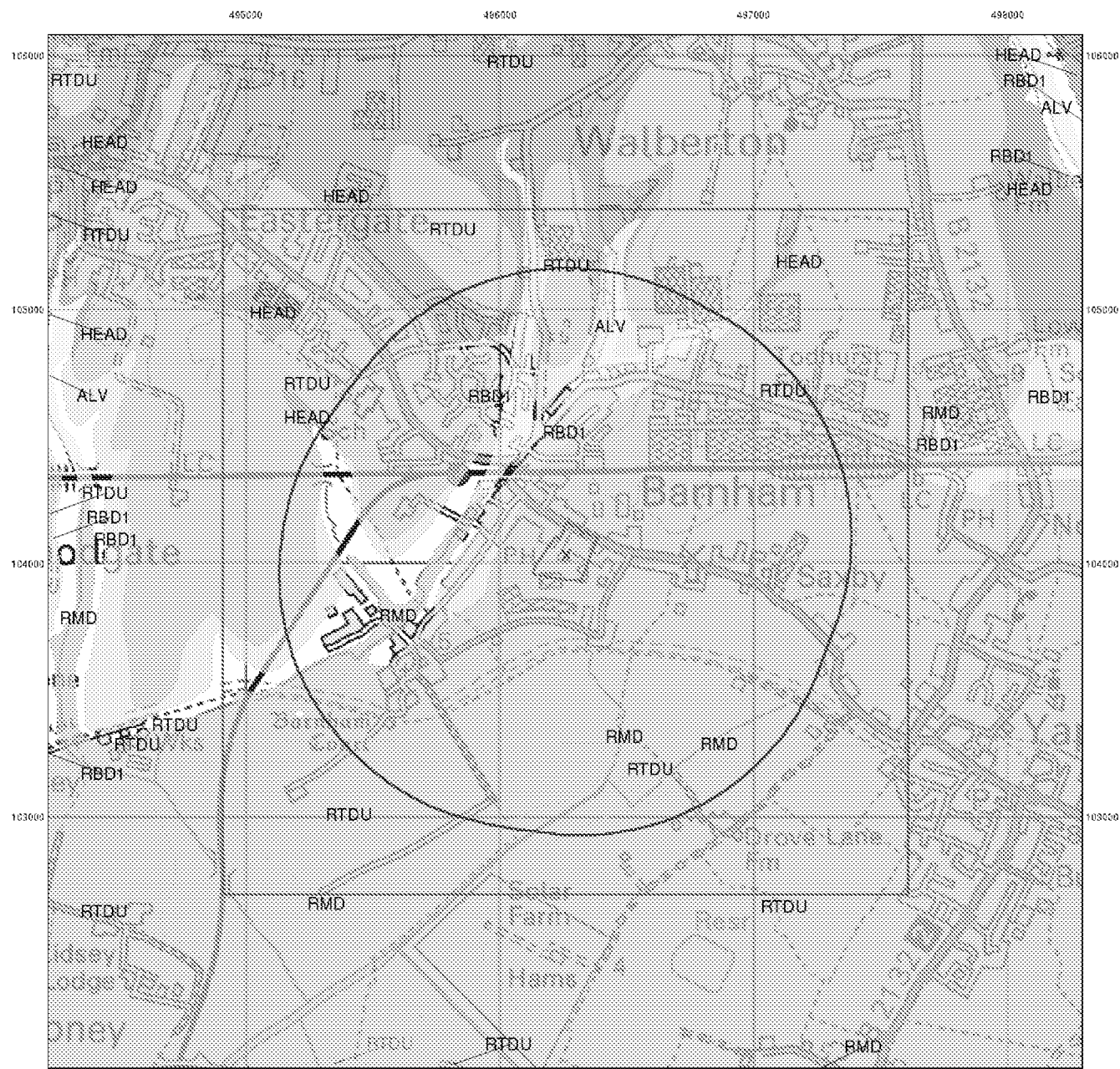
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Landmark
 geospatial data solutions

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Page 2 of 5



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TWEEDIE EVANS CONSULTING

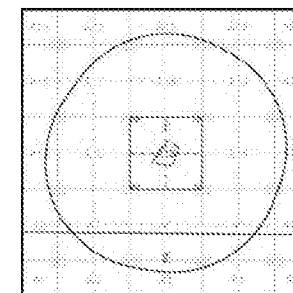
Superficial Geology

Superficial Deposits are the youngest geological deposits formed during the most recent period of geological time, the Quaternary, which extends back about 1.8 million years from the present.

They rest on older deposits or rocks referred to as Bedrock. This dataset contains Superficial deposits that are of natural origin and 'in place'. Other superficial strata may be held in the Mass Movement dataset where they have been moved, or in the Artificial Ground dataset where they are of man-made origin.

Most of these Superficial deposits are unconsolidated sediments such as gravel, sand, silt and clay, and onshore they form relatively thin, often discontinuous patches or larger spreads.

Superficial Geology Map - Slice A

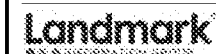


Order Details:

Order Number: 163503061_1_1
Customer Reference: 1801024.001
National Grid Reference: 496260, 104030
Slice: A
Site Area (Ha): 3.46
Search Buffer (m): 1000

Site Details:

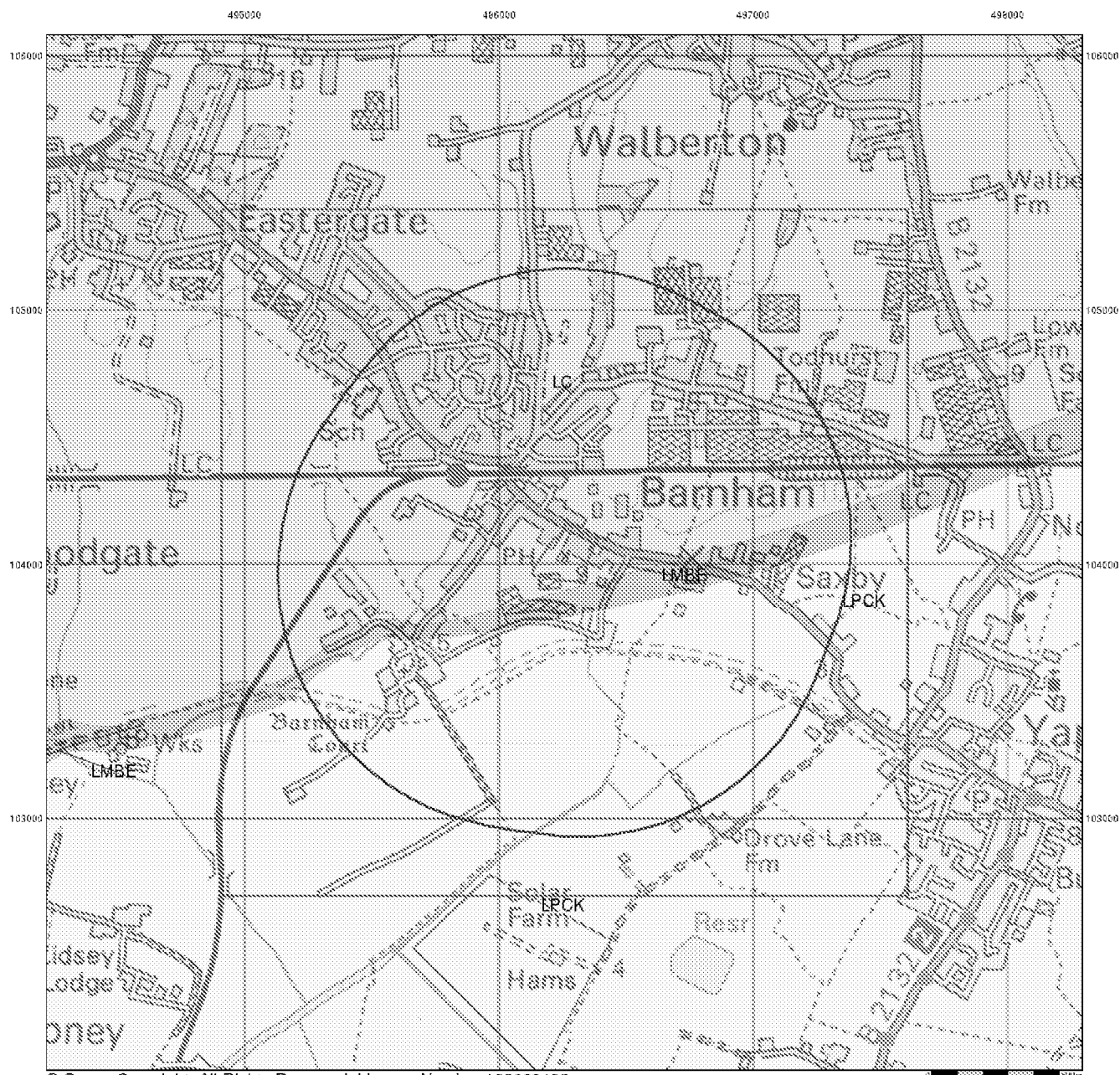
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Page 3 of 5



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TEC

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Bedrock and Faults

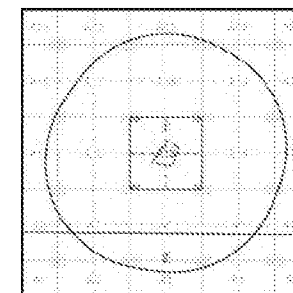
Bedrock geology is a term used for the main mass of rocks forming the Earth and are present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

The bedrock has formed over vast lengths of geological time ranging from ancient and highly altered rocks of the Proterozoic, some 2500 million years ago, or older, up to the relatively young Pliocene, 1.8 million years ago.

The bedrock geology includes many lithologies, often classified into three types based on origin: igneous, metamorphic and sedimentary.

The BGS Faults and Rock Segments dataset includes geological faults (e.g. normal, thrust), and thin beds mapped as lines (e.g. coal seam, gypsum bed). Some of these are linked to other particular 1:50,000 Geology datasets, for example, coal seams are part of the bedrock sequence, most faults and mineral veins primarily affect the bedrock but cut across the strata and post date its deposition.

Bedrock and Faults Map - Slice A



Order Details:

Order Number: 163503061_1.1
Customer Reference: 1801024.001
National Grid Reference: 496260, 104030
Slice: A
Site Area (Ha): 3.46
Search Buffer (m): 1000

Site Details:

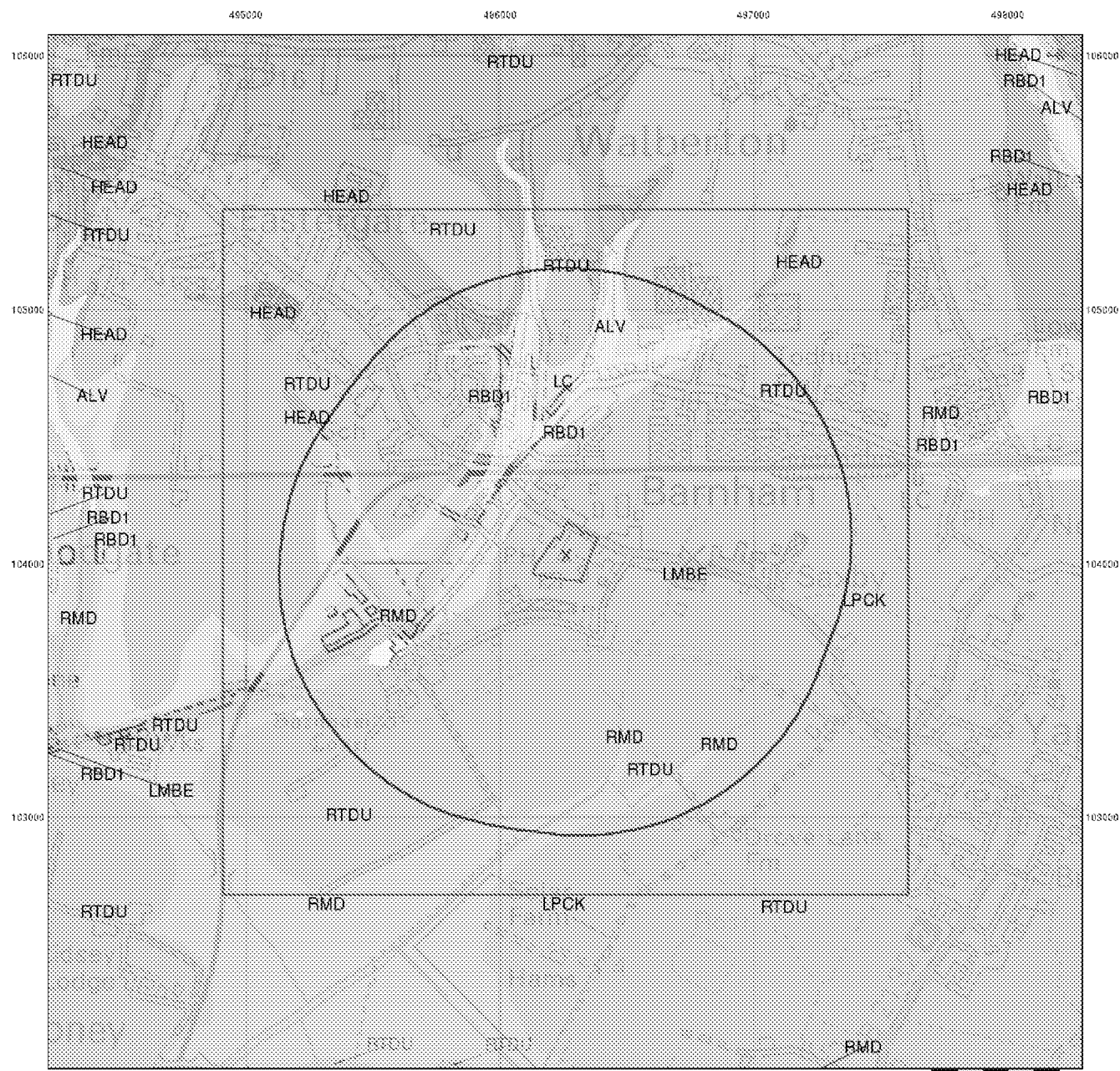
Land off Yapton Road, Barnham, Barnham, BOGNOR REGIS, PO22 0AY

Landmark
Geological Data

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Page 4 of 5



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Combined Surface Geology

The Combined Surface Geology map combines all the previous maps into one combined geological overview of your site.

Please consult the legends to the previous maps to interpret the Combined "Surface Geology" map.

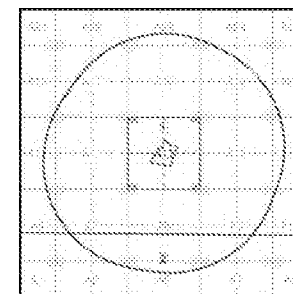
Additional Information

More information on 1:50,000 Geological mapping and explanations of rock classifications can be found on the BGS website. Using the LEX Codes in this report, further descriptions of rock types can be obtained by interrogating the 'BGS Lexicon of Named Rock Units'. This database can be accessed by following the 'Information and Data' link on the BGS website.

Contact

British Geological Survey
Kingsley Dunham Centre
Keyworth
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NG12 5GG
Telephone: 0115 936 3143
Fax: 0115 936 3276
email: enquiries@bgs.ac.uk
website: www.bgs.ac.uk

Combined Geology Map - Slice A



Order Details:

Order Number: 163503061_1.1
Customer Reference: 1801024.001
National Grid Reference: 496260, 104030
Slice: A
Site Area (Ha): 3.46
Search Buffer (m): 1000

Site Details:

Land off Yapton Road, Barnham, Barnham, BOGNOR REGIS, PO22 0AY

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Geological Mapping

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Page 5 of 5

APPENDIX D

Risk Evaluation

Risk Evaluation

The qualitative assessment methodology presented in Ciria publication C552 (2001) titled '*Contaminated Land Risk Assessment: A Guide to Good Practice*' has been used by TEC for the basis of evaluating potential risk.

The method requires an assessment of the:

- magnitude of the probability or likelihood of the risk occurring (Table 1); and
- magnitude of the potential consequence or severity of the risk occurring (Table 2)

Table 1. Classification of Probability

Classification	Definition
High likelihood	There is a pollution linkage and an event that either appears very likely in the short-term and almost inevitable over the long-term, or there is evidence at the receptor of harm or pollution.
Likely	There is a pollution linkage and all the elements are present and in the right place, which means that it is probable that an event will occur. Circumstances are such that an event is not inevitable, but possible in the short-term and likely over the long-term.
Low likelihood	There is a pollution linkage and circumstances are possible under which an event could occur. However, it is by no means certain that even over a longer period such an event would take place, and is less likely in the short-term.
Unlikely	There is a pollution linkage but circumstances are such that it is improbable that an event would occur even in the very long-term.

Table 2. Classification of Consequence

Classification	Definition	Examples
Severe	Short-term (acute) risk to human health likely to result in "significant harm" as defined by the Environment Protection Act 1990, Part IIA. Short-term risk of pollution of sensitive water resource. (Note: Water Resources Act contains no scope for considering significance of pollution). Catastrophic damage to buildings/property. A short-term risk to a particular ecosystem, or organisation forming part of such ecosystem (note: the definitions of ecological systems within the draft circular on Contaminated Land, DETR, 2000).	High concentrations of cyanide on the surface of an informal recreation area. Major spillage of contaminants from site into controlled water. Explosion, causing building collapse (can also equate to a short-term human health risk if buildings are occupied).
Medium	Chronic damage to human health ("significant harm" as defined in DETR, 2000). Pollution of sensitive water resources. (Note: Water Resources Act contains no scope for considering significance of pollution). A significant change in a particular ecosystem, or organism forming part of such ecosystem, (note: the definitions of ecological systems within draft circular on Contaminated Land, DETR, 2000).	Concentration of a contaminant from site exceeding the generic or site-specific assessment criteria. Leaching of contaminants from a site to a major or minor aquifer. Death of a species within a designated nature reserve.
Mild	Pollution of non-sensitive water resources. Significant damage to crops, buildings, structures and services ("significant harm" as defined in the draft circular on Contaminated Land, DETR, 2000). Damage to sensitive buildings/structures/services or the environment.	Pollution of non-classified groundwater. Damage to building rendering it unsafe to occupy (for example foundation damage resulting in instability).
Minor	Harm, although not necessarily significant harm, which may result in a financial loss, or expenditure to resolve. Non-permanent health effects to human health (easily prevented by means such as personal protective clothing etc), easily repairable effects of damage to buildings, structures and services.	The presence of contaminants at such concentrations that protective equipment is required during site works. The loss of plants in a landscaping scheme. Discolouration of concrete.

The combination of the two factors is determined using Table 3 and the resulting level of risk is described in Table 4. The evaluation can be applied to each of the scenarios identified in the risk model and the overall risk assessed.

Table 3. Combination of Consequence with Probability

		Consequence			
		Severe	Medium	Mild	Minor
Probability	High Likelihood	Very High Risk	High Risk	Moderate Risk	Moderate/Low Risk
	Likely	High Risk	Moderate Risk	Moderate/Low Risk	Low Risk
	Low Likelihood	Moderate Risk	Moderate/Low Risk	Low Risk	Very Low Risk
	Unlikely	Moderate/Low Risk	Low Risk	Very Low Risk	Very Low Risk

Table 4. Description of risks and likely action required

Very High Risk	There is a high probability that severe harm could arise to a designated receptor from an identified hazard, or there is evidence that severe harm to a designated receptor is currently happening. This risk, if realised, is likely to result in a substantial liability. Urgent investigation (if not undertaken already) and remediation are likely to be required.
High Risk	Harm is likely to arise to a designated receptor from an identified hazard. Realisation of the risk is likely to present a substantial liability. Urgent investigation (if not undertaken already) is required and remedial works may be necessary in the short-term and are likely over the longer-term.
Moderate Risk	It is possible that harm could arise to a designated receptor from an identified hazard. However, it is either relatively unlikely that any such harm would be severe, or if any harm were to occur it is more likely that the harm would be relatively mild. Investigation (if not already undertaken) is normally required to clarify the risk and to determine the potential liability. Some remedial works may be required in the long-term.
Low Risk	It is possible that harm could arise to a designated receptor from an identified hazard, but it is likely that this harm, if realised, would at worst normally be mild.
Very Low Risk	There is a low possibility that harm could arise to a receptor. In the event of such harm being realised it is not likely to be severe.

Using the risk model the pollutant linkages are identified and a preliminary estimate of risk undertaken. If there is no pollutant linkage identified, then there is no risk. If the estimate of risk for all the linkages and exposure scenarios is very low at this stage then it is likely that no further assessment will be required.

APPENDIX E
Exploratory Hole Logs

CABLE PERCUSSIVE BOREHOLE RECORD		 TWEEDIE EVANS CONSULTING www.tecon.co.uk
Project Title: Yapton Road, Barnham	Borehole: BH1	
Project No: 1801024.001	Dates: 20th March 2018	
Client: Wates Construction Ltd		

Depth (m)	Description	Legend	Sample Details	Depth (m)	SPT Results		Remarks/ Data	Installation
					Blow Count	N Value		
0.00	Ground Surface			0.0				
0.30	TOPSOIL TYPE MATERIAL Brown slightly sandy slightly gravelly clay. Gravel of fine to medium subangular flint.							
0.90	Soft to firm brown slightly sandy slightly gravelly CLAY. Gravel of fine to medium subangular flint.							
1.10	Soft to firm light brown slightly gravelly sandy CLAY. Gravel of fine sub angular flint.			1.0	(4) 2,2,2,3	9		
	Medium dense orangish brown slightly clayey fine SAND. Occasional gravel of fine to medium sub angular flint.			2.0	(5) 3,4,4,4	15		
				3.0	(4) 3,3,3,3	12		
4.00				4.0	(4) 4,4,5,5	18		
4.30	Firm grey slightly sandy silty CLAY.							
	Firm becoming stiff fissured medium strength grey silty CLAY.			5.0	U100 Blows:42		HSV 4.8m: 60, 65, 60kPa	
	Occasional selenite crystals below 5.4mbgl.		U100					
			A					
	Becoming high strength below 5.8mbgl			6.0			HSV 5.8m: 137.5, 125, 137.5kPa	
					(6) 4,5,7,8	24		
Notes:				Plant: Dando 3000				
A: 250ml and 60ml Amber Glass Jars				Water observations: No groundwater encountered during drilling.				
T: Plastic Tub (1Kg)				General remarks:				
B: Bulk Sample								
U: Undisturbed Sample								
SPT: Standard Penetration Test								
HSV: Hand Shear Vane								
				Logged by: JL		Checked by: AF		Approved by: ET

CABLE PERCUSSIVE BOREHOLE RECORD	
Project Title: Yapton Road, Barnham	Borehole: BH1
Project No: 1801024.001	Dates: 20th March 2018
Client: Wates Construction Ltd	



TEC
TWEEDIE EVANS CONSULTING
www.tec.co.uk

Depth (m)	Description	Legend	Sample Details	Depth (m)	SPT Results		Remarks/ Data	Installation
					Blow Count	N Value		
	Becoming very high strength below 6.8mbgl.			7.0			HSV 6.8m: > 250kPa	
				8.0	(6) 4,6,6,7	23	HSV 7.8m: > 250kPa	
				9.0				
				10.0	(7) 4,6,8,9	37		
				11.0	(8) 6,6,9,9	30		
12.00				12.0	(7) 6,7,8,9	30		
	Borehole Terminated			13.0				
Notes:				Plant: Dando 3000				
A: 250ml and 60ml Amber Glass Jars				Water observations: No groundwater encountered during drilling.				
T: Plastic Tub (1Kg)				General remarks:				
B: Bulk Sample								
U: Undisturbed Sample								
SPT: Standard Penetration Test								
HSV: Hand Shear Vane								
				Logged by: JL		Checked by: AF		Approved by: ET

CABLE PERCUSSIVE BOREHOLE RECORD		 TEC TWEEDIE EVANS CONSULTING 
Project Title: Yapton Road, Barnham	Borehole: BH2	
Project No: 1801024.001	Dates: 21st March 2018	
Client: Wates Construction Ltd		

Depth (m)	Description	Legend	Sample Details	Depth (m)	SPT Results		Remarks/ Data	Installation
					Blow Count	N Value		
0.00	Ground Surface			0.0				
0.40	MADE GROUND Brown slightly sandy slightly gravelly clay. Gravel of fine to medium subangular flint and occasional brick and concrete.			0.6				
0.70	Soft to firm brown slightly sandy slightly gravelly CLAY. Gravel of fine to medium subangular flint.			1.0	(4) 2,2,2,2	8		
2.00	Soft to firm sandy slightly gravelly CLAY. Occasional gravel of fine to medium subangular flint.			2.0	(5) 2,3,3,3	11		
2.90	Medium dense orangish brown slightly clayey fine SAND. Occasional gravel of fine to medium sub angular flint.			3.0	(6) 4,4,3,4	15		
				4.0	(8) 5,6,6,5	22		
4.50	Medium dense orangish grey very gravelly SAND. Gravel of fine to medium subangular flint.			5.0	(6) 3,3,3,3	12	HSV 4.5m: 100, 100,, 100kPa	
	Stiff fissured high strength grey silty CLAY with rare selenite crystals.			6.0	(7) 4,5,6,6	21	HSV 5.5m: 137.5, 125, 125kPa HSV 6.5m: 175, 187.5, 187.5kPa	
Notes: A: 250ml and 60ml Amber Glass Jars T: Plastic Tub (1Kg) B: Bulk Sample U: Undisturbed Sample SPT: Standard Penetration Test HSV: Hand Shear Vane				Plant: Dando 3000 Water observations: Groundwater strike at 3.5mbgl. Rising to 2.5mbgl after 30 minutes. General remarks:				
Logged by: JL		Checked by: AF		Approved by: ET				

CABLE PERCUSSIVE BOREHOLE RECORD	
Project Title: Yapton Road, Barnham	Borehole: BH2
Project No: 1801024.001	Dates: 21st March 2018
Client: Wates Construction Ltd	



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Depth (m)	Description	Legend	Sample Details	Depth (m)	SPT Results		Remarks/ Data	Installation
					Blow Count	N Value		
			U100	7.0	U100 Blows: 59		HSV 7.5m: 225, 225, 225kPa	
				8.0			HSV 8.5m: > 250kPa	
				9.0				
					(8) 6,8,8,8	30	HSV 9.5m: > 250kPa	
				10.0				
				11.0	(9) 6,7,9,9	31		
12.00				12.0	(8) 6,6,9,9	30		
	Borehole Terminated			13.0				

Notes:

A: 250ml and 60ml Amber Glass Jars

T: Plastic Tub (1Kg)

B: Bulk Sample

U: Undisturbed Sample

SPT: Standard Penetration Test

HSV: Hand Shear Vane

Plant: Dando 3000

Water observations: Groundwater strike at 3.5mbgl. Rising to 2.5mbgl after 30 minutes.

General remarks:

Logged by: JL

Checked by: AF

Approved by: ET

CABLE PERCUSSIVE BOREHOLE RECORD		 TEC TWEEDIE EVANS CONSULTING www.tecon.co.uk
Project Title: Yapton Road, Barnham	Borehole: BH3	
Project No: 1801024.001	Dates: 21st March 2018	
Client: Wates Construction Ltd		

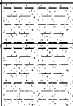
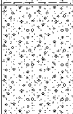
Depth (m)	Description	Legend	Sample Details	Depth (m)	SPT Results		Remarks/ Data	Installation
					Blow Count	N Value		
0.00	Ground Surface			0.0				
0.50	TOPSOIL TYPE MATERIAL Grey brown slightly gravelly sandy CLAY. Gravel of fine to medium sub angular flint. frequent rootlets.		A					
1.20	Soft to firm brown slightly gravelly slightly sandy CLAY with occasional gravel of fine to medium subangular flint. Occasional rootlets.			1.0				
1.70	Firm orangish brown slightly gravelly sandy CLAY with occasional gravel of fine to medium subangular flint.				(2,2) 3,2,2,2	9		
2.50	Firm orangish brown slightly gravelly very sandy CLAY. Gravel of fine to medium subangular flint.			2.0	(1,2) 1,2,2,2	7		
3.90	Medium dense orangish brown clayey SAND.			3.0	(2,3) 3,2,3,4	12		
4.50	Stiff high to very high strength strength grey slightly sandy silty CLAY.			4.0	(4,6) 6,7,7,7	27		
	Stiff fissured high to very high strength strength grey silty CLAY.						HSV 4.5m: 187.5, 187.5, 187.5kPa	
	Rare selenite crystals below 4.5m			5.0	(4,6) 5,7,6,8	26		
				6.0			HSV 5.5m: 175, 187.5, 175kPa	
	Becoming very high strength below 6.5mbgl.				U100 Blows: 70		HSV 6.5m: 225, 225, 225kPa	
Notes: A: 250ml and 60ml Amber Glass Jars T: Plastic Tub (1Kg) B: Bulk Sample U: Undisturbed Sample SPT: Standard Penetration Test HSV: Hand Shear Vane			Plant: Dando 2000					
			Water observations: Groundwater strike at 3.0mbgl					
			General remarks:					
			Logged by: JL		Checked by: AF		Approved by: ET	

CABLE PERCUSSIVE BOREHOLE RECORD		 TEC TWEEDIE EVANS CONSULTING www.tecon.co.uk
Project Title: Yapton Road, Barnham	Borehole: BH3	
Project No: 1801024.001	Dates: 21st March 2018	
Client: Wates Construction Ltd		

Depth (m)	Description	Legend	Sample Details	Depth (m)	SPT Results		Remarks/ Data	Installation
					Blow Count	N Value		
			U100					
				7.0			HSV 7.5m: > 250kPa	
			A	8.0	(5,5) 6,8,7,8	29	HSV 8.5m: > 250kPa	
				9.0				
					(4,6) 9,8,8,9	34		
				10.0				
					(6,5) 5,7,9,9	30		
				11.0				
12.00					(5,7) 7,9,10,10	36		
	Borehole Terminated			12.0				
				13.0				

Notes: A: 250ml and 60ml Amber Glass Jars T: Plastic Tub (1Kg) B: Bulk Sample U: Undisturbed Sample SPT: Standard Penetration Test HSV: Hand Shear Vane	Plant: Dando 2000		
	Water observations: Groundwater strike at 3.0mbgl		
	General remarks:		
	Logged by: JL	Checked by: AF	Approved by: ET

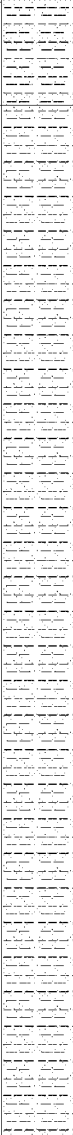
CABLE PERCUSSIVE BOREHOLE RECORD		 TEC TWEEDIE EVANS CONSULTING www.tecon.co.uk
Project Title: Yapton Road, Barnham	Borehole: BH4	
Project No: 1801024.001	Dates: 21st March 2018	
Client: Wates Construction Ltd		

Depth (m)	Description	Legend	Sample Details	Depth (m)	SPT Results		Remarks/ Data	Installation
					Blow Count	N Value		
0.00	Ground Surface			0.0				
0.20	TOPSOIL TYPE MATERIAL Grey brown sandy CLAY with occasional gravel of fine to medium subangular flint. frequent rootlets.		A					
1.00	Soft to firm orangish brown slightly gravelly sandy CLAY with occasional gravel of fine subangular flint. Occasional rootlets.							
1.90	Firm orangish brown slightly gravelly sandy CLAY with occasional gravel of fine subangular flint.			1.0	(2,2) 3,3,3,2	10		
2.90	Firm orangish brown slightly gravelly very sandy CLAY with occasional gravel of fine sub angular flint.			2.0	(2,4) 3,3,4,4	14		
4.30	Medium dense to dense orangish brown slightly clayey slightly gravelly SAND. Gravel of fine to medium sub angular flint.			3.0	(2,2) 3,2,3,3	11		
				4.0	(6,6) 7,8,10,9	34		
6.30	Medium dense brown gravelly SAND. Gravel of subangular flint.			5.0	(5,4) 4,3,3,3	13		
				6.0				
	Stiff high strength grey slightly sandy silty CLAY.				(7,7) 7,8,6,4	25	HSV 6.5m: 150, 162.5, 150kPa	
Notes: A: 250ml and 60ml Amber Glass Jars T: Plastic Tub (1Kg) B: Bulk Sample U: Undisturbed Sample SPT: Standard Penetration Test HSV: Hand Shear Vane			Plant: Dando 2000					
			Water observations: Groundwater strike at 2.0mbgl, rising to 0.8mbgl.					
			General remarks:					
			Logged by: JL		Checked by: AF		Approved by: ET	

CABLE PERCUSSIVE BOREHOLE RECORD	
Project Title: Yapton Road, Barnham	Borehole: BH4
Project No: 1801024.001	Dates: 21st March 2018
Client: Wates Construction Ltd	



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Depth (m)	Description	Legend	Sample Details	Depth (m)	SPT Results		Remarks/ Data	Installation
					Blow Count	N Value		
7.00	Stiff fissured very high strength grey silty CLAY. Rare selenite crystals.		A					
				7.0				
							HSV 7.5m: 162.5, 175, 175kPa	
				8.0	U100 Blows: 90			
			U100				HSV 8.5m: 175, 175, 175kPa	
				9.0				
					(5,5) 6,7,9,7	29	HSV 9.5m: 212.5, 212.5, 212.5kPa	
				10.0				
							HSV 10.5m: > 250kPa	
				11.0	(5,7) 7,8,9,9	33		
							HSV 11.5m: > 250kPa	
12.00				12.0	(6,6) 8,8,10,12	38		
	Borehole Terminated			13.0				
Notes: A: 250ml and 60ml Amber Glass Jars T: Plastic Tub (1Kg) B: Bulk Sample U: Undisturbed Sample SPT: Standard Penetration Test HSV: Hand Shear Vane				Plant: Dando 2000				
				Water observations: Groundwater strike at 2.0mbgl, rising to 0.8mbgl.				
				General remarks:				
				Logged by: JL		Checked by: AF		Approved by: ET

CABLE PERCUSSIVE BOREHOLE RECORD		 TWEEDIE EVANS CONSULTING www.tecon.co.uk
Project Title: Yapton Road, Barnham	Borehole: BH5	
Project No: 1801024.001	Dates: 21st March 2018	
Client: Wates Construction Ltd		

Depth (m)	Description	Legend	Sample Details	Depth (m)	SPT Results		Remarks/ Data	Installation
					Blow Count	N Value		
0.00	Ground Surface			0.0				
0.30	MADE GROUND Grey brown sandy clay with occasional gravel of fine to medium subangular flint and red brick. Frequent rootlets.							
0.90	Grey brown sandy CLAY with occasional gravel of fine to medium subangular flint. Occasional rootlets. Soft to firm orangish brown sandy CLAY with rare gravel of fine to medium sub angular flint.			1.0	(3) 2,2,2,2	8		
2.00	Medium dense to dense orangish brown clayey slightly gravelly SAND. Gravel of sub angular flint.			2.0	(5) 3,4,4,3	14		
				3.0	(6) 2,3,4,4	13		
				4.0	(10) 6,8,8,9	31		
5.10	Stiff fissured high to very high strength grey silty CLAY with rare selenite crystals.			5.0	(10) 3,3,3,3	12		
	9.0m - 9.8mbgl No selenite crystals noted.			6.0	(5) 3,4,5,5	17	HSV 5.5m: 100, 112.5, 100kPa HSV 6.5m: 162.5, 187.5, 162.5kPa	
Notes: A: 250ml and 60ml Amber Glass Jars T: Plastic Tub (1Kg) B: Bulk Sample U: Undisturbed Sample SPT: Standard Penetration Test HSV: Hand Shear Vane				Plant: Dando 3000 Water observations: Groundwater strike at 2.0mbgl, rising to 1.0mbgl after 30 minutes. General remarks:				
Logged by: JL		Checked by: AF		Approved by: ET				

CABLE PERCUSSIVE BOREHOLE RECORD		 TWEEDIE EVANS CONSULTING www.tecon.co.uk
Project Title: Yapton Road, Barnham	Borehole: BH5	
Project No: 1801024.001	Dates: 21st March 2018	
Client: Wates Construction Ltd		

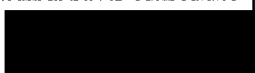
Depth (m)	Description	Legend	Sample Details	Depth (m)	SPT Results		Remarks/ Data	Installation
					Blow Count	N Value		
				7.0			HSV 7.5m: 175, 187.5, 175kPa	
				8.0	(7) 5,5,6,7	23	HSV 8.5m: 175, 187.5, 187.5kPa	
				9.0				
			U100				HSV 9.5m: > 250kPa	
				10.0				
				11.0	(10) 6,8,8,9	31	HSV 10.5m: > 250kPa	
12.00	11.5m - 12.0mbgl No selenite crystals noted.			12.0	(10) 7,8,9,9	33		
	Borehole Terminated			13.0				

Notes: A: 250ml and 60ml Amber Glass Jars T: Plastic Tub (1Kg) B: Bulk Sample U: Undisturbed Sample SPT: Standard Penetration Test HSV: Hand Shear Vane	Plant: Dando 3000		
	Water observations: Groundwater strike at 2.0mbgl, rising to 1.0mbgl after 30 minutes.		
	General remarks:		
	Logged by: JL	Checked by: AF	Approved by: ET

CABLE PERCUSSIVE BOREHOLE RECORD	
Project Title: Yapton Road, Barnham	Borehole: BH6
Project No: 1801024.001	Dates: 22nd March 2018
Client: Wates Construction Ltd	



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Depth (m)	Description	Legend	Sample Details	Depth (m)	SPT Results		Remarks/ Data	Installation
					Blow Count	N Value		
0.00	Ground Surface			0.0				
0.50	MADE GROUND Gray brown sandy clay with occasional ravel of fine to medium subangular flint and brick. Frequent rootlets.		A					
1.00	Soft to firm gray brown sandy CLAY with rare gravel of fine to medium subangular flint. Occasional rootlets.			1.0	(1,1) 2,1,2,3	8		
2.10	Soft to firm orangish brown slightly gravelly sandy CLAY with occasional gravel of fine to medium subangular flint.			2.0	(2,2) 1,2,3,3	9		
3.10	Medium dense orangish brown slightly gravelly clayey SAND. Gravel of subangular flint.			3.0	(3,3) 4,5,4,4	17		
3.50	Medium dense orangish brown clayey gravelly SAND. Gravel of subangular flint.			4.0	(4,4) 6,5,5,5	21		
5.10	Stiff high strength grey slightly sandy silty CLAY with rare selenite crystals.			5.0	(3,3) 4,6,7,5	22		
6.00	Stiff very high strength red mottled grey sandy silty CLAY.			6.0	(4,3) 3,3,5,5	16	HSV 5.5m: 137.5, 137.5, 125kPa HSV 6.5m: >250kPa	
Notes:				Plant: Dando 2000				
A: 250ml and 60ml Amber Glass Jars				Water observations: Groundwater strike at 3.0mbgl, rising to 1.0m after 30 minutes.				
T: Plastic Tub (1Kg)								
B: Bulk Sample								
U: Undisturbed Sample								
SPT: Standard Penetration Test								
HSV: Hand Shear Vane								
				General remarks:				

CABLE PERCUSSIVE BOREHOLE RECORD		
Project Title: Yapton Road, Barnham	Borehole: BH6	
Project No: 1801024.001	Dates: 22nd March 2018	
Client: Wates Construction Ltd		

Depth (m)	Description	Legend	Sample Details	Depth (m)	SPT Results		Remarks/ Data	Installation
					Blow Count	N Value		
			U100					
				7.0			HSV 7.5m: > 250kPa	
				8.0	(4,5) 5,6,6,7	24	HSV 8.5m: > 250kPa	
				9.0				
					U100 Blows: 85			
				10.0				
			A					
				11.0	(5,7) 7,9,8,9	33		
12.00				12.0	(7,8) 8,10,10,10	38		
	Borehole Terminated			13.0				

Notes: A: 250ml and 60ml Amber Glass Jars T: Plastic Tub (1Kg) B: Bulk Sample U: Undisturbed Sample SPT: Standard Penetration Test HSV: Hand Shear Vane	Plant: Dando 2000		
	Water observations: Groundwater strike at 3.0mbgl, rising to 1.0m after 30 minutes.		
	General remarks:		
	Logged by: JL	Checked by: AF	Approved by: ET

TRIAL PIT RECORD		
Project Title: Yapton Road, Barnham	Trial Pit: TP01	
Project No: 1801024.001	Dates: 21/03/2018	
Client: Wates Construction Ltd		

Depth (m)	Description	Legend Side B	Depth (m)	Sample Details	Remarks
0.00	Ground Surface		0.00		
0.30	TOPSOIL TYPE MATERIAL Grey brown sandy clay with occasional fine to medium gravel of flint. Frequent rootlets.			A	
1.50	Soft to firm low to medium strength brown mottled orange sandy CLAY.		1.00		0.8m : HSV = 40,45,40
2.20	Soft to firm medum strength brown mottled orange very sandy gravelly CLAY. Gravel of sub angular to sub rounded flint. Occasional roots.		2.00		1.8m : HSV = 45,50,50
2.80	Orangish brown gravelly clayey SAND. Gravel of sub angular flint.			B	
	Trial Pit Terminated		3.00		

Excavation Details:	Dimensions:	Notes and Remarks: Collapsing from 1.2m	
Date excavated: 21/03/2018	B: 0.6m	Water observations:	
Date backfilled: 21/03/2018	A: 2.2m		
Plant: JCB 3CX		Logged by: JL	Checked by: AF
Shoring: None		Approved by: AK	
Stability: Unstable			

TRIAL PIT RECORD		
Project Title: Yapton Road, Barnham	Trial Pit: TP02	
Project No: 1801024.001	Dates: 21/03/2018	
Client: Wates Construction Ltd		

Depth (m)	Description	Legend Side B	Depth (m)	Sample Details	Remarks
0.00	Ground Surface		0.00		
0.30	TOPSOIL TYPE MATERIAL Grey brown sandy clay with occasional fine to medium gravel of flint. Frequent rootlets.			A	
	Soft to firm low to medium strength orangish brown sandy CLAY. Occasional fine to medium sub angular gravel of flint			A	0.8m : HSV = 40,45,45
				T	
1.70			1.00		1.6m : HSV = 45,45,45
	Soft to firm medium strength orangish brown slightly gravelly very sandy CLAY. Gravel of sub angular flint.		2.00		
2.20					
	Orangish brown clayey gravelly SAND. Gravel of sub angular flint.				
2.60					
	Trial Pit Terminated		3.00		

Excavation Details:	Dimensions:	Notes and Remarks: Collapsing from 1.4mbgl		
Date excavated: 21/03/2018	B: 0.6m	Water observations: Water ingress at 1.15mbgl		
Date backfilled: 21/03/2018	A: 2.0m			
Plant: JCB 3CX		Logged by: JL	Checked by: AF	Approved by: AK
Shoring: None				
Stability: Unstable				

TRIAL PIT RECORD		 TEC TWEEDIE EVANS CONSULTING www.tecon.co.uk
Project Title: Yapton Road, Barnham	Trial Pit: TP03	
Project No: 1801024.001	Dates: 21/03/2018	
Client: Wates Construction Ltd		

Depth (m)	Description	Legend Side B	Depth (m)	Sample Details	Remarks
0.00	Ground Surface		0.00		
	MADE GROUND Grey brown sandy slightly gravelly clay. Gravel of fine sub angular flint, textile, glass. Occasional cobbles of concrete.			A	
0.60					
	Soft to firm orangish brown slightly sandy slightly gravelly CLAY. Gravel of fine to medium sub angular flint.		1.00		
1.50					
	Orangish brown clayey fine SAND. Occasional gravel of flint.		2.00		
2.30					
	Trial Pit Terminated		3.00		

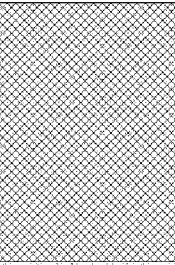
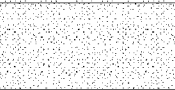
Excavation Details:	Dimensions:	Notes and Remarks: Collapsing from 1.8mbgl	
Date excavated: 21/03/2018	B: 0.6m	Water observations: Water ingress at 1.5mbgl	
Date backfilled: 21/03/2018	A: 2.1m		
Plant: JCB 3CX		Logged by: JL	Checked by: ET
Shoring: None		Approved by: AK	
Stability: Unstable			

TRIAL PIT RECORD		 TWEEDIE EVANS CONSULTING www.tecon.co.uk
Project Title: Yapton Road, Barnham	Trial Pit: TP04	
Project No: 1801024.001	Dates: 21/03/2018	
Client: Wates Construction Ltd		

Depth (m)	Description	Legend Side B	Depth (m)	Sample Details	Remarks
0.00	Ground Surface		0.00		
0.35	MADE GROUND Grey brown slightly gravelly sandy clay. Gravel of fine to medium sub angular flint and glass. Frequent rootlets			A	
0.75	MADE GROUND Orangish brown slightly sandy slightly gravelly clay. gravel of fine to medium sub angular flint and glass.			A	
1.30	Firm medium to high strength orangish brown slightly sandy slightly gravelly CLAY. Gravel of fine to medium flint.		1.00		0.8m HSV = 75,65,75
2.10	Firm medium to high strength orangish brown sandy gravelly CLAY. Gravel of sub angular to sub rounded flint.		2.00		1.1m HSV = 75,80,75
2.30	Orangish brown clayey slightly gravelly SAND, Gravel of sub angular flint.				1.5m HSV = 70,65,70
	Trial Pit Terminated		3.00		

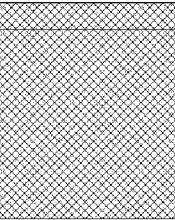
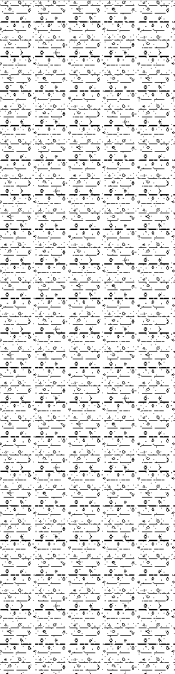
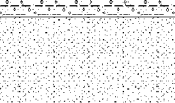
Excavation Details:	Dimensions:	Notes and Remarks: Collapsing from 1.8mbgl	
Date excavated: 21/03/2018	B: 0.6	Water observations: Water ingress at 2.1mbgl	
Date backfilled: 21/03/2018	A: 1.9m		
Plant: JCB 3CX		Logged by: JL	Checked by: ET
Shoring: None		Approved by: AK	
Stability: Unstable			

TRIAL PIT RECORD		 TWEEDIE EVANS CONSULTING www.tecon.co.uk
Project Title: Yapton Road, Barnham	Trial Pit: TP05	
Project No: 1801024.001	Dates: 21/03/2018	
Client: Wates Construction Ltd		

Depth (m)	Description	Legend Side B	Depth (m)	Sample Details	Remarks
0.00	Ground Surface		0.00		
	MADE GROUND Grey brown sandy slightly gravelly clay. Gravel of fine to medium sub angular flint. ...Plastic membrane at 0.6mbgl			A	
0.60					
	Soft to firm orangish brown slightly gravelly sandy CLAY. Occasional gravel of fine to medium sub angular flint. ...Becoming sandier below 1.8mbgl		1.00		1.1m: HSV = 50,55,55
			2.00		1.8m: HSV = 60,60,60
2.20					
	Orangish brown clayey SAND.				
2.40					
	Trial Pit Terminated				
			3.00		

Excavation Details:	Dimensions:	Notes and Remarks:	
Date excavated: 21/03/2018	B: 0.6m	Water observations: Water ingress at 1.6mbgl	
Date backfilled: 21/03/2018	A: 2.0m		
Plant: JCB 3CX		Logged by: JL	Checked by: AF
Shoring: None		Approved by: AK	
Stability: Stable			

TRIAL PIT RECORD		 TEC TWEEDIE EVANS CONSULTING www.tecon.co.uk
Project Title: Yapton Road, Barnham	Trial Pit: TP06	
Project No: 1801024.001	Dates: 21/03/2018	
Client: Wates Construction Ltd		

Depth (m)	Description	Legend Side B	Depth (m)	Sample Details	Remarks
0.00	Ground Surface		0.00		
0.06	MADE GROUND Brown sandy clay with frequent rootlets.		0.00		0.7m HSV = 45,45,45
	MADE GROUND Grey gravelly sand. Gravel of fine to coarse brick, clinker, mudstone, flint, concrete. Cobbles of brick and concrete			A	
0.50				A	
	Soft to firm medium strength brown sandy slightly gravelly CLAY. Gravel of fine to medium sub angular flint.		1.00		
			2.00		1.5m HSV = 55,60,55
2.10					
	Orangish brown clayey SAND				
2.30					
	Trial Pit Terminated		3.00		

Excavation Details:	Dimensions:	Notes and Remarks:	
Date excavated: 21/03/2018	B: 0.6m	Water observations: No groundwater recorded.	
Date backfilled: 21/03/2018			
Plant: JCB 3CX	A: 2.2m		
Shoring: None			
Stability: Stable			
		Logged by: JL	Checked by: AF
		Approved by: AK	

TRIAL PIT RECORD		
Project Title: Yapton Road, Barnham	Trial Pit: TP07	
Project No: 1801024.001	Dates: 22/03/2018	
Client: Wates Construction Ltd		

Depth (m)	Description	Legend Side B	Depth (m)	Sample Details	Remarks
0.00	Ground Surface		0.00		
0.15	MADE GROUND Grey brown slightly gravelly sandy clay. Gravel of fine sub angular flint. Frequent rootlets				
	Soft to firm low strength orangish brown slightly gravelly sandy CLAY. Gravel of fine to medium sub angular flint. Occasional roots.			A	
0.80					0.6m HSV = 40,40,35
	Soft to firm medium to high strength orangish brown sandy slightly gravelly CLAY. Gravel of fine to medium sub angular flint.		1.00		
					1.5 HSV = 65,70,65
2.00			2.00		
	Orangish brown clayey SAND				
2.20					
	Trial Pit Terminated				
			3.00		

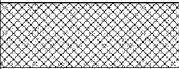
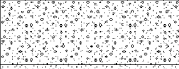
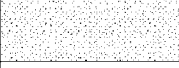
Excavation Details:		Dimensions:	Notes and Remarks: Collapsed below 1.8mbgl	
Date excavated: 22/03/2018		B: 0.6m  A: 2.2m	Water observations: Water ingress at 2mbgl	
Date backfilled: 22/03/2018				
Plant: JCB 3CX				
Shoring: None				
Stability: Unstable			Logged by: JL	Checked by: AM
			Approved by: AK	

TRIAL PIT RECORD		 TEC TWEEDIE EVANS CONSULTING www.tecon.co.uk
Project Title: Yapton Road, Barnham	Trial Pit: TP08	
Project No: 1801024.001	Dates: 22/03/2018	
Client: Wates Construction Ltd		

Depth (m)	Description	Legend Side B	Depth (m)	Sample Details	Remarks
0.00	Ground Surface		0.00		
0.15	MADE GROUND Grey brown sandy slightly gravelly clay. Gravel of fine sub angular flint. Frequent rootlets Soft low strength brown slightly gravelly sandy CLAY. Gravel of fine to medium sub angular flint.			A	
				A	0.6m: HSV = 30,35,30
1.00	Soft to firm medium strength orangish brown slightly gravelly sandy CLAY. Gravel of fine to medium sub angular flint.		1.00		1.3m: HSV = 45,45,45
1.60					
1.70	Soft to firm brown sandy very gravelly CLAY. Gravel of fine to medium sub angular flint.				
1.90	Firm brown slightly gravelly very sandy CLAY. Gravel of fine to medium sub angular flint.				
2.10	Orangish brown clayey SAND. rare gravel of sub angular flint.		2.00		
	Trial Pit Terminated		3.00		
			4.00		

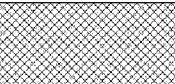
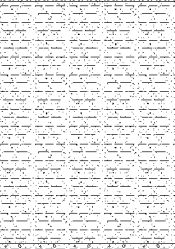
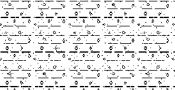
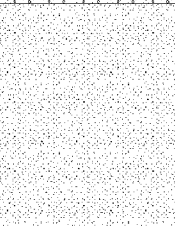
Excavation Details:	Dimensions:	Notes and Remarks:	
Date excavated: 22/03/2018 Date backfilled: 22/03/2018 Plant: JCB 3CX Shoring: None Stability: Stable	B: 0.6m A: 2.1m 	Water observations: Water ingress at 1.1mbgl	
		Logged by: JL	Checked by: AF Approved by: AK

TRIAL PIT RECORD		
Project Title: Yapton Road, Barnham	Trial Pit: TP09	
Project No: 1801024.001	Dates: 22/03/2018	
Client: Wates Construction Ltd		

Depth (m)	Description	Legend Side B	Depth (m)	Sample Details	Remarks
0.00	Ground Surface		0.00		
0.20	MADE GROUND Dark grey brown sandy clay. Rare gravel of flint. Frequent rootlets			A	
	Soft to firm low to medium strength brown sandy CLAY. Rare gravel of sub angular flint.		1.00		0.5m: HSV = 35,30,35
1.70					1.2m: HSV = 45,50,45
1.90	Orangish brown clayey very gravelly SAND. Gravel of fine to coarse sub angular to sub rounded flint.				1.6m: HSV = 55,60,50
2.10	Orangish brown fine SAND. rare gravel of flint		2.00		
	Trial Pit Terminated		3.00		
			4.00		

Excavation Details:	Dimensions:	Notes and Remarks:	
Date excavated: 22/03/2018	B: 0.6m	Water observations: No groundwater encountered.	
Date backfilled: 22/03/2018	A: 2.0m		
Plant: JCB 3CX		Logged by: JL	Checked by: AF
Shoring: None		Approved by: AK	
Stability: Stable			

TRIAL PIT RECORD		 TEC TWEEDIE EVANS CONSULTING www.tecon.co.uk 
Project Title: Yapton Road, Barnham	Trial Pit: TP10	
Project No: 1801024.001	Dates: 22/03/2018	
Client: Wates Construction Ltd		

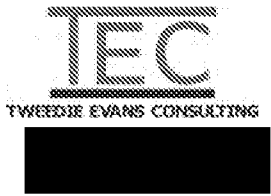
Depth (m)	Description	Legend Side B	Depth (m)	Sample Details	Remarks
0.00	Ground Surface		0.00		
0.25	MADE GROUND Grey brown sandy very gravelly clay. Gravel of flint, concrete, glass, plastic, concrete, ceramic.		0.00	A	0.8m: HSV = 40,35,40
1.00	Soft to firm low strength orangish brown sandy CLAY. with occasional fine to medium gravel of flint.		1.00		
1.30	Soft orangish brown very gravelly sandy CLAY. Gravel of fine to medium sub angular flint and chalk		1.00		
2.00	Orangish brown clayey SAND with rare fine to medium gravel of flint.		2.00		
	Trial Pit Terminated		2.00		
			3.00		
			4.00		

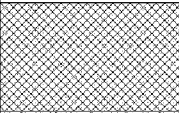
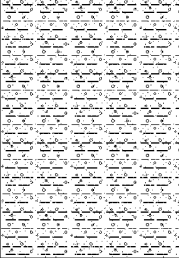
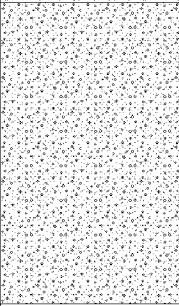
Excavation Details:	Dimensions:	Notes and Remarks: Collapsing after 1.1mbgl Black metal pipe running across the north-eastern side of the pit at 0.6mbgl.	
Date excavated: 22/03/2018 Date backfilled: 22/03/2018 Plant: JCB 3CX Shoring: None Stability: Unstable	B: 0.6m  A: 2.6m	Water observations: Water ingress at 1.6mbgl	
		Logged by: JL	Checked by: AF Approved by: AK

TRIAL PIT RECORD		 TWEEDIE EVANS CONSULTING www.tecon.co.uk
Project Title: Yapton Road, Barnham	Trial Pit: TP11	
Project No: 1801024.001	Dates: 22/03/2018	
Client: Wates Construction Ltd		

Depth (m)	Description	Legend Side B	Depth (m)	Sample Details	Remarks
0.00	Ground Surface		0.00		
0.15	MADE GROUND Grey brown sandy gravelly clay. Gravel of flint.				
	MADE GROUND Brown sandy slightly gravelly clay. Gravel of fine to medium flint, brick, string and plastic.				
0.80					
	Soft to firm medium strength brown slightly gravelly sandy CLAY. Gravel of fine to medium sub angular flint.		1.00		1m: HSV = 50,45,50
1.10					
	Soft to firm orangish brown sandy CLAY. Occasional gravel of fine to medium sub angular flint.				
1.70					
	Orangish brown clayey gravelly SAND. Gravel of fine to medium sub angular flint.		2.00	B	
2.60					
	Trial Pit Terminated		3.00		

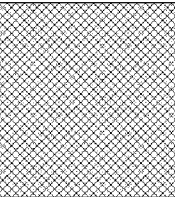
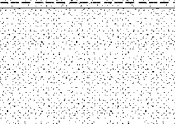
Excavation Details:	Dimensions:	Notes and Remarks: Collapsing from 1.9mbgl	
Date excavated: 22/03/2018	B: 0.6m		
Date backfilled: 22/03/2018	A: 1.9m	Water observations: Water ingress at 2.1mbgl	
Plant: JCB 3CX			
Shoring: None			
Stability: Unstable		Logged by: JL	Checked by: AF
		Approved by: AK	

TRIAL PIT RECORD		
Project Title: Yapton Road, Barnham	Trial Pit: TP12	
Project No: 1801024.001	Dates: 22/03/2018	
Client: Wates Construction Ltd		

Depth (m)	Description	Legend Side B	Depth (m)	Sample Details	Remarks
0.00	Ground Surface		0.00		
0.25	MADE GROUND Dark grey very sandy gravelly clay. Gravel of brick, tarmacadam and clinker			A	
0.85	Soft to firm grey brown slightly gravelly very sandy CLAY. Gravel of fine to medium sub angular flint.			A	
1.50	Soft to firm medium strength orangish brown sandy CLAY. Occasional fine to medium gravel of sub angular flint.		1.00	T	1m: HSV = 50,45,50
2.20	Orangish brown clayey gravelly SAND. Gravel of sub angular flint.		2.00		
	Trial Pit Terminated		3.00		

Excavation Details:	Dimensions:	Notes and Remarks: Collapsing from 1.7mbgl	
Date excavated: 22/03/2018	B: 0.6m	Water observations: Water ingress at 1.8mbgl	
Date backfilled: 22/03/2018	A: 2.1m		
Plant: JCB 3CX		Logged by: JL	Checked by: AF
Shoring: None		Approved by: AK	
Stability: Unstable			

TRIAL PIT RECORD		 TEC TWEEDIE EVANS CONSULTING www.tec.co.uk
Project Title: Yapton Road, Barnham	Trial Pit: TP13	
Project No: 1801024.001	Dates: 22/03/2018	
Client: Wates Construction Ltd		

Depth (m)	Description	Legend Side B	Depth (m)	Sample Details	Remarks
0.00	Ground Surface		0.00		
	MADE GROUND Brown sandy slightly gravelly clay. Gravel of fine to coarse brick, flint, glass, plastic and wood.			A	
0.60					
	Soft to firm low to medium strength orangish brown sandy CLAY with rare flint gravel.		1.00		0.7m: HSV = 35,40,45
	...Band of flint gravel at 1.5mbgl			T	1m: HSV = 50,55,50
1.70					
	Orangish brown clayey SAND with rare gravel of sub angular flint.		2.00		
2.10					
	Trial Pit Terminated		3.00		
			4.00		

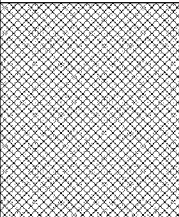
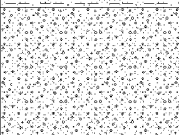
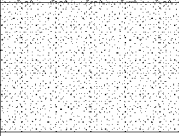
Excavation Details:	Dimensions:	Notes and Remarks: Collapsing after 1.4mbgl	
Date excavated: 22/03/2018	B: 0.6m	Water observations: Water ingress at 1.7mbgl	
Date backfilled: 22/03/2018	A: 2.0m		
Plant: JCB 3CX		Logged by: JL	Checked by: AF
Shoring: None		Approved by: AK	
Stability: Unstable			

TRIAL PIT RECORD		 TEC TWEEDIE EVANS CONSULTING www.tecon.co.uk
Project Title: Yapton Road, Barnham	Trial Pit: TP14	
Project No: 1801024.001	Dates: 22/03/2018	
Client: Wates Construction Ltd		

Depth (m)	Description	Legend Side B	Depth (m)	Sample Details	Remarks
0.00	Ground Surface		0.00		
0.10	MADE GROUND Grey gravelly sand. Gravel of limestone.			A	
1.12	Soft to firm medium strength orangish brown sandy CLAY. Occasional fine to medium gravel of sub angular flint.		1.00		
1.40	Orangish brown clayey gravelly SAND. Gravel of fine to medium sub angular flint.			A	
1.90	Orangish brown SAND. Occasional fine to medium sub angular flint gravel.				
	Trial Pit Terminated		2.00		
			3.00		
			4.00		

Excavation Details:	Dimensions:	Notes and Remarks:	
Date excavated: 22/03/2018	B: 0.6m	Water observations: Water ingress at 1.8mbgl	
Date backfilled: 22/03/2018	A: 1.9m		
Plant: JCB 3CX		Logged by: JL	Checked by: AF
Shoring: None		Approved by: AK	
Stability: Stable			

TRIAL PIT RECORD		
Project Title: Yapton Road, Barnham	Trial Pit: TP15	
Project No: 1801024.001	Dates: 22/03/2018	
Client: Wates Construction Ltd		

Depth (m)	Description	Legend Side B	Depth (m)	Sample Details	Remarks
0.00	Ground Surface		0.00		
	MADE GROUND Dark grey clayey gravelly sand. Gravel and cobbles of brick and concrete. Gravel of flint and glass.			A	
				A	
0.50	Soft to firm medium strength orangish brown sandy CLAY with occasional flint gravel.		1.00		
1.50	Orangish brown clayey gravelly SAND. Gravel of sub angular flint.				
1.80	Orangish brown clayey SAND		2.00		
2.10	Trial Pit Terminated		3.00		

Excavation Details:	Dimensions:	Notes and Remarks:	
Date excavated: 22/03/2018	B: 0.6m	Water observations: No groundwater encountered.	
Date backfilled: 22/03/2018	A: 2.0m		
Plant: JCB 3CX		Logged by: JL	Checked by: AF
Shoring: None		Approved by: AK	
Stability: Stable			

APPENDIX F

Geochemical Certificates of Analysis



Final Report

Report No.: 18-08646-1

Initial Date of Issue: 08-Apr-2018

Client: Tweedie Evans

Client Address: The Old Chapel
35a Southover
Wells
BA5 1UH

Contact(s): Jan Loades

Project: 1801024 Yapton Road, Barnham

Quotation No.: Q18-12456

Date Received: 28-Mar-2018

Order No.:

Date Instructed: 29-Mar-2018

No. of Samples: 24

Turnaround (Wkdays): 5

Results Due: 06-Apr-2018

Date Approved: 06-Apr-2018

Approved By:

Details: Martin Dyer, Laboratory Manager

Results - Soil

Client: Tweedie Evans	Chemtest Job No.: 18-08646									
Quotation No.: Q18-12456	Chemtest Sample ID.: 599220									
Order No.:	Client Sample Ref.: TP2									
	Sample Type: SOIL									
	Top Depth (m): 0.20									
	Date Sampled: 21-Mar-2018									
	Asbestos Lab: 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
Moisture	N	2030	%	0.020	20	21	24	19	17	19
Soil Colour	N	2040		N/A	Brown	Brown	Brown	Orange, Brown	Brown	Brown
Other Material	N	2040		N/A	Stones	Stones	Stones	NONE	NONE	NONE
Soil Texture	N	2040		N/A	Clay	Clay	Clay	Clay	Clay	Clay
pH	M	2010		N/A	8.2	7.8	6.5	8.2	8.6	8.2
Electrical Conductivity (2.5:1)	N	2020	µS/cm	1.0	2000	340	300			290
Boron (Hot Water Soluble)	M	2120	mg/kg	0.40	1.5	0.76	0.72			0.58
Magnesium (Water Soluble)	N	2120	g/l	0.010				< 0.010	0.023	< 0.010
Sulphate (2:1 Water Soluble) as SO4	M	2120	g/l	0.010	0.17	< 0.010	< 0.010	0.13	0.61	0.35
Total Sulphur	M	2175	%	0.010				0.26	0.58	0.57
Chloride (Water Soluble)	M	2220	g/l	0.010	< 0.010	< 0.010	0.033	< 0.010	0.084	0.063
Nitrate (Water Soluble)	N	2220	g/l	0.010				< 0.010	< 0.010	< 0.010
Cyanide (Complex)	M	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50
Cyanide (Free)	M	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50
Cyanide (Total)	M	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50
Sulphide (Easily Liberatable)	U	2325	mg/kg	0.50	0.84	0.71	0.56			22
Phosphorus (Available)	N	2420	mg/l	0.50	14	39	17			12
Ammonium (Extractable)	M	2425	mg/kg	0.50	5.4	7.6	15			5.6
Ammonium (Water Soluble)	M	2120	g/l	0.01				< 0.01	< 0.01	< 0.01
Calcium (Total)	N	2430	mg/kg	100	8300	5600	3300			3200
Iron (Total)	N	2430	mg/kg	100	17000	19000	16000			19000
Potassium (Total)	N	2430	mg/kg	100	1200	1700	1100			1100
Magnesium (Total)	N	2430	mg/kg	100	3700	3400	2400			3400
Sodium (Total)	N	2430	mg/kg	10	1200	240	130			99
Sulphate (Total)	M	2430	%	0.010	0.34	0.098	0.092			0.060
Sulphate (Acid Soluble)	M	2430	%	0.010				0.051	0.21	0.14
Arsenic	M	2450	mg/kg	1.0	12	13	10			10
Barium	M	2450	mg/kg	10	66	100	110			59
Beryllium	U	2450	mg/kg	1.0	< 1.0	< 1.0	< 1.0			< 1.0
Cadmium	M	2450	mg/kg	0.10	0.19	0.30	0.46			0.18
Cobalt	M	2450	mg/kg	2.0	7.5	11	8.7			7.9
Chromium	M	2450	mg/kg	1.0	21	25	19			20
Manganese	M	2450	mg/kg	5.0	370	590	640			400
Molybdenum	M	2450	mg/kg	2.0	< 2.0	< 2.0	< 2.0			< 2.0

Results - Soil

Client: Tweedie Evans	Chemtest Job No.:		18-08646	18-08646	18-08646	18-08646	18-08646	18-08646	18-08646	18-08646	18-08646	18-08646
Quotation No.: Q18-12456	Chemtest Sample ID.:		599220	599221	599222	599223	599224	599225	599226	599229	599230	
Order No.:	Client Sample Ref.:		TP2	TP3	TP1	BH2	BH1	BH4	BH3	BH4	TP5	
	Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	
	Top Depth (m):		0.20	0.20	0.20	5.00	5.50	6.50	8.00	0.10	0.30	
	Date Sampled:		21-Mar-2018	21-Mar-2018	21-Mar-2018	21-Mar-2018	21-Mar-2018	21-Mar-2018	21-Mar-2018	21-Mar-2018	21-Mar-2018	
	Asbestos Lab:		COVENTRY	COVENTRY	COVENTRY					COVENTRY	COVENTRY	
Determinand	Accred.	SOP	Units	LOD								
Antimony	N	2450	mg/kg	2.0	< 2.0	< 2.0	< 2.0				< 2.0	< 2.0
Tin	N	2450	mg/kg	5.0	5.9	< 5.0	< 5.0				< 5.0	< 5.0
Copper	M	2450	mg/kg	0.50	42	30	32				16	26
Mercury	M	2450	mg/kg	0.10	0.14	< 0.10	< 0.10				< 0.10	< 0.10
Nickel	M	2450	mg/kg	0.50	16	20	16				16	20
Lead	M	2450	mg/kg	0.50	53	63	53				33	48
Selenium	M	2450	mg/kg	0.20	< 0.20	< 0.20	< 0.20				< 0.20	< 0.20
Vanadium	U	2450	mg/kg	5.0	29	31	23				26	35
Zinc	M	2450	mg/kg	0.50	100	170	160				91	130
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50				< 0.50	< 0.50
Fraction of Organic Carbon	M	2625		0.0010	0.013	0.016	0.056				0.0079	0.016
Total Organic Carbon	M	2625	%	0.20	1.3	1.6	5.6				0.79	1.6
Mineral Oil	N	2670	mg/kg	10	< 10	< 10	< 10				< 10	< 10
Aliphatic TPH >C5-C6	N	2680	mg/kg	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
Aliphatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0				< 1.0	< 1.0
Aliphatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0				< 1.0	< 1.0
Aliphatic TPH >C12-C16	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0				< 1.0	< 1.0
Aliphatic TPH >C16-C21	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0				< 1.0	< 1.0
Aliphatic TPH >C21-C35	M	2680	mg/kg	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
Total Aliphatic Hydrocarbons	N	2680	mg/kg	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
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0				< 1.0	< 1.0
Aromatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0				< 1.0	< 1.0
Aromatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0				< 1.0	< 1.0
Aromatic TPH >C12-C16	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0				< 1.0	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0				8.5	< 1.0
Aromatic TPH >C21-C35	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0				2.2	< 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0				< 1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	< 5.0	< 5.0				11	< 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	< 10	< 10	< 10				11	< 10
Dichlorodifluoromethane	N	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0				< 1.0	< 1.0
Chloromethane	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0				< 1.0	< 1.0
Vinyl Chloride	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0				< 1.0	< 1.0
Bromomethane	M	2760	µg/kg	20	< 20	< 20	< 20				< 20	< 20
Chloroethane	N	2760	µg/kg	2.0	< 2.0	< 2.0	< 2.0				< 2.0	< 2.0
Trichlorofluoromethane	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0				< 1.0	< 1.0
1,1-Dichloroethene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0				< 1.0	< 1.0

Results - Soil

Client: Tweedie Evans	Chemtest Job No.:		18-08646	18-08646	18-08646	18-08646	18-08646	18-08646	18-08646	18-08646	18-08646
Quotation No.: Q18-12456	Chemtest Sample ID.:		599220	599221	599222	599223	599224	599225	599226	599229	599230
Order No.:	Client Sample Ref.:		TP2	TP3	TP1	BH2	BH1	BH4	BH3	BH4	TP5
	Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Top Depth (m):		0.20	0.20	0.20	5.00	5.50	6.50	8.00	0.10	0.30
	Date Sampled:		21-Mar-2018	21-Mar-2018	21-Mar-2018	21-Mar-2018	21-Mar-2018	21-Mar-2018	21-Mar-2018	21-Mar-2018	21-Mar-2018
	Asbestos Lab:		COVENTRY	COVENTRY	COVENTRY					COVENTRY	COVENTRY
Determinand	Accred.	SOP	Units	LOD							
Trans 1,2-Dichloroethene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0
1,1-Dichloroethane	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0
cis 1,2-Dichloroethene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0
Bromochloromethane	N	2760	µg/kg	5.0	< 5.0	< 5.0	< 5.0			< 5.0	< 5.0
Trichloromethane	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0
1,1,1-Trichloroethane	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0
Tetrachloromethane	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0
1,1-Dichloropropene	N	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0
Benzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0
1,2-Dichloroethane	M	2760	µg/kg	2.0	< 2.0	< 2.0	< 2.0			< 2.0	< 2.0
Trichloroethene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0
1,2-Dichloropropane	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0
Dibromomethane	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0
Bromodichloromethane	M	2760	µg/kg	5.0	< 5.0	< 5.0	< 5.0			< 5.0	< 5.0
cis-1,3-Dichloropropene	N	2760	µg/kg	10	< 10	< 10	< 10			< 10	< 10
Toluene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0
Trans-1,3-Dichloropropene	N	2760	µg/kg	10	< 10	< 10	< 10			< 10	< 10
1,1,2-Trichloroethane	M	2760	µg/kg	10	< 10	< 10	< 10			< 10	< 10
Tetrachloroethene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0
1,3-Dichloropropane	N	2760	µg/kg	2.0	< 2.0	< 2.0	< 2.0			< 2.0	< 2.0
Dibromochloromethane	N	2760	µg/kg	10	< 10	< 10	< 10			< 10	< 10
1,2-Dibromoethane	M	2760	µg/kg	5.0	< 5.0	< 5.0	< 5.0			< 5.0	< 5.0
Chlorobenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0
1,1,1,2-Tetrachloroethane	M	2760	µg/kg	2.0	< 2.0	< 2.0	< 2.0			< 2.0	< 2.0
Ethylbenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0
m & p-Xylene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0
o-Xylene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0
Styrene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0
Tribromomethane	N	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0
Isopropylbenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0
Bromobenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0
1,2,3-Trichloropropane	N	2760	µg/kg	50	< 50	< 50	< 50			< 50	< 50
N-Propylbenzene	N	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0
2-Chlorotoluene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0
1,3,5-Trimethylbenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0
4-Chlorotoluene	N	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0
Tert-Butylbenzene	N	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0
1,2,4-Trimethylbenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0
Sec-Butylbenzene	N	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0

Results - Soil

Client: Tweedie Evans	Chemtest Job No.:		18-08646	18-08646	18-08646	18-08646	18-08646	18-08646	18-08646	18-08646	18-08646
Quotation No.: Q18-12456	Chemtest Sample ID.:		599220	599221	599222	599223	599224	599225	599226	599229	599230
Order No.:	Client Sample Ref.:		TP2	TP3	TP1	BH2	BH1	BH4	BH3	BH4	TP5
	Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Top Depth (m):		0.20	0.20	0.20	5.00	5.50	6.50	8.00	0.10	0.30
	Date Sampled:		21-Mar-2018	21-Mar-2018	21-Mar-2018	21-Mar-2018	21-Mar-2018	21-Mar-2018	21-Mar-2018	21-Mar-2018	21-Mar-2018
	Asbestos Lab:		COVENTRY	COVENTRY	COVENTRY					COVENTRY	COVENTRY
Determinand	Accred.	SOP	Units	LOD							
1,3-Dichlorobenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0
4-Isopropyltoluene	N	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0
1,4-Dichlorobenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0
N-Butylbenzene	N	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0
1,2-Dichlorobenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0
1,2-Dibromo-3-Chloropropane	N	2760	µg/kg	50	< 50	< 50	< 50			< 50	< 50
1,2,4-Trichlorobenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0
Hexachlorobutadiene	N	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0
1,2,3-Trichlorobenzene	N	2760	µg/kg	2.0	< 2.0	< 2.0	< 2.0			< 2.0	< 2.0
Methyl Tert-Butyl Ether	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0
N-Nitrosodimethylamine	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
Phenol	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
2-Chlorophenol	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
Bis-(2-Chloroethyl)Ether	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
1,3-Dichlorobenzene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
1,4-Dichlorobenzene	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
1,2-Dichlorobenzene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
2-Methylphenol	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
Bis(2-Chloroisopropyl)Ether	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
Hexachloroethane	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
N-Nitrosodi-n-propylamine	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
4-Methylphenol	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
Nitrobenzene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
Isophorone	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
2-Nitrophenol	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
2,4-Dimethylphenol	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
Bis(2-Chloroethoxy)Methane	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
2,4-Dichlorophenol	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
1,2,4-Trichlorobenzene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
Naphthalene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
4-Chloroaniline	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
Hexachlorobutadiene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
4-Chloro-3-Methylphenol	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
2-Methylnaphthalene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
4-Nitrophenol	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
Hexachlorocyclopentadiene	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
2,4,6-Trichlorophenol	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
2,4,5-Trichlorophenol	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
2-Chloronaphthalene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50

Results - Soil

Client: Tweedie Evans	Chemtest Job No.:									
Quotation No.: Q18-12456	Chemtest Sample ID.:									
Order No.:	Client Sample Ref.:									
	Sample Type:									
	Top Depth (m):									
	Date Sampled:									
	Asbestos Lab:									
Determinand	Accred.	SOP	Units	LOD						
2-Nitroaniline	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50
Acenaphthylene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50
Dimethylphthalate	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50
2,6-Dinitrotoluene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50
Acenaphthene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50
3-Nitroaniline	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50
Dibenzofuran	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50
4-Chlorophenylphenylether	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50
2,4-Dinitrotoluene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50
Fluorene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50
Diethyl Phthalate	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50
4-Nitroaniline	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50
2-Methyl-4,6-Dinitrophenol	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50
Azobenzene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50
4-Bromophenylphenyl Ether	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50
Hexachlorobenzene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50
Pentachlorophenol	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50
Phenanthrene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50
Anthracene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50
Carbazole	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50
Di-N-Butyl Phthalate	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50
Fluoranthene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50
Pyrene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50
Butylbenzyl Phthalate	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50
Benzo[a]anthracene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50
Chrysene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50
Bis(2-Ethylhexyl)Phthalate	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50
Di-N-Octyl Phthalate	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50
Benzo[b]fluoranthene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50
Benzo[k]fluoranthene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50
Benzo[a]pyrene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50
Indeno(1,2,3-c,d)Pyrene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50
Dibenz(a,h)Anthracene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50
Benzo[g,h,i]perylene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50			< 0.50
Naphthalene	M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10			< 0.10
Acenaphthylene	N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10			< 0.10
Acenaphthene	M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10			< 0.10
Fluorene	M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10			< 0.10
Phenanthrene	M	2800	mg/kg	0.10	< 0.10	0.17	0.12			< 0.10

Results - Soil

Client: Tweedie Evans	Chemtest Job No.:					18-08646	18-08646	18-08646	18-08646	18-08646	18-08646	18-08646	18-08646	18-08646
Quotation No.: Q18-12456	Chemtest Sample ID.:					599220	599221	599222	599223	599224	599225	599226	599229	599230
Order No.:	Client Sample Ref.:					TP2	TP3	TP1	BH2	BH1	BH4	BH3	BH4	TP5
	Sample Type:					SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Top Depth (m):					0.20	0.20	0.20	5.00	5.50	6.50	8.00	0.10	0.30
	Date Sampled:					21-Mar-2018	21-Mar-2018	21-Mar-2018	21-Mar-2018	21-Mar-2018	21-Mar-2018	21-Mar-2018	21-Mar-2018	21-Mar-2018
	Asbestos Lab:					COVENTRY	COVENTRY	COVENTRY					COVENTRY	COVENTRY
Determinand	Accred.	SOP	Units	LOD										
Anthracene	M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10						< 0.10	< 0.10
Fluoranthene	M	2800	mg/kg	0.10	0.12	0.48	0.26						0.10	0.35
Pyrene	M	2800	mg/kg	0.10	0.16	0.51	0.31						0.13	0.35
Benzo[a]anthracene	M	2800	mg/kg	0.10	< 0.10	0.15	< 0.10						< 0.10	< 0.10
Chrysene	M	2800	mg/kg	0.10	< 0.10	0.18	< 0.10						< 0.10	< 0.10
Benzo[b]fluoranthene	M	2800	mg/kg	0.10	< 0.10	0.27	< 0.10						< 0.10	< 0.10
Benzo[k]fluoranthene	M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10						< 0.10	< 0.10
Benzo[a]pyrene	M	2800	mg/kg	0.10	< 0.10	0.16	< 0.10						< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene	M	2800	mg/kg	0.10	< 0.10	0.10	< 0.10						< 0.10	< 0.10
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10						< 0.10	< 0.10
Benzo[g,h,i]perylene	M	2800	mg/kg	0.10	< 0.10	0.19	< 0.10						< 0.10	< 0.10
Coronene	N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10						< 0.10	< 0.10
Total Of 17 PAH's	N	2800	mg/kg	2.0	< 2.0	2.2	< 2.0						< 2.0	< 2.0
Total Phenols	M	2920	mg/kg	0.30	< 0.30	< 0.30	< 0.30						< 0.30	< 0.30

Results - Soil

Client: Tweedie Evans	Chemtest Job No.:				18-08646	18-08646	18-08646	18-08646	18-08646	18-08646	18-08646	18-08646	18-08646
Quotation No.: Q18-12456	Chemtest Sample ID.:				599231	599232	599233	599241	599242	599243	599244	599245	599246
Order No.:	Client Sample Ref.:				BH3	TP4	TP6	TP15	TP14	BH6	TP11	TP7	TP13
	Sample Type:				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Top Depth (m):				0.20	0.20	0.10	0.20	1.50	10.50	0.20	0.40	0.20
	Date Sampled:				21-Mar-2018	21-Mar-2018	21-Mar-2018	22-Mar-2018	22-Mar-2018	22-Mar-2018	22-Mar-2018	22-Mar-2018	22-Mar-2018
	Asbestos Lab:				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
Moisture	N	2030	%	0.020	27	22	7.7	12	16	11	20	22	18
Soil Colour	N	2040		N/A	Brown	Brown	Brown	Brown	Brown	Red	Brown	Orange,	Brown
Other Material	N	2040		N/A	Roots, 20%	Stones	Stones	Stones,	NONE	NONE	Stones	NONE,	Stones
Soil Texture	N	2040		N/A	Clay	Clay	Sand	Sand	Sand	Clay	Clay	Clay	Clay
pH	M	2010		N/A	7.0	7.5	8.6	8.0	7.7	8.8	7.9	7.8	7.9
Electrical Conductivity (2.5:1)	N	2020	µS/cm	1.0	460	280	390	250			240	260	260
Boron (Hot Water Soluble)	M	2120	mg/kg	0.40	0.88	0.64	1.2	0.60			1.4	0.83	1.2
Magnesium (Water Soluble)	N	2120	g/l	0.010					< 0.010	< 0.010			
Sulphate (2:1 Water Soluble) as SO4	M	2120	g/l	0.010	< 0.010	< 0.010	0.12	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Total Sulphur	M	2175	%	0.010					0.011	0.016			
Chloride (Water Soluble)	M	2220	g/l	0.010	0.017	< 0.010	0.019	< 0.010	0.011	< 0.010	< 0.010	< 0.010	< 0.010
Nitrate (Water Soluble)	N	2220	g/l	0.010					< 0.010	< 0.010			
Cyanide (Complex)	M	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50	< 0.50
Cyanide (Free)	M	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50	< 0.50
Cyanide (Total)	M	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	3.1	0.54	26	1.5			1.1	2.2	3.3
Phosphorus (Available)	N	2420	mg/l	0.50	50	44	14	27			39	47	36
Ammonium (Extractable)	M	2425	mg/kg	0.50	39	9.6	3.3	3.4			7.2	8.6	6.2
Ammonium (Water Soluble)	M	2120	g/l	0.01					< 0.01	< 0.01			
Calcium (Total)	N	2430	mg/kg	100	4200	12000	71000	54000			5700	6600	7300
Iron (Total)	N	2430	mg/kg	100	20000	18000	11000	22000			18000	20000	19000
Potassium (Total)	N	2430	mg/kg	100	1700	1500	2600	1500			1800	1800	1600
Magnesium (Total)	N	2430	mg/kg	100	3100	3100	11000	5200			3600	3900	3500
Sodium (Total)	N	2430	mg/kg	10	75	110	1100	280			130	130	110
Sulphate (Total)	M	2430	%	0.010	0.076	0.092	0.34	0.098			0.042	0.050	0.051
Sulphate (Acid Soluble)	M	2430	%	0.010					< 0.010	< 0.010			
Arsenic	M	2450	mg/kg	1.0	12	12	14	33			8.5	14	13
Barium	M	2450	mg/kg	10	82	85	300	180			62	87	83
Beryllium	U	2450	mg/kg	1.0	< 1.0	< 1.0	2.7	1.5			< 1.0	1.2	1.3
Cadmium	M	2450	mg/kg	0.10	0.28	0.29	0.31	5.0			0.54	0.55	0.64
Cobalt	M	2450	mg/kg	2.0	9.1	9.0	6.0	19			6.6	13	10
Chromium	M	2450	mg/kg	1.0	22	22	33	30			20	28	26
Manganese	M	2450	mg/kg	5.0	450	480	1600	840			340	660	490
Molybdenum	M	2450	mg/kg	2.0	< 2.0	< 2.0	< 2.0	3.3			< 2.0	< 2.0	< 2.0

Results - Soil

Client: Tweedie Evans	Chemtest Job No.:				18-08646	18-08646	18-08646	18-08646	18-08646	18-08646	18-08646	18-08646	18-08646
Quotation No.: Q18-12456	Chemtest Sample ID.:				599231	599232	599233	599241	599242	599243	599244	599245	599246
Order No.:	Client Sample Ref.:				BH3	TP4	TP6	TP15	TP14	BH6	TP11	TP7	TP13
	Sample Type:				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Top Depth (m):				0.20	0.20	0.10	0.20	1.50	10.50	0.20	0.40	0.20
	Date Sampled:				21-Mar-2018	21-Mar-2018	21-Mar-2018	22-Mar-2018	22-Mar-2018	22-Mar-2018	22-Mar-2018	22-Mar-2018	22-Mar-2018
	Asbestos Lab:				COVENTRY	COVENTRY	COVENTRY	COVENTRY			COVENTRY	COVENTRY	COVENTRY
Determinand	Accred.	SOP	Units	LOD									
Antimony	N	2450	mg/kg	2.0	< 2.0	< 2.0	< 2.0	5.5			< 2.0	< 2.0	< 2.0
Tin	N	2450	mg/kg	5.0	< 5.0	< 5.0	< 5.0	25			5.2	< 5.0	< 5.0
Copper	M	2450	mg/kg	0.50	30	29	15	63			25	24	25
Mercury	M	2450	mg/kg	0.10	< 0.10	< 0.10	< 0.10	0.27			< 0.10	< 0.10	< 0.10
Nickel	M	2450	mg/kg	0.50	19	18	22	42			14	24	20
Lead	M	2450	mg/kg	0.50	56	53	110	240			39	28	50
Selenium	M	2450	mg/kg	0.20	< 0.20	< 0.20	< 0.20	< 0.20			< 0.20	< 0.20	< 0.20
Vanadium	U	2450	mg/kg	5.0	27	30	65	38			21	34	32
Zinc	M	2450	mg/kg	0.50	140	150	100	1700			130	93	140
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50	< 0.50
Fraction of Organic Carbon	M	2625		0.0010	0.021	0.030	0.034	0.043			0.013	0.015	0.012
Total Organic Carbon	M	2625	%	0.20	2.1	3.0	3.4	4.3			1.3	1.5	1.2
Mineral Oil	N	2670	mg/kg	10	< 10	17	26	30			< 10	< 10	< 10
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	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0	< 1.0
Aliphatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0	< 1.0
Aliphatic TPH >C12-C16	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0	< 1.0
Aliphatic TPH >C16-C21	M	2680	mg/kg	1.0	< 1.0	< 1.0	10	< 1.0			< 1.0	< 1.0	< 1.0
Aliphatic TPH >C21-C35	M	2680	mg/kg	1.0	< 1.0	22	29	34			< 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	22	39	34			< 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	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0	< 1.0
Aromatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0	< 1.0	3.1	< 1.0			< 1.0	< 1.0	< 1.0
Aromatic TPH >C12-C16	M	2680	mg/kg	1.0	< 1.0	< 1.0	20	1.1			< 1.0	< 1.0	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0	1.2	240	31			< 1.0	< 1.0	< 1.0
Aromatic TPH >C21-C35	M	2680	mg/kg	1.0	< 1.0	94	1700	290			< 1.0	< 1.0	< 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	150	< 1.0			< 1.0	< 1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	96	2100	320			< 5.0	< 5.0	< 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	< 10	120	2100	360			< 10	< 10	< 10
Dichlorodifluoromethane	N	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0	< 1.0
Chloromethane	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0	< 1.0
Vinyl Chloride	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0	< 1.0
Bromomethane	M	2760	µg/kg	20	< 20	< 20	< 20	< 20			< 20	< 20	< 20
Chloroethane	N	2760	µg/kg	2.0	< 2.0	< 2.0	< 2.0	< 2.0			< 2.0	< 2.0	< 2.0
Trichlorofluoromethane	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0	< 1.0

Results - Soil

Client: Tweedie Evans	Chemtest Job No.:				18-08646	18-08646	18-08646	18-08646	18-08646	18-08646	18-08646	18-08646	18-08646
Quotation No.: Q18-12456	Chemtest Sample ID.:				599231	599232	599233	599241	599242	599243	599244	599245	599246
Order No.:	Client Sample Ref.:				BH3	TP4	TP6	TP15	TP14	BH6	TP11	TP7	TP13
	Sample Type:				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Top Depth (m):				0.20	0.20	0.10	0.20	1.50	10.50	0.20	0.40	0.20
	Date Sampled:				21-Mar-2018	21-Mar-2018	21-Mar-2018	22-Mar-2018	22-Mar-2018	22-Mar-2018	22-Mar-2018	22-Mar-2018	22-Mar-2018
	Asbestos Lab:				COVENTRY	COVENTRY	COVENTRY	COVENTRY			COVENTRY	COVENTRY	COVENTRY
Determinand	Accred.	SOP	Units	LOD									
Trans 1,2-Dichloroethene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0	< 1.0
cis 1,2-Dichloroethene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0	< 1.0
Bromochloromethane	N	2760	µg/kg	5.0	< 5.0	< 5.0	< 5.0	< 5.0			< 5.0	< 5.0	< 5.0
Trichloromethane	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0	< 1.0
Tetrachloromethane	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0	< 1.0
1,1-Dichloropropene	N	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0	< 1.0
Benzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	M	2760	µg/kg	2.0	< 2.0	< 2.0	< 2.0	< 2.0			< 2.0	< 2.0	< 2.0
Trichloroethene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0	< 1.0
Dibromomethane	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0	< 1.0
Bromodichloromethane	M	2760	µg/kg	5.0	< 5.0	< 5.0	< 5.0	< 5.0			< 5.0	< 5.0	< 5.0
cis-1,3-Dichloropropene	N	2760	µg/kg	10	< 10	< 10	< 10	< 10			< 10	< 10	< 10
Toluene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0	< 1.0
Trans-1,3-Dichloropropene	N	2760	µg/kg	10	< 10	< 10	< 10	< 10			< 10	< 10	< 10
1,1,2-Trichloroethane	M	2760	µg/kg	10	< 10	< 10	< 10	< 10			< 10	< 10	< 10
Tetrachloroethene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0	< 1.0
1,3-Dichloropropane	N	2760	µg/kg	2.0	< 2.0	< 2.0	< 2.0	< 2.0			< 2.0	< 2.0	< 2.0
Dibromochloromethane	N	2760	µg/kg	10	< 10	< 10	< 10	< 10			< 10	< 10	< 10
1,2-Dibromoethane	M	2760	µg/kg	5.0	< 5.0	< 5.0	< 5.0	< 5.0			< 5.0	< 5.0	< 5.0
Chlorobenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0	< 1.0
1,1,1,2-Tetrachloroethane	M	2760	µg/kg	2.0	< 2.0	< 2.0	< 2.0	< 2.0			< 2.0	< 2.0	< 2.0
Ethylbenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0	< 1.0
m & p-Xylene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0	< 1.0
o-Xylene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0	< 1.0
Styrene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0	< 1.0
Tribromomethane	N	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0	< 1.0
Isopropylbenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0	< 1.0
Bromobenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0	< 1.0
1,2,3-Trichloropropane	N	2760	µg/kg	50	< 50	< 50	< 50	< 50			< 50	< 50	< 50
N-Propylbenzene	N	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0	< 1.0
2-Chlorotoluene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0	< 1.0
4-Chlorotoluene	N	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0	< 1.0
Tert-Butylbenzene	N	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0	< 1.0
Sec-Butylbenzene	N	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0	< 1.0

Results - Soil

Client: Tweedie Evans	Chemtest Job No.: 18-08646											
Quotation No.: Q18-12456	Chemtest Sample ID.: 599231											
Order No.:	Client Sample Ref.: BH3											
	Sample Type: SOIL											
	Top Depth (m): 0.20											
	Date Sampled: 21-Mar-2018											
	Asbestos Lab: COVENTRY											
Determinand	Accred.	SOP	Units	LOD								
1,3-Dichlorobenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0
4-Isopropyltoluene	N	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0
1,4-Dichlorobenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0
N-Butylbenzene	N	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0
1,2-Dichlorobenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0
1,2-Dibromo-3-Chloropropane	N	2760	µg/kg	50	< 50	< 50	< 50	< 50			< 50	< 50
1,2,4-Trichlorobenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0
Hexachlorobutadiene	N	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0
1,2,3-Trichlorobenzene	N	2760	µg/kg	2.0	< 2.0	< 2.0	< 2.0	< 2.0			< 2.0	< 2.0
Methyl Tert-Butyl Ether	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0
N-Nitrosodimethylamine	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
Phenol	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
2-Chlorophenol	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
Bis-(2-Chloroethyl)Ether	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
1,3-Dichlorobenzene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
1,4-Dichlorobenzene	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
1,2-Dichlorobenzene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
2-Methylphenol	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
Bis(2-Chloroisopropyl)Ether	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
Hexachloroethane	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
N-Nitrosodi-n-propylamine	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
4-Methylphenol	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
Nitrobenzene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
Isophorone	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
2-Nitrophenol	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
2,4-Dimethylphenol	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
Bis(2-Chloroethoxy)Methane	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
2,4-Dichlorophenol	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
1,2,4-Trichlorobenzene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
Naphthalene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
4-Chloroaniline	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
Hexachlorobutadiene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
4-Chloro-3-Methylphenol	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
2-Methylnaphthalene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
4-Nitrophenol	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
Hexachlorocyclopentadiene	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
2,4,6-Trichlorophenol	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
2,4,5-Trichlorophenol	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50
2-Chloronaphthalene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50

Results - Soil

Client: Tweedie Evans	Chemtest Job No.:				18-08646	18-08646	18-08646	18-08646	18-08646	18-08646	18-08646	18-08646	18-08646
Quotation No.: Q18-12456	Chemtest Sample ID.:				599231	599232	599233	599241	599242	599243	599244	599245	599246
Order No.:	Client Sample Ref.:				BH3	TP4	TP6	TP15	TP14	BH6	TP11	TP7	TP13
	Sample Type:				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Top Depth (m):				0.20	0.20	0.10	0.20	1.50	10.50	0.20	0.40	0.20
	Date Sampled:				21-Mar-2018	21-Mar-2018	21-Mar-2018	22-Mar-2018	22-Mar-2018	22-Mar-2018	22-Mar-2018	22-Mar-2018	22-Mar-2018
	Asbestos Lab:				COVENTRY	COVENTRY	COVENTRY	COVENTRY			COVENTRY	COVENTRY	COVENTRY
Determinand	Accred.	SOP	Units	LOD									
2-Nitroaniline	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50	< 0.50
Acenaphthylene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50	< 0.50
Dimethylphthalate	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50	< 0.50
2,6-Dinitrotoluene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50	< 0.50
Acenaphthene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50	< 0.50
3-Nitroaniline	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50	< 0.50
Dibenzofuran	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50	< 0.50
4-Chlorophenylphenylether	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50	< 0.50
2,4-Dinitrotoluene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50	< 0.50
Fluorene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50	< 0.50
Diethyl Phthalate	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50	< 0.50
4-Nitroaniline	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50	< 0.50
2-Methyl-4,6-Dinitrophenol	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50	< 0.50
Azobenzene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50	< 0.50
4-Bromophenylphenyl Ether	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50	< 0.50
Hexachlorobenzene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50	< 0.50
Pentachlorophenol	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50	< 0.50
Phenanthrene	M	2790	mg/kg	0.50	< 0.50	< 0.50	2.9	4.5			< 0.50	< 0.50	< 0.50
Anthracene	M	2790	mg/kg	0.50	< 0.50	< 0.50	1.1	0.67			< 0.50	< 0.50	< 0.50
Carbazole	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	0.62			< 0.50	< 0.50	< 0.50
Di-N-Butyl Phthalate	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50	< 0.50
Fluoranthene	M	2790	mg/kg	0.50	< 0.50	< 0.50	7.1	7.5			0.88	0.86	< 0.50
Pyrene	M	2790	mg/kg	0.50	< 0.50	< 0.50	6.9	6.8			0.84	0.82	< 0.50
Butylbenzyl Phthalate	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50	< 0.50
Benzo[a]anthracene	M	2790	mg/kg	0.50	< 0.50	< 0.50	4.7	3.3			< 0.50	< 0.50	< 0.50
Chrysene	M	2790	mg/kg	0.50	< 0.50	< 0.50	4.7	4.7			< 0.50	< 0.50	< 0.50
Bis(2-Ethylhexyl)Phthalate	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50	< 0.50
Di-N-Octyl Phthalate	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50	< 0.50	< 0.50
Benzo[b]fluoranthene	M	2790	mg/kg	0.50	< 0.50	< 0.50	8.0	7.1			< 0.50	< 0.50	< 0.50
Benzo[k]fluoranthene	M	2790	mg/kg	0.50	< 0.50	< 0.50	3.1	2.9			< 0.50	< 0.50	< 0.50
Benzo[a]pyrene	M	2790	mg/kg	0.50	< 0.50	< 0.50	6.6	5.1			< 0.50	< 0.50	< 0.50
Indeno(1,2,3-c,d)Pyrene	M	2790	mg/kg	0.50	< 0.50	< 0.50	4.1	3.1			< 0.50	< 0.50	< 0.50
Dibenz(a,h)Anthracene	M	2790	mg/kg	0.50	< 0.50	< 0.50	1.5	1.2			< 0.50	< 0.50	< 0.50
Benzo[g,h,i]perylene	M	2790	mg/kg	0.50	< 0.50	< 0.50	5.1	3.8			< 0.50	< 0.50	< 0.50
Naphthalene	M	2800	mg/kg	0.10	< 0.10	< 0.10	0.52	0.59			< 0.10	0.11	< 0.10
Acenaphthylene	N	2800	mg/kg	0.10	< 0.10	< 0.10	1.4	1.9			< 0.10	< 0.10	< 0.10
Acenaphthene	M	2800	mg/kg	0.10	< 0.10	< 0.10	2.0	3.4			< 0.10	< 0.10	< 0.10
Fluorene	M	2800	mg/kg	0.10	< 0.10	< 0.10	1.9	2.8			< 0.10	< 0.10	< 0.10
Phenanthrene	M	2800	mg/kg	0.10	0.13	0.51	21	30			0.19	0.10	0.42

Results - Soil

Client: Tweedie Evans	Chemtest Job No.:				18-08646	18-08646	18-08646	18-08646	18-08646	18-08646	18-08646	18-08646	18-08646
Quotation No.: Q18-12456	Chemtest Sample ID.:				599231	599232	599233	599241	599242	599243	599244	599245	599246
Order No.:	Client Sample Ref.:				BH3	TP4	TP6	TP15	TP14	BH6	TP11	TP7	TP13
	Sample Type:				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Top Depth (m):				0.20	0.20	0.10	0.20	1.50	10.50	0.20	0.40	0.20
	Date Sampled:				21-Mar-2018	21-Mar-2018	21-Mar-2018	22-Mar-2018	22-Mar-2018	22-Mar-2018	22-Mar-2018	22-Mar-2018	22-Mar-2018
	Asbestos Lab:				COVENTRY	COVENTRY	COVENTRY	COVENTRY			COVENTRY	COVENTRY	COVENTRY
Determinand	Accred.	SOP	Units	LOD									
Anthracene	M	2800	mg/kg	0.10	< 0.10	< 0.10	7.2	6.3			< 0.10	< 0.10	0.10
Fluoranthene	M	2800	mg/kg	0.10	0.46	0.93	52	62			0.49	0.18	1.1
Pyrene	M	2800	mg/kg	0.10	0.44	0.86	45	51			0.51	0.20	1.1
Benzo[a]anthracene	M	2800	mg/kg	0.10	0.14	0.26	27	30			0.19	< 0.10	0.54
Chrysene	M	2800	mg/kg	0.10	0.22	0.39	30	38			0.22	< 0.10	0.62
Benzo[b]fluoranthene	M	2800	mg/kg	0.10	0.34	0.53	45	56			0.40	< 0.10	1.1
Benzo[k]fluoranthene	M	2800	mg/kg	0.10	< 0.10	0.14	16	19			0.10	< 0.10	0.31
Benzo[a]pyrene	M	2800	mg/kg	0.10	0.16	0.27	37	43			0.33	< 0.10	0.71
Indeno(1,2,3-c,d)Pyrene	M	2800	mg/kg	0.10	0.17	0.20	36	36			0.31	< 0.10	0.73
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.10	< 0.10	< 0.10	4.7	8.3			< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene	M	2800	mg/kg	0.10	0.19	0.27	33	32			0.35	< 0.10	0.82
Coronene	N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10			< 0.10	< 0.10	< 0.10
Total Of 17 PAH's	N	2800	mg/kg	2.0	2.3	4.4	360	420			3.1	< 2.0	7.6
Total Phenols	M	2920	mg/kg	0.30	< 0.30	< 0.30	< 0.30	< 0.30			< 0.30	< 0.30	< 0.30

Results - Soil

Client: Tweedie Evans	Chemtest Job No.:		18-08646	18-08646	18-08646	18-08646	18-08646	18-08646	18-08646
Quotation No.: Q18-12456	Chemtest Sample ID.:		599247	599248	599249	599257	599258	599259	
Order No.:	Client Sample Ref.:		TP9	TP8	TP10	TP12	TP14	BH6	
	Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	
	Top Depth (m):		0.20	0.10	0.20	0.10	0.10	0.10	
	Date Sampled:		22-Mar-2018	22-Mar-2018	22-Mar-2018	22-Mar-2018	22-Mar-2018	22-Mar-2018	
	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
Moisture	N	2030	%	0.020	28	26	18	21	8.9
Soil Colour	N	2040		N/A	Brown	Brown	Brown	Brown	Brown
Other Material	N	2040		N/A	Stones	Stones, Roots, 15%	Stones, Roots, 15%	Stones, Roots, 15%	Stones, Roots, 155
Soil Texture	N	2040		N/A	Sand	Clay	Clay	Clay	Sand
pH	M	2010		N/A	7.4	7.2	8.1	7.7	9.6
Electrical Conductivity (2.5:1)	N	2020	µS/cm	1.0	450	320	240	310	570
Boron (Hot Water Soluble)	M	2120	mg/kg	0.40	4.5	2.9	0.91	1.1	4.5
Magnesium (Water Soluble)	N	2120	g/l	0.010					
Sulphate (2:1 Water Soluble) as SO4	M	2120	g/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.40
Total Sulphur	M	2175	%	0.010					
Chloride (Water Soluble)	M	2220	g/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.028
Nitrate (Water Soluble)	N	2220	g/l	0.010					
Cyanide (Complex)	M	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Cyanide (Free)	M	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Cyanide (Total)	M	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Sulphide (Easily Liberatable)	U	2325	mg/kg	0.50	1.5	1.4	2.2	1.3	11
Phosphorus (Available)	N	2420	mg/l	0.50	190	50	32	59	21
Ammonium (Extractable)	M	2425	mg/kg	0.50	19	16	5.8	12	5.0
Ammonium (Water Soluble)	M	2120	g/l	0.01					
Calcium (Total)	N	2430	mg/kg	100	41000	5500	15000	23000	71000
Iron (Total)	N	2430	mg/kg	100	13000	16000	19000	18000	13000
Potassium (Total)	N	2430	mg/kg	100	2400	1300	1700	2000	2000
Magnesium (Total)	N	2430	mg/kg	100	3900	2400	3500	4300	8000
Sodium (Total)	N	2430	mg/kg	10	230	71	130	110	2800
Sulphate (Total)	M	2430	%	0.010	0.56	0.11	0.065	0.12	0.53
Sulphate (Acid Soluble)	M	2430	%	0.010					
Arsenic	M	2450	mg/kg	1.0	11	11	16	18	26
Barium	M	2450	mg/kg	10	79	61	130	110	630
Beryllium	U	2450	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cadmium	M	2450	mg/kg	0.10	0.66	0.39	0.38	0.88	0.38
Cobalt	M	2450	mg/kg	2.0	6.4	6.9	11	8.8	12
Chromium	M	2450	mg/kg	1.0	26	20	24	26	61
Manganese	M	2450	mg/kg	5.0	530	420	600	480	540
Molybdenum	M	2450	mg/kg	2.0	< 2.0	< 2.0	< 2.0	< 2.0	4.4

Results - Soil

Client: Tweedie Evans	Chemtest Job No.:				18-08646	18-08646	18-08646	18-08646	18-08646	18-08646
Quotation No.: Q18-12456	Chemtest Sample ID.:				599247	599248	599249	599257	599258	599259
Order No.:	Client Sample Ref.:				TP9	TP8	TP10	TP12	TP14	BH6
	Sample Type:				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Top Depth (m):				0.20	0.10	0.20	0.10	0.10	0.10
	Date Sampled:				22-Mar-2018	22-Mar-2018	22-Mar-2018	22-Mar-2018	22-Mar-2018	22-Mar-2018
	Asbestos Lab:				COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	Accred.	SOP	Units	LOD						
Antimony	N	2450	mg/kg	2.0	< 2.0	< 2.0	< 2.0	< 2.0	17	23
Tin	N	2450	mg/kg	5.0	< 5.0	< 5.0	< 5.0	< 5.0	24	73
Copper	M	2450	mg/kg	0.50	47	19	33	43	14000	11000
Mercury	M	2450	mg/kg	0.10	< 0.10	< 0.10	< 0.10	0.10	0.10	< 0.10
Nickel	M	2450	mg/kg	0.50	14	15	22	19	65	25
Lead	M	2450	mg/kg	0.50	29	35	110	140	700	130
Selenium	M	2450	mg/kg	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Vanadium	U	2450	mg/kg	5.0	24	23	35	31	35	20
Zinc	M	2450	mg/kg	0.50	210	110	150	370	710	250
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Fraction of Organic Carbon	M	2625		0.0010	0.056	0.032	0.011	0.027	0.048	0.051
Total Organic Carbon	M	2625	%	0.20	5.6	3.2	1.1	2.7	4.8	5.1
Mineral Oil	N	2670	mg/kg	10	< 10	< 10	27	20	< 10	< 10
Aliphatic TPH >C5-C6	N	2680	mg/kg	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
Aliphatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C12-C16	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C16-C21	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C21-C35	M	2680	mg/kg	1.0	< 1.0	< 1.0	33	25	2.0	< 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	< 5.0	33	25	< 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
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C12-C16	M	2680	mg/kg	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	< 1.0	< 1.0	< 1.0	2.5	< 1.0
Aromatic TPH >C21-C35	M	2680	mg/kg	1.0	< 1.0	< 1.0	74	120	540	< 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	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	< 5.0	74	120	550	< 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	< 10	< 10	110	150	550	< 10
Dichlorodifluoromethane	N	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloromethane	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl Chloride	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromomethane	M	2760	µg/kg	20	< 20	< 20	< 20	< 20	< 20	< 20
Chloroethane	N	2760	µg/kg	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Trichlorofluoromethane	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Results - Soil

Client: Tweedie Evans	Chemtest Job No.:		18-08646	18-08646	18-08646	18-08646	18-08646	18-08646
Quotation No.: Q18-12456	Chemtest Sample ID.:		599247	599248	599249	599257	599258	599259
Order No.:	Client Sample Ref.:		TP9	TP8	TP10	TP12	TP14	BH6
	Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Top Depth (m):		0.20	0.10	0.20	0.10	0.10	0.10
	Date Sampled:		22-Mar-2018	22-Mar-2018	22-Mar-2018	22-Mar-2018	22-Mar-2018	22-Mar-2018
	Asbestos Lab:		COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	Accred.	SOP	Units	LOD				
Trans 1,2-Dichloroethene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis 1,2-Dichloroethene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromochloromethane	N	2760	µg/kg	5.0	< 5.0	< 5.0	< 5.0	< 5.0
Trichloromethane	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloromethane	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloropropene	N	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Benzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	M	2760	µg/kg	2.0	< 2.0	< 2.0	< 2.0	< 2.0
Trichloroethene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dibromomethane	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	M	2760	µg/kg	5.0	< 5.0	< 5.0	< 5.0	< 5.0
cis-1,3-Dichloropropene	N	2760	µg/kg	10	< 10	< 10	< 10	< 10
Toluene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trans-1,3-Dichloropropene	N	2760	µg/kg	10	< 10	< 10	< 10	< 10
1,1,2-Trichloroethane	M	2760	µg/kg	10	< 10	< 10	< 10	< 10
Tetrachloroethene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichloropropane	N	2760	µg/kg	2.0	< 2.0	< 2.0	< 2.0	< 2.0
Dibromochloromethane	N	2760	µg/kg	10	< 10	< 10	< 10	< 10
1,2-Dibromoethane	M	2760	µg/kg	5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chlorobenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1,2-Tetrachloroethane	M	2760	µg/kg	2.0	< 2.0	< 2.0	< 2.0	< 2.0
Ethylbenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
m & p-Xylene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tribromomethane	N	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromobenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichloropropane	N	2760	µg/kg	50	< 50	< 50	< 50	< 50
N-Propylbenzene	N	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
2-Chlorotoluene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
4-Chlorotoluene	N	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tert-Butylbenzene	N	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Sec-Butylbenzene	N	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0

Results - Soil

Client: Tweedie Evans	Chemtest Job No.:					18-08646	18-08646	18-08646	18-08646	18-08646	18-08646
Quotation No.: Q18-12456	Chemtest Sample ID.:					599247	599248	599249	599257	599258	599259
Order No.:	Client Sample Ref.:					TP9	TP8	TP10	TP12	TP14	BH6
	Sample Type:					SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Top Depth (m):					0.20	0.10	0.20	0.10	0.10	0.10
	Date Sampled:					22-Mar-2018	22-Mar-2018	22-Mar-2018	22-Mar-2018	22-Mar-2018	22-Mar-2018
	Asbestos Lab:					COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	Accred.	SOP	Units	LOD							
1,3-Dichlorobenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
4-Isopropyltoluene	N	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
N-Butylbenzene	N	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-Chloropropane	N	2760	µg/kg	50	< 50	< 50	< 50	< 50	< 50	< 50	< 50
1,2,4-Trichlorobenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Hexachlorobutadiene	N	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene	N	2760	µg/kg	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Methyl Tert-Butyl Ether	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
N-Nitrosodimethylamine	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Phenol	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Chlorophenol	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bis-(2-Chloroethyl)Ether	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,3-Dichlorobenzene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,4-Dichlorobenzene	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-Dichlorobenzene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Methylphenol	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bis(2-Chloroisopropyl)Ether	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Hexachloroethane	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
N-Nitrosodi-n-propylamine	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Methylphenol	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Nitrobenzene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Isophorone	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Nitrophenol	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4-Dimethylphenol	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bis(2-Chloroethoxy)Methane	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4-Dichlorophenol	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2,4-Trichlorobenzene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Naphthalene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Chloroaniline	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Hexachlorobutadiene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Chloro-3-Methylphenol	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Methylnaphthalene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Nitrophenol	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Hexachlorocyclopentadiene	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4,6-Trichlorophenol	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4,5-Trichlorophenol	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Chloronaphthalene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

Results - Soil

Client: Tweedie Evans	Chemtest Job No.:		18-08646	18-08646	18-08646	18-08646	18-08646	18-08646	18-08646
Quotation No.: Q18-12456	Chemtest Sample ID.:		599247	599248	599249	599257	599258	599259	
Order No.:	Client Sample Ref.:		TP9	TP8	TP10	TP12	TP14	BH6	
	Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	
	Top Depth (m):		0.20	0.10	0.20	0.10	0.10	0.10	
	Date Sampled:		22-Mar-2018	22-Mar-2018	22-Mar-2018	22-Mar-2018	22-Mar-2018	22-Mar-2018	
	Asbestos Lab:		COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	
Determinand	Accred.	SOP	Units	LOD					
2-Nitroaniline	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Acenaphthylene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dimethylphthalate	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,6-Dinitrotoluene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Acenaphthene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
3-Nitroaniline	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dibenzofuran	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Chlorophenylphenylether	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4-Dinitrotoluene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Fluorene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Diethyl Phthalate	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Nitroaniline	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Methyl-4,6-Dinitrophenol	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Azobenzene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Bromophenylphenyl Ether	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Hexachlorobenzene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Pentachlorophenol	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Phenanthrene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	1.0	< 0.50
Anthracene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	0.54	< 0.50
Carbazole	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Di-N-Butyl Phthalate	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Fluoranthene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	3.1	< 0.50
Pyrene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	3.3	< 0.50
Butylbenzyl Phthalate	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[a]anthracene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	2.1	< 0.50
Chrysene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	1.6	< 0.50
Bis(2-Ethylhexyl)Phthalate	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Di-N-Octyl Phthalate	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[b]fluoranthene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	0.89	< 0.50
Benzo[k]fluoranthene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	1.3	< 0.50
Benzo[a]pyrene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	0.60	< 0.50
Indeno(1,2,3-c,d)Pyrene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	1.1	< 0.50
Dibenz(a,h)Anthracene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	0.76	< 0.50
Benzo[g,h,i]perylene	M	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50	1.0	< 0.50
Naphthalene	M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	0.14	0.17
Acenaphthylene	N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	0.10	< 0.10
Phenanthrene	M	2800	mg/kg	0.10	0.14	< 0.10	0.76	0.28	0.13

Results - Soil

Client: Tweedie Evans	Chemtest Job No.:				18-08646	18-08646	18-08646	18-08646	18-08646	18-08646
Quotation No.: Q18-12456	Chemtest Sample ID.:				599247	599248	599249	599257	599258	599259
Order No.:	Client Sample Ref.:				TP9	TP8	TP10	TP12	TP14	BH6
	Sample Type:				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Top Depth (m):				0.20	0.10	0.20	0.10	0.10	0.10
	Date Sampled:				22-Mar-2018	22-Mar-2018	22-Mar-2018	22-Mar-2018	22-Mar-2018	22-Mar-2018
	Asbestos Lab:				COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	Accred.	SOP	Units	LOD						
Anthracene	M	2800	mg/kg	0.10	< 0.10	< 0.10	0.21	< 0.10	0.29	< 0.10
Fluoranthene	M	2800	mg/kg	0.10	0.20	0.19	1.7	0.57	2.5	0.25
Pyrene	M	2800	mg/kg	0.10	0.25	0.23	1.6	0.57	2.3	0.28
Benzo[a]anthracene	M	2800	mg/kg	0.10	< 0.10	< 0.10	0.80	0.20	1.1	< 0.10
Chrysene	M	2800	mg/kg	0.10	< 0.10	< 0.10	1.0	0.28	1.5	< 0.10
Benzo[b]fluoranthene	M	2800	mg/kg	0.10	0.17	< 0.10	1.4	0.73	2.3	< 0.10
Benzo[k]fluoranthene	M	2800	mg/kg	0.10	< 0.10	< 0.10	0.43	0.18	0.75	< 0.10
Benzo[a]pyrene	M	2800	mg/kg	0.10	0.10	< 0.10	1.1	0.54	1.8	< 0.10
Indeno(1,2,3-c,d)Pyrene	M	2800	mg/kg	0.10	0.10	< 0.10	0.92	0.73	1.4	< 0.10
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.28	< 0.10
Benzo[g,h,i]perylene	M	2800	mg/kg	0.10	0.13	< 0.10	0.90	0.77	1.7	< 0.10
Coronene	N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Of 17 PAH's	N	2800	mg/kg	2.0	< 2.0	< 2.0	11	4.9	17	< 2.0
Total Phenols	M	2920	mg/kg	0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30

SOP	Title	Parameters included	Method summary
2010	pH Value of Soils	pH	pH Meter
2020	Electrical Conductivity	Electrical conductivity (EC) of aqueous extract or calcium sulphate solution for topsoil	Measurement of the electrical resistance of a 2:1 water/soil extract.
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.
2040	Soil Description (Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES
2175	Total Sulphur in Soils	Total Sulphur	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry
2220	Water soluble Chloride in Soils	Chloride	Aqueous extraction and measurement by 'Aquakem 600' Discrete Analyser using ferric nitrate / mercuric thiocyanate.
2300	Cyanides & Thiocyanate in Soils	Free (or easily 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.
2420	Phosphate	Phosphate	Spectrophotometry - Discrete analyser
2425	Extractable Ammonium in soils	Ammonium	Extraction with potassium chloride solution / analysis by 'Aquakem 600' Discrete Analyser using sodium salicylate and sodium dichloroisocyanurate.
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.
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID
2680	TPH A/A Split	Aliphatics: >C5–C6, >C6–C8, >C8–C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35–C44 Aromatics: >C5–C7, >C7–C8, >C8–C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35–C44	Dichloromethane extraction / GCxGC FID detection
2760	Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics. (cf. USEPA Method 8260)*please refer to UKAS schedule	Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds.
2790	Semi-Volatile Organic Compounds (SVOCs) in Soils by GC-MS	Semi-volatile organic compounds (cf. USEPA Method 8270)	Acetone/Hexane extraction / GC-MS

SOP	Title	Parameters included	Method summary
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS
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

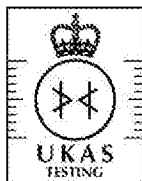
All soil samples will be retained for a period of 45 days from the date of receipt

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



2183

Final Report

Report No.: 18-10477-1

Initial Date of Issue: 24-Apr-2018

Client: Tweedie Evans

Client Address: The Old Chapel
35a Southover
Wells
BA5 1UH

Contact(s): Jan Loades

Project: 1801024 Yapton Road, Barnham

Quotation No.: Q18-12456 **Date Received:** 18-Apr-2018

Order No.: **Date Instructed:** 18-Apr-2018

No. of Samples: 3

Turnaround (Wkdays): 5 **Results Due:** 24-Apr-2018

Date Approved: 24-Apr-2018

Approved By:

Details: Martin Dyer, Laboratory Manager

Results - Water

Client: Tweedie Evans	Chemtest Job No.:				18-10477	18-10477	18-10477
Quotation No.: Q18-12456	Chemtest Sample ID.:				608303	608304	608305
Order No.:	Client Sample Ref.:				BH6	BH5	BH2
	Client Sample ID.:				W6	W5	W2
	Sample Type:				WATER	WATER	WATER
	Date Sampled:				16-Apr-2018	16-Apr-2018	16-Apr-2018
Determinand	Accred.	SOP	Units	LOD			
pH	U	1010		N/A	8.3	7.8	8.0
Electrical Conductivity	U	1020	µS/cm	1.0	1800	830	960
Chloride	U	1220	mg/l	1.0	72	76	66
Phosphorus (Total)	N	1220	mg/l	0.020	0.026	< 0.020	0.11
Ammonium	U	1220	mg/l	0.050	< 0.050	< 0.050	0.061
Sulphate	U	1220	mg/l	1.0	220	54	71
Cyanide (Total)	U	1300	mg/l	0.050	< 0.050	< 0.050	< 0.050
Cyanide (Free)	U	1300	mg/l	0.050	< 0.050	< 0.050	< 0.050
Cyanide (Complex)	U	1300	mg/l	0.050	< 0.050	< 0.050	< 0.050
Sulphide	U	1325	mg/l	0.050	< 0.050	< 0.050	< 0.050
Calcium	U	1415	mg/l	5.0	61	120	110
Potassium	U	1415	mg/l	0.50	5.9	4.0	22
Magnesium	U	1415	mg/l	0.50	5.7	10	8.6
Sodium	U	1415	mg/l	0.50	380	40	44
Arsenic (Dissolved)	U	1450	µg/l	1.0	3.4	1.3	2.2
Boron (Dissolved)	U	1450	µg/l	20	39	130	100
Barium (Dissolved)	U	1450	µg/l	5.0	42	31	54
Beryllium (Dissolved)	U	1450	µg/l	1.0	< 1.0	< 1.0	< 1.0
Cadmium (Dissolved)	U	1450	µg/l	0.080	1.0	< 0.080	< 0.080
Cobalt (Dissolved)	U	1450	µg/l	1.0	27	2.0	< 1.0
Chromium (Dissolved)	U	1450	µg/l	1.0	9.0	3.6	3.2
Copper (Dissolved)	U	1450	µg/l	1.0	19	2.2	3.8
Iron (Dissolved)	N	1450	µg/l	20	490	370	260
Mercury (Dissolved)	U	1450	µg/l	0.50	< 0.50	< 0.50	< 0.50
Manganese (Dissolved)	U	1450	µg/l	1.0	700	180	38
Molybdenum (Dissolved)	U	1450	µg/l	1.0	13	1.2	< 1.0
Nickel (Dissolved)	U	1450	µg/l	1.0	16	26	2.8
Lead (Dissolved)	U	1450	µg/l	1.0	4.8	< 1.0	< 1.0
Antimony (Dissolved)	U	1450	µg/l	1.0	< 1.0	< 1.0	< 1.0
Selenium (Dissolved)	U	1450	µg/l	1.0	110	9.1	9.2
Tin (Dissolved)	U	1450	µg/l	1.0	< 1.0	< 1.0	< 1.0
Vanadium (Dissolved)	U	1450	µg/l	1.0	1.9	< 1.0	1.5
Zinc (Dissolved)	U	1450	µg/l	1.0	90	7.4	4.8
Chromium (Hexavalent)	U	1490	µg/l	20	< 20	< 20	< 20
Total Organic Carbon	U	1610	mg/l	2.0	21	11	14
Mineral Oil	N	1670	µg/l	10	< 10	< 10	< 10
Aliphatic TPH >C5-C6	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C6-C8	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C8-C10	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C10-C12	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10

Results - Water

Client: Tweedie Evans	Chemtest Job No.: 18-10477				18-10477	18-10477	18-10477
Quotation No.: Q18-12456	Chemtest Sample ID.: 608303				608303	608304	608305
Order No.:	Client Sample Ref.:				BH6	BH5	BH2
	Client Sample ID.:				W6	W5	W2
	Sample Type:				WATER	WATER	WATER
	Date Sampled:				16-Apr-2018	16-Apr-2018	16-Apr-2018
Determinand	Accred.	SOP	Units	LOD			
Aliphatic TPH >C12-C16	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C16-C21	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C21-C35	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C35-C44	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Total Aliphatic Hydrocarbons	N	1675	µg/l	5.0	< 5.0	< 5.0	< 5.0
Aromatic TPH >C5-C7	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C7-C8	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C8-C10	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C10-C12	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C12-C16	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C16-C21	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C21-C35	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C35-C44	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Total Aromatic Hydrocarbons	N	1675	µg/l	5.0	< 5.0	< 5.0	< 5.0
Total Petroleum Hydrocarbons	N	1675	µg/l	10	< 10	< 10	< 10
Dichlorodifluoromethane	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
Chloromethane	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
Vinyl Chloride	N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
Bromomethane	U	1760	µg/l	5.0	< 5.0	< 5.0	< 5.0
Chloroethane	U	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0
Trichlorofluoromethane	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
Trans 1,2-Dichloroethene	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
cis 1,2-Dichloroethene	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
Bromochloromethane	U	1760	µg/l	5.0	< 5.0	< 5.0	< 5.0
Trichloromethane	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
Tetrachloromethane	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloropropene	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
Benzene	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	U	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0
Trichloroethene	N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
Dibromomethane	U	1760	µg/l	10	< 10	< 10	< 10
Bromodichloromethane	U	1760	µg/l	5.0	< 5.0	< 5.0	< 5.0
cis-1,3-Dichloropropene	N	1760	µg/l	10	< 10	< 10	< 10
Toluene	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
Trans-1,3-Dichloropropene	N	1760	µg/l	10	< 10	< 10	< 10
1,1,2-Trichloroethane	U	1760	µg/l	10	< 10	< 10	< 10

Results - Water

Client: Tweedie Evans	Chemtest Job No.:				18-10477	18-10477	18-10477
Quotation No.: Q18-12456	Chemtest Sample ID.:				608303	608304	608305
Order No.:	Client Sample Ref.:				BH6	BH5	BH2
	Client Sample ID.:				W6	W5	W2
	Sample Type:				WATER	WATER	WATER
	Date Sampled:				16-Apr-2018	16-Apr-2018	16-Apr-2018
Determinand	Accred.	SOP	Units	LOD			
Tetrachloroethene	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
1,3-Dichloropropane	U	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0
Dibromochloromethane	U	1760	µg/l	10	< 10	< 10	< 10
1,2-Dibromoethane	U	1760	µg/l	5.0	< 5.0	< 5.0	< 5.0
Chlorobenzene	N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
1,1,1,2-Tetrachloroethane	U	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0
Ethylbenzene	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
m & p-Xylene	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
o-Xylene	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
Styrene	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
Tribromomethane	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
Bromobenzene	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichloropropane	N	1760	µg/l	50	< 50	< 50	< 50
N-Propylbenzene	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
2-Chlorotoluene	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
4-Chlorotoluene	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
Tert-Butylbenzene	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
Sec-Butylbenzene	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
4-Isopropyltoluene	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
N-Butylbenzene	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-Chloropropane	U	1760	µg/l	50	< 50	< 50	< 50
1,2,4-Trichlorobenzene	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
Hexachlorobutadiene	U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene	U	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0
Methyl Tert-Butyl Ether	N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
N-Nitrosodimethylamine	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Phenol	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
2-Chlorophenol	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Bis-(2-Chloroethyl)Ether	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
1,3-Dichlorobenzene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
1,4-Dichlorobenzene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
1,2-Dichlorobenzene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
2-Methylphenol (o-Cresol)	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Bis(2-Chloroisopropyl)Ether	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50

Results - Water

Client: Tweedie Evans	Chemtest Job No.:				18-10477	18-10477	18-10477
Quotation No.: Q18-12456	Chemtest Sample ID.:				608303	608304	608305
Order No.:	Client Sample Ref.:				BH6	BH5	BH2
	Client Sample ID.:				W6	W5	W2
	Sample Type:				WATER	WATER	WATER
	Date Sampled:				16-Apr-2018	16-Apr-2018	16-Apr-2018
Determinand	Accred.	SOP	Units	LOD			
Hexachloroethane	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
N-Nitrosodi-n-propylamine	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
4-Methylphenol	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Nitrobenzene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Isophorone	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
2-Nitrophenol	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
2,4-Dimethylphenol	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Bis(2-Chloroethoxy)Methane	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
2,4-Dichlorophenol	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
1,2,4-Trichlorobenzene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Naphthalene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
4-Chloroaniline	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Hexachlorobutadiene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
4-Chloro-3-Methylphenol	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
2-Methylnaphthalene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Hexachlorocyclopentadiene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
2,4,6-Trichlorophenol	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
2,4,5-Trichlorophenol	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
2-Chloronaphthalene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
2-Nitroaniline	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Acenaphthylene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Dimethylphthalate	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
2,6-Dinitrotoluene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Acenaphthene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
3-Nitroaniline	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Dibenzofuran	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
4-Chlorophenylphenylether	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
2,4-Dinitrotoluene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Fluorene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Diethyl Phthalate	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
4-Nitroaniline	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
2-Methyl-4,6-Dinitrophenol	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Azobenzene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
4-Bromophenylphenyl Ether	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Hexachlorobenzene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Pentachlorophenol	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Phenanthrene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Anthracene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Carbazole	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Di-N-Butyl Phthalate	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50

Results - Water

Client: Tweedie Evans	Chemtest Job No.: 18-10477				18-10477	18-10477	18-10477
Quotation No.: Q18-12456	Chemtest Sample ID.: 608303				608303	608304	608305
Order No.:	Client Sample Ref.:				BH6	BH5	BH2
	Client Sample ID.:				W6	W5	W2
	Sample Type:				WATER	WATER	WATER
	Date Sampled:				16-Apr-2018	16-Apr-2018	16-Apr-2018
Determinand	Accred.	SOP	Units	LOD			
Fluoranthene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Pyrene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Butylbenzyl Phthalate	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Benzo[a]anthracene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Chrysene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Bis(2-Ethylhexyl)Phthalate	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Di-N-Octyl Phthalate	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Benzo[b]fluoranthene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Benzo[k]fluoranthene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Benzo[a]pyrene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Indeno(1,2,3-c,d)Pyrene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Dibenz(a,h)Anthracene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Benzo[g,h,i]perylene	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
4-Nitrophenol	N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Naphthalene	U	1800	µg/l	0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene	U	1800	µg/l	0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	U	1800	µg/l	0.10	< 0.10	< 0.10	< 0.10
Fluorene	U	1800	µg/l	0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	U	1800	µg/l	0.10	< 0.10	< 0.10	< 0.10
Anthracene	U	1800	µg/l	0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	U	1800	µg/l	0.10	< 0.10	< 0.10	< 0.10
Pyrene	U	1800	µg/l	0.10	< 0.10	< 0.10	< 0.10
Benzo[a]anthracene	U	1800	µg/l	0.10	< 0.10	< 0.10	< 0.10
Chrysene	U	1800	µg/l	0.10	< 0.10	< 0.10	< 0.10
Benzo[b]fluoranthene	U	1800	µg/l	0.10	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene	U	1800	µg/l	0.10	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene	U	1800	µg/l	0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene	U	1800	µg/l	0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)Anthracene	U	1800	µg/l	0.10	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene	U	1800	µg/l	0.10	< 0.10	< 0.10	< 0.10
Total Of 16 PAH's	U	1800	µg/l	2.0	< 2.0	< 2.0	< 2.0
Total Phenols	U	1920	mg/l	0.030	< 0.030	< 0.030	< 0.030

SOP	Title	Parameters included	Method summary
1010	pH Value of Waters	pH	pH Meter
1020	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Conductivity Meter
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser.
1300	Cyanides & Thiocyanate in Waters	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Continuous Flow Analysis.
1325	Sulphide in Waters	Sulphides	Automated colorimetric analysis by 'Aquakem 600' Discrete Analyser using N,N-dimethyl-p-phenylenediamine.
1415	Cations in Waters by ICP-MS	Sodium; Potassium; Calcium; Magnesium	Direct determination by inductively coupled plasma - mass spectrometry (ICP-MS).
1450	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1490	Hexavalent Chromium in Waters	Chromium [VI]	Automated colorimetric analysis by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.
1610	Total/Dissolved Organic Carbon in Waters	Organic Carbon	TOC Analyser using Catalytic Oxidation
1670	Total Petroleum Hydrocarbons (TPH) in Waters by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO	Pentane extraction / GC FID detection
1675	TPH Aliphatic/Aromatic split in Waters by GC-FID(cf. Texas Method 1006 / TPH CWG)	Aliphatics: >C5–C6, >C6–C8, >C8– C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44 Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Pentane extraction / GCxGC FID detection
1760	Volatile Organic Compounds (VOCs) in Waters by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics. (cf. USEPA Method 8260)	Automated headspace gas chromatographic (GC) analysis of water samples with mass spectrometric (MS) detection of volatile organic compounds.
1790	Semi-Volatile Organic Compounds (SVOCs) in Waters by GC-MS	Semi-volatile organic compounds	Solvent extraction / GCMS detection
1800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Waters by GC-MS	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	Pentane extraction / GCMS detection
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.
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.

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 G

Basic Characterisation (WAC) Certificates of Analysis



Final Report

Report No.: 18-08810-1

Initial Date of Issue: 10-Apr-2018

Client Tweedie Evans

Client Address: The Old Chapel
35a Southover
Wells
BA5 1UH

Contact(s): Jan Loades

Project 1801024 Yapton Road, Barnham

Quotation No.: Q18-12456 **Date Received:** 28-Mar-2018

Order No.: **Date Instructed:** 29-Mar-2018

No. of Samples: 16

Turnaround (Wkdays): 6 **Results Due:** 09-Apr-2018

Date Approved: 10-Apr-2018

Approved By:

Details: Robert Monk, Technical Manager

Results - 2 Stage WAC

Project: 1801024 Yapton Road, Barnham

Chemtest Job No: 18-08810							Landfill Waste Acceptance Criteria			
Chemtest Sample ID: 599227							Limits			
Sample Ref: TP2							Inert Waste Landfill	Stable, Non-reactive hazardous waste in non-hazardous Landfill	Hazardous Waste Landfill	
Sample ID:										
Top Depth(m): 0.70										
Bottom Depth(m):										
Sampling Date: 21-Mar-2018										
Determinand	SOP	Accred.	Units							
Total Organic Carbon	2625	U	%				0.91	3	5	6
Loss On Ignition	2610	U	%				5.2	--	--	10
Total BTEX	2760	U	mg/kg				< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg				< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg				< 10	500	--	--
Total (Of 17) PAH's	2700	N	mg/kg				< 2.0	100	--	--
pH	2010	U					7.7	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg				0.044	--	To evaluate	To evaluate
Eluate Analysis			2:1 mg/l	8:1 mg/l	2:1 mg/kg	Cumulative mg/kg 10:1	Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg			
Arsenic	1450	U	< 0.0010	< 0.0010	< 0.050	< 0.050	0.5	2	25	
Barium	1450	U	0.0026	0.0032	< 0.50	< 0.50	20	100	300	
Cadmium	1450	U	< 0.00010	< 0.00010	< 0.010	< 0.010	0.04	1	5	
Chromium	1450	U	0.0011	0.0013	< 0.050	< 0.050	0.5	10	70	
Copper	1450	U	0.0013	0.0015	< 0.050	< 0.050	2	50	100	
Mercury	1450	U	< 0.00050	< 0.00050	< 0.0010	< 0.0050	0.01	0.2	2	
Molybdenum	1450	U	< 0.0010	0.0020	< 0.050	< 0.050	0.5	10	30	
Nickel	1450	U	< 0.0010	< 0.0010	< 0.050	< 0.050	0.4	10	40	
Lead	1450	U	< 0.0010	< 0.0010	< 0.010	< 0.010	0.5	10	50	
Antimony	1450	U	< 0.0010	< 0.0010	< 0.010	< 0.010	0.06	0.7	5	
Selenium	1450	U	< 0.0010	< 0.0010	< 0.010	< 0.010	0.1	0.5	7	
Zinc	1450	U	0.0012	0.0018	< 0.50	< 0.50	4	50	200	
Chloride	1220	U	< 1.0	< 1.0	< 10	< 10	800	15000	25000	
Fluoride	1220	U	0.17	0.36	< 1.0	3.3	10	150	500	
Sulphate	1220	U	3.8	2.3	< 10	25	1000	20000	50000	
Total Dissolved Solids	1020	N	41	66	81	630	4000	60000	100000	
Phenol Index	1920	U	< 0.030	< 0.030	< 0.30	< 0.50	1	-	-	
Dissolved Organic Carbon	1610	U	15	13	< 50	130	500	800	1000	

Solid Information	
Dry mass of test portion/kg	0.175
Moisture (%)	16

Leachate Test Information	
Leachant volume 1st extract/l	0.317
Leachant volume 2nd extract/l	1.400
Eluant recovered from 1st extract/l	0.232

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - 2 Stage WAC

Project: 1801024 Yapton Road, Barnham

Chemtest Job No: 18-08810							Landfill Waste Acceptance Criteria			
Chemtest Sample ID: 599228							Limits			
Sample Ref: TP1							Inert Waste Landfill	Stable, Non-reactive hazardous waste in non-hazardous Landfill	Hazardous Waste Landfill	
Sample ID:										
Top Depth(m): 0.20										
Bottom Depth(m):										
Sampling Date: 21-Mar-2018										
Determinand	SOP	Accred.	Units							
Total Organic Carbon	2625	U	%				3.8	3	5	6
Loss On Ignition	2610	U	%				7.2	--	--	10
Total BTEX	2760	U	mg/kg				< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg				< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg				< 10	500	--	--
Total (Of 17) PAH's	2700	N	mg/kg				3.3	100	--	--
pH	2010	U					6.1	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg				0.015	--	To evaluate	To evaluate
Eluate Analysis							Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg			
			2:1 mg/l	8:1 mg/l	2:1 mg/kg	Cumulative mg/kg 10:1				
Arsenic	1450	U	0.0013	0.0022	< 0.050	< 0.050	0.5	2	25	
Barium	1450	U	0.0079	0.016	< 0.50	< 0.50	20	100	300	
Cadmium	1450	U	< 0.00010	< 0.00010	< 0.010	< 0.010	0.04	1	5	
Chromium	1450	U	0.0017	0.0019	< 0.050	< 0.050	0.5	10	70	
Copper	1450	U	0.0043	0.0053	< 0.050	< 0.050	2	50	100	
Mercury	1450	U	< 0.00050	< 0.00050	< 0.0010	< 0.0050	0.01	0.2	2	
Molybdenum	1450	U	< 0.0010	< 0.0010	< 0.050	< 0.050	0.5	10	30	
Nickel	1450	U	0.0015	0.0020	< 0.050	< 0.050	0.4	10	40	
Lead	1450	U	0.0024	0.0055	< 0.010	0.050	0.5	10	50	
Antimony	1450	U	< 0.0010	< 0.0010	< 0.010	< 0.010	0.06	0.7	5	
Selenium	1450	U	< 0.0010	< 0.0010	< 0.010	< 0.010	0.1	0.5	7	
Zinc	1450	U	0.013	0.022	< 0.50	< 0.50	4	50	200	
Chloride	1220	U	< 1.0	1.3	< 10	11	800	15000	25000	
Fluoride	1220	U	0.13	0.19	< 1.0	1.8	10	150	500	
Sulphate	1220	U	< 1.0	1.5	< 10	13	1000	20000	50000	
Total Dissolved Solids	1020	N	15	14	29	140	4000	60000	100000	
Phenol Index	1920	U	< 0.030	< 0.030	< 0.30	< 0.50	1	-	-	
Dissolved Organic Carbon	1610	U	26	19	51	200	500	800	1000	

Solid Information	
Dry mass of test portion/kg	0.175
Moisture (%)	19

Leachate Test Information	
Leachant volume 1st extract/l	0.308
Leachant volume 2nd extract/l	1.400
Eluant recovered from 1st extract/l	0.257

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - 2 Stage WAC

Project: 1801024 Yapton Road, Barnham

Chemtest Job No: 18-08810 Chemtest Sample ID: 599234 Sample Ref: TP6 Sample ID: Top Depth(m): 0.50 Bottom Depth(m): Sampling Date: 21-Mar-2018							Landfill Waste Acceptance Criteria Limits		
							Inert Waste Landfill	Stable, Non-reactive hazardous waste in non-hazardous Landfill	Hazardous Waste Landfill
Determinand	SOP	Accred.	Units						
Total Organic Carbon	2625	U	%				0.21	3	5
Loss On Ignition	2610	U	%				2.6	--	10
Total BTEX	2760	U	mg/kg				< 0.010	6	--
Total PCBs (7 Congeners)	2815	U	mg/kg				< 0.10	1	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg				< 10	500	--
Total (Of 17) PAH's	2700	N	mg/kg				< 2.0	100	--
pH	2010	U					7.9	--	--
Acid Neutralisation Capacity	2015	N	mol/kg				0.014	--	To evaluate
Eluate Analysis			2:1 mg/l	8:1 mg/l	2:1 mg/kg	Cumulative mg/kg 10:1	Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg		
Arsenic	1450	U	< 0.0010	< 0.0010	< 0.050	< 0.050	0.5	2	25
Barium	1450	U	0.0066	0.0040	< 0.50	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.00010	< 0.010	< 0.010	0.04	1	5
Chromium	1450	U	0.0012	0.0013	< 0.050	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.0010	< 0.050	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.00050	< 0.0010	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	< 0.0010	< 0.0010	< 0.050	< 0.050	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.0010	< 0.050	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.0010	< 0.010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.0010	< 0.010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.0010	< 0.010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	0.0022	< 0.50	< 0.50	4	50	200
Chloride	1220	U	1.6	< 1.0	< 10	< 10	800	15000	25000
Fluoride	1220	U	0.35	0.27	< 1.0	2.8	10	150	500
Sulphate	1220	U	7.6	1.2	15	20	1000	20000	50000
Total Dissolved Solids	1020	N	71	29	140	340	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.030	< 0.30	< 0.50	1	-	-
Dissolved Organic Carbon	1610	U	22	15	< 50	160	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.175
Moisture (%)	15

Leachate Test Information	
Leachant volume 1st extract/l	0.318
Leachant volume 2nd extract/l	1.400
Eluant recovered from 1st extract/l	0.217

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - 2 Stage WAC

Project: 1801024 Yapton Road, Barnham

Chemtest Job No: 18-08810 Chemtest Sample ID: 599235 Sample Ref: TP3 Sample ID: Top Depth(m): 0.30 Bottom Depth(m): Sampling Date: 21-Mar-2018							Landfill Waste Acceptance Criteria Limits		
							Inert Waste Landfill	Stable, Non-reactive hazardous waste in non-hazardous Landfill	Hazardous Waste Landfill
Determinand	SOP	Accred.	Units						
Total Organic Carbon	2625	U	%				1.8	3	5
Loss On Ignition	2610	U	%				5.0	--	10
Total BTEX	2760	U	mg/kg				< 0.010	6	--
Total PCBs (7 Congeners)	2815	U	mg/kg				< 0.10	1	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg				< 10	500	--
Total (Of 17) PAH's	2700	N	mg/kg				< 2.0	100	--
pH	2010	U					7.5	--	--
Acid Neutralisation Capacity	2015	N	mol/kg				0.0060	--	To evaluate
Eluate Analysis			2:1 mg/l	8:1 mg/l	2:1 mg/kg	Cumulative mg/kg 10:1	Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg		
Arsenic	1450	U	0.0027	0.0032	< 0.050	< 0.050	0.5	2	25
Barium	1450	U	0.0072	0.011	< 0.50	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.00010	< 0.010	< 0.010	0.04	1	5
Chromium	1450	U	0.0010	0.0022	< 0.050	< 0.050	0.5	10	70
Copper	1450	U	0.0055	0.0048	< 0.050	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.00050	< 0.0010	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0020	0.0012	< 0.050	< 0.050	0.5	10	30
Nickel	1450	U	0.0014	0.0016	< 0.050	< 0.050	0.4	10	40
Lead	1450	U	0.0016	0.0054	< 0.010	0.048	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.0010	< 0.010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.0010	< 0.010	< 0.010	0.1	0.5	7
Zinc	1450	U	0.0061	0.016	< 0.50	< 0.50	4	50	200
Chloride	1220	U	1.3	1.1	< 10	11	800	15000	25000
Fluoride	1220	U	0.24	0.27	< 1.0	2.6	10	150	500
Sulphate	1220	U	< 1.0	1.4	< 10	12	1000	20000	50000
Total Dissolved Solids	1020	N	57	50	110	510	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.030	< 0.30	< 0.50	1	-	-
Dissolved Organic Carbon	1610	U	110	32	220	430	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.175
Moisture (%)	20

Leachate Test Information	
Leachant volume 1st extract/l	0.307
Leachant volume 2nd extract/l	1.400
Eluant recovered from 1st extract/l	0.242

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - 2 Stage WAC

Project: 1801024 Yapton Road, Barnham

Chemtest Job No: 18-08810 Chemtest Sample ID: 599236 Sample Ref: TP4 Sample ID: Top Depth(m): 0.50 Bottom Depth(m): Sampling Date: 21-Mar-2018							Landfill Waste Acceptance Criteria Limits		
							Inert Waste Landfill	Stable, Non-reactive hazardous waste in non-hazardous Landfill	Hazardous Waste Landfill
Determinand	SOP	Accred.	Units						
Total Organic Carbon	2625	U	%				0.93	3	5
Loss On Ignition	2610	U	%				3.3	--	10
Total BTEX	2760	U	mg/kg				< 0.010	6	--
Total PCBs (7 Congeners)	2815	U	mg/kg				< 0.10	1	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg				37	500	--
Total (Of 17) PAH's	2700	N	mg/kg				17	100	--
pH	2010	U					8.0	--	>6
Acid Neutralisation Capacity	2015	N	mol/kg				0.010	--	To evaluate
Eluate Analysis			2:1 mg/l	8:1 mg/l	2:1 mg/kg	Cumulative mg/kg 10:1	Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg		
Arsenic	1450	U	< 0.0010	0.0019	< 0.050	< 0.050	0.5	2	25
Barium	1450	U	0.0017	0.0055	< 0.50	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.00010	< 0.010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.0010	< 0.050	< 0.050	0.5	10	70
Copper	1450	U	0.0013	0.0030	< 0.050	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.00050	< 0.0010	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	< 0.0010	0.0026	< 0.050	< 0.050	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.0010	< 0.050	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	0.0011	< 0.010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.0010	< 0.010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.0010	< 0.010	< 0.010	0.1	0.5	7
Zinc	1450	U	0.0011	0.0034	< 0.50	< 0.50	4	50	200
Chloride	1220	U	< 1.0	< 1.0	< 10	< 10	800	15000	25000
Fluoride	1220	U	0.14	0.39	< 1.0	3.5	10	150	500
Sulphate	1220	U	2.4	5.5	< 10	50	1000	20000	50000
Total Dissolved Solids	1020	N	23	69	45	620	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.030	< 0.30	< 0.50	1	-	-
Dissolved Organic Carbon	1610	U	14	13	< 50	130	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.175
Moisture (%)	14

Leachate Test Information	
Leachant volume 1st extract/l	0.321
Leachant volume 2nd extract/l	1.400
Eluant recovered from 1st extract/l	0.278

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - 2 Stage WAC

Project: 1801024 Yapton Road, Barnham

Chemtest Job No: 18-08810 Chemtest Sample ID: 599237 Sample Ref: TP5 Sample ID: Top Depth(m): 0.30 Bottom Depth(m): Sampling Date: 21-Mar-2018							Landfill Waste Acceptance Criteria Limits		
							Inert Waste Landfill	Stable, Non-reactive hazardous waste in non-hazardous Landfill	Hazardous Waste Landfill
Determinand	SOP	Accred.	Units						
Total Organic Carbon	2625	U	%				1.8	3	5
Loss On Ignition	2610	U	%				4.0	--	10
Total BTEX	2760	U	mg/kg				< 0.010	6	--
Total PCBs (7 Congeners)	2815	U	mg/kg				< 0.10	1	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg				< 10	500	--
Total (Of 17) PAH's	2700	N	mg/kg				< 2.0	100	--
pH	2010	U					7.5	--	--
Acid Neutralisation Capacity	2015	N	mol/kg				0.026	--	To evaluate
Eluate Analysis			2:1 mg/l	8:1 mg/l	2:1 mg/kg	Cumulative mg/kg 10:1	Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg		
Arsenic	1450	U	0.0030	0.0027	< 0.050	< 0.050	0.5	2	25
Barium	1450	U	0.021	0.013	< 0.50	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.00010	< 0.010	< 0.010	0.04	1	5
Chromium	1450	U	0.0015	0.0015	< 0.050	< 0.050	0.5	10	70
Copper	1450	U	0.011	0.0052	< 0.050	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.00050	< 0.0010	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	< 0.0010	< 0.0010	< 0.050	< 0.050	0.5	10	30
Nickel	1450	U	0.0040	0.0023	< 0.050	< 0.050	0.4	10	40
Lead	1450	U	0.0076	0.0039	0.015	0.043	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.0010	< 0.010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.0010	< 0.010	< 0.010	0.1	0.5	7
Zinc	1450	U	0.029	0.016	< 0.50	< 0.50	4	50	200
Chloride	1220	U	3.6	1.5	< 10	17	800	15000	25000
Fluoride	1220	U	0.26	0.23	< 1.0	2.3	10	150	500
Sulphate	1220	U	13	4.9	26	58	1000	20000	50000
Total Dissolved Solids	1020	N	32	20	63	210	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.030	< 0.30	< 0.50	1	-	-
Dissolved Organic Carbon	1610	U	150	52	300	640	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.175
Moisture (%)	14

Leachate Test Information	
Leachant volume 1st extract/l	0.320
Leachant volume 2nd extract/l	1.400
Eluant recovered from 1st extract/l	0.208

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - 2 Stage WAC

Project: 1801024 Yapton Road, Barnham

Chemtest Job No: 18-08810 Chemtest Sample ID: 599238 Sample Ref: TP8 Sample ID: Top Depth(m): 0.10 Bottom Depth(m): Sampling Date: 22-Mar-2018							Landfill Waste Acceptance Criteria Limits		
							Inert Waste Landfill	Stable, Non-reactive hazardous waste in non-hazardous Landfill	Hazardous Waste Landfill
Determinand	SOP	Accred.	Units						
Total Organic Carbon	2625	U	%				1.8	3	5
Loss On Ignition	2610	U	%				4.9	--	10
Total BTEX	2760	U	mg/kg				< 0.010	6	--
Total PCBs (7 Congeners)	2815	U	mg/kg				< 0.10	1	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg				< 10	500	--
Total (Of 17) PAH's	2700	N	mg/kg				< 2.0	100	--
pH	2010	U					7.2	--	>6
Acid Neutralisation Capacity	2015	N	mol/kg				< 0.0020	--	To evaluate
Eluate Analysis			2:1 mg/l	8:1 mg/l	2:1 mg/kg	Cumulative mg/kg 10:1	Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg		
Arsenic	1450	U	0.0011	0.0029	< 0.050	< 0.050	0.5	2	25
Barium	1450	U	0.0033	0.0086	< 0.50	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.00010	< 0.010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	0.0027	< 0.050	< 0.050	0.5	10	70
Copper	1450	U	0.0032	0.0036	< 0.050	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.00050	< 0.0010	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	< 0.0010	< 0.0010	< 0.050	< 0.050	0.5	10	30
Nickel	1450	U	0.0015	0.0023	< 0.050	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	0.0033	< 0.010	0.028	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.0010	< 0.010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.0010	< 0.010	< 0.010	0.1	0.5	7
Zinc	1450	U	0.0027	0.012	< 0.50	< 0.50	4	50	200
Chloride	1220	U	6.8	2.2	13	29	800	15000	25000
Fluoride	1220	U	0.18	0.23	< 1.0	2.2	10	150	500
Sulphate	1220	U	< 1.0	1.2	< 10	10	1000	20000	50000
Total Dissolved Solids	1020	N	35	24	69	260	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.030	< 0.30	< 0.50	1	-	-
Dissolved Organic Carbon	1610	U	17	17	< 50	170	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.175
Moisture (%)	16

Leachate Test Information	
Leachant volume 1st extract/l	0.318
Leachant volume 2nd extract/l	1.400
Eluant recovered from 1st extract/l	0.255

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - 2 Stage WAC

Project: 1801024 Yapton Road, Barnham

Chemtest Job No: 18-08810 Chemtest Sample ID: 599239 Sample Ref: TP8 Sample ID: Top Depth(m): 0.50 Bottom Depth(m): Sampling Date: 22-Mar-2018							Landfill Waste Acceptance Criteria Limits		
							Inert Waste Landfill	Stable, Non-reactive hazardous waste in non-hazardous Landfill	Hazardous Waste Landfill
Determinand	SOP	Accred.	Units						
Total Organic Carbon	2625	U	%				0.59	3	5
Loss On Ignition	2610	U	%				2.5	--	10
Total BTEX	2760	U	mg/kg				< 0.010	6	--
Total PCBs (7 Congeners)	2815	U	mg/kg				< 0.10	1	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg				< 10	500	--
Total (Of 17) PAH's	2700	N	mg/kg				< 2.0	100	--
pH	2010	U					8.2	--	>6
Acid Neutralisation Capacity	2015	N	mol/kg				0.019	--	To evaluate
Eluate Analysis			2:1 mg/l	8:1 mg/l	2:1 mg/kg	Cumulative mg/kg 10:1	Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg		
Arsenic	1450	U	0.0011	0.0023	< 0.050	< 0.050	0.5	2	25
Barium	1450	U	0.0039	0.0055	< 0.50	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.00010	< 0.010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	0.0015	< 0.050	< 0.050	0.5	10	70
Copper	1450	U	0.0023	0.0025	< 0.050	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.00050	< 0.0010	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0011	0.0010	< 0.050	< 0.050	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.0010	< 0.050	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	0.0010	< 0.010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.0010	< 0.010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.0010	< 0.010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	0.0031	< 0.50	< 0.50	4	50	200
Chloride	1220	U	1.9	1.1	< 10	12	800	15000	25000
Fluoride	1220	U	0.21	0.54	< 1.0	4.9	10	150	500
Sulphate	1220	U	1.2	< 1.0	< 10	< 10	1000	20000	50000
Total Dissolved Solids	1020	N	48	38	95	400	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.030	< 0.30	< 0.50	1	-	-
Dissolved Organic Carbon	1610	U	21	21	< 50	210	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.175
Moisture (%)	14

Leachate Test Information	
Leachant volume 1st extract/l	0.321
Leachant volume 2nd extract/l	1.400
Eluant recovered from 1st extract/l	0.280

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - 2 Stage WAC

Project: 1801024 Yapton Road, Barnham

Chemtest Job No: 18-08810 Chemtest Sample ID: 599240 Sample Ref: TP15 Sample ID: Top Depth(m): 0.30 Bottom Depth(m): Sampling Date: 22-Mar-2018							Landfill Waste Acceptance Criteria Limits		
							Inert Waste Landfill	Stable, Non-reactive hazardous waste in non-hazardous Landfill	Hazardous Waste Landfill
Determinand	SOP	Accred.	Units						
Total Organic Carbon	2625	U	%				6.8	3	5
Loss On Ignition	2610	U	%				8.7	--	--
Total BTEX	2760	U	mg/kg				< 0.010	6	--
Total PCBs (7 Congeners)	2815	U	mg/kg				< 0.10	1	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg				1600	500	--
Total (Of 17) PAH's	2700	N	mg/kg				360	100	--
pH	2010	U					8.0	--	>6
Acid Neutralisation Capacity	2015	N	mol/kg				0.011	--	To evaluate
Eluate Analysis			2:1 mg/l	8:1 mg/l	2:1 mg/kg	Cumulative mg/kg 10:1	Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg		
Arsenic	1450	U	< 0.0010	0.0012	< 0.050	< 0.050	0.5	2	25
Barium	1450	U	0.030	0.015	< 0.50	< 0.50	20	100	300
Cadmium	1450	U	0.00011	< 0.00010	< 0.010	< 0.010	0.04	1	5
Chromium	1450	U	0.0025	0.0020	< 0.050	< 0.050	0.5	10	70
Copper	1450	U	0.0031	0.0021	< 0.050	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.00050	< 0.0010	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0043	0.0028	< 0.050	< 0.050	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.0010	< 0.050	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	0.0020	< 0.010	0.018	0.5	10	50
Antimony	1450	U	0.0020	0.0012	< 0.010	0.013	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.0010	< 0.010	< 0.010	0.1	0.5	7
Zinc	1450	U	0.014	0.013	< 0.50	< 0.50	4	50	200
Chloride	1220	U	2.2	< 1.0	< 10	< 10	800	15000	25000
Fluoride	1220	U	0.70	0.52	1.4	5.4	10	150	500
Sulphate	1220	U	74	17	150	240	1000	20000	50000
Total Dissolved Solids	1020	N	210	74	420	910	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.030	< 0.30	< 0.50	1	-	-
Dissolved Organic Carbon	1610	U	16	14	< 50	140	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.175
Moisture (%)	12

Leachate Test Information	
Leachant volume 1st extract/l	0.325
Leachant volume 2nd extract/l	1.400
Eluant recovered from 1st extract/l	0.214

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - 2 Stage WAC

Project: 1801024 Yapton Road, Barnham

Chemtest Job No: 18-08810 Chemtest Sample ID: 599250 Sample Ref: TP9 Sample ID: Top Depth(m): 0.20 Bottom Depth(m): Sampling Date: 22-Mar-2018							Landfill Waste Acceptance Criteria Limits		
							Inert Waste Landfill	Stable, Non-reactive hazardous waste in non-hazardous Landfill	Hazardous Waste Landfill
Determinand	SOP	Accred.	Units						
Total Organic Carbon	2625	U	%				6.7	3	5
Loss On Ignition	2610	U	%				18	--	--
Total BTEX	2760	U	mg/kg				< 0.010	6	--
Total PCBs (7 Congeners)	2815	U	mg/kg				< 0.10	1	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg				< 10	500	--
Total (Of 17) PAH's	2700	N	mg/kg				5.7	100	--
pH	2010	U					7.5	--	>6
Acid Neutralisation Capacity	2015	N	mol/kg				0.013	--	To evaluate
Eluate Analysis			2:1 mg/l	8:1 mg/l	2:1 mg/kg	Cumulative mg/kg 10:1	Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg		
Arsenic	1450	U	0.0068	0.0095	< 0.050	0.090	0.5	2	25
Barium	1450	U	0.0048	0.0046	< 0.50	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.00010	< 0.010	< 0.010	0.04	1	5
Chromium	1450	U	0.0015	0.0020	< 0.050	< 0.050	0.5	10	70
Copper	1450	U	0.0099	0.010	< 0.050	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.00050	< 0.0010	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0058	0.0053	< 0.050	0.053	0.5	10	30
Nickel	1450	U	0.0015	0.0014	< 0.050	< 0.050	0.4	10	40
Lead	1450	U	0.0058	0.0097	0.011	0.091	0.5	10	50
Antimony	1450	U	0.0049	0.010	< 0.010	0.092	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.0010	< 0.010	< 0.010	0.1	0.5	7
Zinc	1450	U	0.011	0.011	< 0.50	< 0.50	4	50	200
Chloride	1220	U	1.6	1.3	< 10	13	800	15000	25000
Fluoride	1220	U	0.11	0.12	< 1.0	1.2	10	150	500
Sulphate	1220	U	< 1.0	< 1.0	< 10	< 10	1000	20000	50000
Total Dissolved Solids	1020	N	97	110	190	1100	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.030	< 0.30	< 0.50	1	-	-
Dissolved Organic Carbon	1610	U	23	21	< 50	210	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.175
Moisture (%)	26

Leachate Test Information	
Leachant volume 1st extract/l	0.287
Leachant volume 2nd extract/l	1.400
Eluant recovered from 1st extract/l	0.247

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - 2 Stage WAC

Project: 1801024 Yapton Road, Barnham

Chemtest Job No: 18-08810 Chemtest Sample ID: 599251 Sample Ref: TP10 Sample ID: Top Depth(m): 0.20 Bottom Depth(m): Sampling Date: 22-Mar-2018							Landfill Waste Acceptance Criteria Limits		
							Inert Waste Landfill	Stable, Non-reactive hazardous waste in non-hazardous Landfill	Hazardous Waste Landfill
Determinand	SOP	Accred.	Units						
Total Organic Carbon	2625	U	%				3	5	6
Loss On Ignition	2610	U	%				--	--	10
Total BTEX	2760	U	mg/kg				6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg				1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg				500	--	--
Total (Of 17) PAH's	2700	N	mg/kg				100	--	--
pH	2010	U					--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg				--	To evaluate	To evaluate
Eluate Analysis			2:1 mg/l	8:1 mg/l	2:1 mg/kg	Cumulative mg/kg 10:1	Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg		
Arsenic	1450	U	0.0043	0.0053	< 0.050	0.051	0.5	2	25
Barium	1450	U	0.010	0.0095	< 0.50	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.00010	< 0.010	< 0.010	0.04	1	5
Chromium	1450	U	0.0012	0.0014	< 0.050	< 0.050	0.5	10	70
Copper	1450	U	0.0049	0.0040	< 0.050	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.00050	< 0.0010	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0047	0.0029	< 0.050	< 0.050	0.5	10	30
Nickel	1450	U	0.0011	0.0014	< 0.050	< 0.050	0.4	10	40
Lead	1450	U	0.0013	0.0031	< 0.010	0.028	0.5	10	50
Antimony	1450	U	0.0015	< 0.0010	< 0.010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.0010	< 0.010	< 0.010	0.1	0.5	7
Zinc	1450	U	0.0053	0.0053	< 0.50	< 0.50	4	50	200
Chloride	1220	U	1.7	< 1.0	< 10	< 10	800	15000	25000
Fluoride	1220	U	0.26	0.26	< 1.0	2.6	10	150	500
Sulphate	1220	U	< 1.0	< 1.0	< 10	< 10	1000	20000	50000
Total Dissolved Solids	1020	N	86	55	170	590	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.030	< 0.30	< 0.50	1	-	-
Dissolved Organic Carbon	1610	U	58	22	110	270	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.175
Moisture (%)	16

Leachate Test Information	
Leachant volume 1st extract/l	0.316
Leachant volume 2nd extract/l	1.400
Eluant recovered from 1st extract/l	0.259

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - 2 Stage WAC

Project: 1801024 Yapton Road, Barnham

Chemtest Job No: 18-08810 Chemtest Sample ID: 599252 Sample Ref: TP7 Sample ID: Top Depth(m): 0.50 Bottom Depth(m): Sampling Date: 22-Mar-2018							Landfill Waste Acceptance Criteria Limits		
							Inert Waste Landfill	Stable, Non-reactive hazardous waste in non-hazardous Landfill	Hazardous Waste Landfill
Determinand	SOP	Accred.	Units						
Total Organic Carbon	2625	U	%				1.2	3	5
Loss On Ignition	2610	U	%				4.3	--	10
Total BTEX	2760	U	mg/kg				< 0.010	6	--
Total PCBs (7 Congeners)	2815	U	mg/kg				< 0.10	1	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg				< 10	500	--
Total (Of 17) PAH's	2700	N	mg/kg				< 2.0	100	--
pH	2010	U					7.9	--	>6
Acid Neutralisation Capacity	2015	N	mol/kg				0.012	--	To evaluate
Eluate Analysis			2:1 mg/l	8:1 mg/l	2:1 mg/kg	Cumulative mg/kg 10:1	Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg		
Arsenic	1450	U	0.0011	0.0013	< 0.050	< 0.050	0.5	2	25
Barium	1450	U	0.0046	0.0042	< 0.50	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.00010	< 0.010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.0010	< 0.050	< 0.050	0.5	10	70
Copper	1450	U	0.0017	0.0017	< 0.050	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.00050	< 0.0010	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0016	0.0015	< 0.050	< 0.050	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.0010	< 0.050	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.0010	< 0.010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.0010	< 0.010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.0010	< 0.010	< 0.010	0.1	0.5	7
Zinc	1450	U	0.0013	0.0017	< 0.50	< 0.50	4	50	200
Chloride	1220	U	2.4	1.3	< 10	15	800	15000	25000
Fluoride	1220	U	0.20	0.26	< 1.0	2.5	10	150	500
Sulphate	1220	U	4.1	< 1.0	< 10	< 10	1000	20000	50000
Total Dissolved Solids	1020	N	67	34	130	390	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.030	< 0.30	< 0.50	1	-	-
Dissolved Organic Carbon	1610	U	24	13	< 50	150	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.175
Moisture (%)	16

Leachate Test Information	
Leachant volume 1st extract/l	0.317
Leachant volume 2nd extract/l	1.400
Eluant recovered from 1st extract/l	0.278

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - 2 Stage WAC

Project: 1801024 Yapton Road, Barnham

Chemtest Job No: 18-08810							Landfill Waste Acceptance Criteria		
Chemtest Sample ID: 599253							Limits		
Sample Ref: TP13							Inert Waste Landfill	Stable, Non-reactive hazardous waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID:									
Top Depth(m): 0.20									
Bottom Depth(m):									
Sampling Date: 22-Mar-2018									
Determinand	SOP	Accred.	Units						
Total Organic Carbon	2625	U	%				1.2	3	5
Loss On Ignition	2610	U	%				4.1	--	10
Total BTEX	2760	U	mg/kg				< 0.010	6	--
Total PCBs (7 Congeners)	2815	U	mg/kg				< 0.10	1	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg				22	500	--
Total (Of 17) PAH's	2700	N	mg/kg				24	100	--
pH	2010	U					8.0	--	>6
Acid Neutralisation Capacity	2015	N	mol/kg				0.030	--	To evaluate
Eluate Analysis			2:1 mg/l	8:1 mg/l	2:1 mg/kg	Cumulative mg/kg 10:1	Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg		
Arsenic	1450	U	0.0026	0.0031	< 0.050	< 0.050	0.5	2	25
Barium	1450	U	0.0075	0.0069	< 0.50	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.00010	< 0.010	< 0.010	0.04	1	5
Chromium	1450	U	0.0011	0.0013	< 0.050	< 0.050	0.5	10	70
Copper	1450	U	0.0037	0.0030	< 0.050	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.00050	< 0.0010	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0031	0.0020	< 0.050	< 0.050	0.5	10	30
Nickel	1450	U	< 0.0010	0.0012	< 0.050	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	0.0022	< 0.010	0.019	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.0010	< 0.010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.0010	< 0.010	< 0.010	0.1	0.5	7
Zinc	1450	U	0.0027	0.0054	< 0.50	< 0.50	4	50	200
Chloride	1220	U	3.6	1.3	< 10	16	800	15000	25000
Fluoride	1220	U	0.33	0.31	< 1.0	3.1	10	150	500
Sulphate	1220	U	1.1	< 1.0	< 10	< 10	1000	20000	50000
Total Dissolved Solids	1020	N	76	38	150	430	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.030	< 0.30	< 0.50	1	-	-
Dissolved Organic Carbon	1610	U	56	22	110	270	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.175
Moisture (%)	17

Leachate Test Information	
Leachant volume 1st extract/l	0.315
Leachant volume 2nd extract/l	1.400
Eluant recovered from 1st extract/l	0.239

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - 2 Stage WAC

Project: 1801024 Yapton Road, Barnham

Chemtest Job No: 18-08810 Chemtest Sample ID: 599254 Sample Ref: TP12 Sample ID: Top Depth(m): 0.10 Bottom Depth(m): Sampling Date: 22-Mar-2018							Landfill Waste Acceptance Criteria Limits		
							Inert Waste Landfill	Stable, Non-reactive hazardous waste in non-hazardous Landfill	Hazardous Waste Landfill
Determinand	SOP	Accred.	Units						
Total Organic Carbon	2625	U	%				2.4	3	6
Loss On Ignition	2610	U	%				7.1	--	10
Total BTEX	2760	U	mg/kg				< 0.010	6	--
Total PCBs (7 Congeners)	2815	U	mg/kg				< 0.10	1	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg				1500	500	--
Total (Of 17) PAH's	2700	N	mg/kg				12	100	--
pH	2010	U					7.9	--	--
Acid Neutralisation Capacity	2015	N	mol/kg				0.0040	--	To evaluate
Eluate Analysis			2:1 mg/l	8:1 mg/l	2:1 mg/kg	Cumulative mg/kg 10:1	Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg		
Arsenic	1450	U	0.0060	0.0068	< 0.050	0.066	0.5	2	25
Barium	1450	U	0.010	0.0093	< 0.50	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.00010	< 0.010	< 0.010	0.04	1	5
Chromium	1450	U	0.0010	0.0012	< 0.050	< 0.050	0.5	10	70
Copper	1450	U	0.0080	0.0052	< 0.050	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.00050	< 0.0010	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0015	0.0011	< 0.050	< 0.050	0.5	10	30
Nickel	1450	U	0.0015	0.0013	< 0.050	< 0.050	0.4	10	40
Lead	1450	U	0.0044	0.0056	< 0.010	0.054	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.0010	< 0.010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.0010	< 0.010	< 0.010	0.1	0.5	7
Zinc	1450	U	0.020	0.025	< 0.50	< 0.50	4	50	200
Chloride	1220	U	1.1	< 1.0	< 10	< 10	800	15000	25000
Fluoride	1220	U	0.14	0.15	< 1.0	1.5	10	150	500
Sulphate	1220	U	< 1.0	< 1.0	< 10	< 10	1000	20000	50000
Total Dissolved Solids	1020	N	69	47	140	500	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.030	< 0.30	< 0.50	1	-	-
Dissolved Organic Carbon	1610	U	58	39	110	420	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.175
Moisture (%)	16

Leachate Test Information	
Leachant volume 1st extract/l	0.316
Leachant volume 2nd extract/l	1.400
Eluant recovered from 1st extract/l	0.283

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - 2 Stage WAC

Project: 1801024 Yapton Road, Barnham

Chemtest Job No: 18-08810 Chemtest Sample ID: 599255 Sample Ref: TP14 Sample ID: Top Depth(m): 0.10 Bottom Depth(m): Sampling Date: 22-Mar-2018							Landfill Waste Acceptance Criteria Limits		
							Inert Waste Landfill	Stable, Non-reactive hazardous waste in non-hazardous Landfill	Hazardous Waste Landfill
Determinand	SOP	Accred.	Units						
Total Organic Carbon	2625	U	%				1.2	3	5
Loss On Ignition	2610	U	%				3.2	--	10
Total BTEX	2760	U	mg/kg				< 0.010	6	--
Total PCBs (7 Congeners)	2815	U	mg/kg				< 0.10	1	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg				990	500	--
Total (Of 17) PAH's	2700	N	mg/kg				25	100	--
pH	2010	U					9.8	--	>6
Acid Neutralisation Capacity	2015	N	mol/kg				0.074	--	To evaluate
Eluate Analysis			2:1 mg/l	8:1 mg/l	2:1 mg/kg	Cumulative mg/kg 10:1	Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg		
Arsenic	1450	U	0.011	0.0087	< 0.050	0.090	0.5	2	25
Barium	1450	U	0.075	0.053	< 0.50	0.56	20	100	300
Cadmium	1450	U	< 0.00010	< 0.00010	< 0.010	< 0.010	0.04	1	5
Chromium	1450	U	0.018	0.0017	< 0.050	< 0.050	0.5	10	70
Copper	1450	U	0.083	0.051	0.17	0.10	2	50	100
Mercury	1450	U	< 0.00050	< 0.00050	< 0.0010	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.020	0.0057	< 0.050	0.074	0.5	10	30
Nickel	1450	U	0.0027	0.0011	< 0.050	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	0.0012	< 0.010	0.011	0.5	10	50
Antimony	1450	U	0.069	0.028	0.14	0.33	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.0010	< 0.010	< 0.010	0.1	0.5	7
Zinc	1450	U	0.0049	0.0028	< 0.50	< 0.50	4	50	200
Chloride	1220	U	6.7	1.7	13	23	800	15000	25000
Fluoride	1220	U	0.44	0.27	< 1.0	2.9	10	150	500
Sulphate	1220	U	98	31	200	390	1000	20000	50000
Total Dissolved Solids	1020	N	180	95	360	1100	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.030	< 0.30	< 0.50	1	-	-
Dissolved Organic Carbon	1610	U	25	22	< 50	220	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.175
Moisture (%)	9.2

Leachate Test Information	
Leachant volume 1st extract/l	0.332
Leachant volume 2nd extract/l	1.400
Eluant recovered from 1st extract/l	0.214

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - 2 Stage WAC

Project: 1801024 Yapton Road, Barnham

Chemtest Job No: 18-08810							Landfill Waste Acceptance Criteria			
Chemtest Sample ID: 599256							Limits			
Sample Ref: TP12							Inert Waste Landfill	Stable, Non-reactive hazardous waste in non-hazardous Landfill	Hazardous Waste Landfill	
Sample ID:										
Top Depth(m): 0.60										
Bottom Depth(m):										
Sampling Date: 22-Mar-2018										
Determinand	SOP	Accred.	Units							
Total Organic Carbon	2625	U	%				0.29	3	5	6
Loss On Ignition	2610	U	%				2.8	--	--	10
Total BTEX	2760	U	mg/kg				< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg				< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg				< 10	500	--	--
Total (Of 17) PAH's	2700	N	mg/kg				< 2.0	100	--	--
pH	2010	U					8.1	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg				0.016	--	To evaluate	To evaluate
Eluate Analysis			2:1 mg/l	8:1 mg/l	2:1 mg/kg	Cumulative mg/kg 10:1	Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg			
Arsenic	1450	U	0.0028	0.0056	< 0.050	0.051	0.5	2	25	
Barium	1450	U	0.0065	0.034	< 0.50	< 0.50	20	100	300	
Cadmium	1450	U	< 0.00010	< 0.00010	< 0.010	< 0.010	0.04	1	5	
Chromium	1450	U	0.0013	0.0025	< 0.050	< 0.050	0.5	10	70	
Copper	1450	U	0.0048	0.0068	< 0.050	< 0.050	2	50	100	
Mercury	1450	U	< 0.00050	< 0.00050	< 0.0010	< 0.0050	0.01	0.2	2	
Molybdenum	1450	U	0.0018	0.0015	< 0.050	< 0.050	0.5	10	30	
Nickel	1450	U	0.0014	0.0028	< 0.050	< 0.050	0.4	10	40	
Lead	1450	U	0.0012	0.0068	< 0.010	0.059	0.5	10	50	
Antimony	1450	U	< 0.0010	< 0.0010	< 0.010	< 0.010	0.06	0.7	5	
Selenium	1450	U	< 0.0010	< 0.0010	< 0.010	< 0.010	0.1	0.5	7	
Zinc	1450	U	0.0026	0.0090	< 0.50	< 0.50	4	50	200	
Chloride	1220	U	< 1.0	2.4	< 10	20	800	15000	25000	
Fluoride	1220	U	0.14	0.27	< 1.0	2.5	10	150	500	
Sulphate	1220	U	1.5	23	< 10	200	1000	20000	50000	
Total Dissolved Solids	1020	N	24	26	47	260	4000	60000	100000	
Phenol Index	1920	U	< 0.030	< 0.030	< 0.30	< 0.50	1	-	-	
Dissolved Organic Carbon	1610	U	29	16	57	180	500	800	1000	

Solid Information	
Dry mass of test portion/kg	0.175
Moisture (%)	19

Leachate Test Information	
Leachant volume 1st extract/l	0.310
Leachant volume 2nd extract/l	1.400
Eluant recovered from 1st extract/l	0.276

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

SOP	Title	Parameters included	Method summary
1020	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Conductivity Meter
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser.
1450	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1610	Total/Dissolved Organic Carbon in Waters	Organic Carbon	TOC Analyser using Catalytic Oxidation
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.
2010	pH Value of Soils	pH	pH Meter
2015	Acid Neutralisation Capacity	Acid Reserve	Titration
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.
2610	Loss on Ignition	loss on ignition (LOI)	Determination of the proportion by mass that is lost from a soil by ignition at 550°C.
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID
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[a,h]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Dichloromethane extraction / GC-FID
2760	Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule	Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds.
2815	Polychlorinated Biphenyls (PCB) ICES7Congeners in Soils by GC-MS	ICES7 PCB congeners	Acetone/Hexane extraction / GC-MS

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

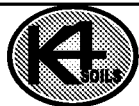
All water samples will be retained for 14 days from the date of receipt

Charges may apply to extended sample storage

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

customerservices@chemtest.co.uk

APPENDIX H
Geotechnical Laboratory Report



LIQUID LIMIT, PLASTIC LIMIT AND PLASTICITY INDEX

Job No.	24274
Borehole/Pit No.	BH1
Sample No.	-
Depth Top	5.00 m
Depth Base	- m
Sample Type	U
Samples received	28/03/2018
Schedules received	26/03/2018
Project Started	29/03/2018
Date Tested	16/04/2018

Site Name Yapton Road, Barnham

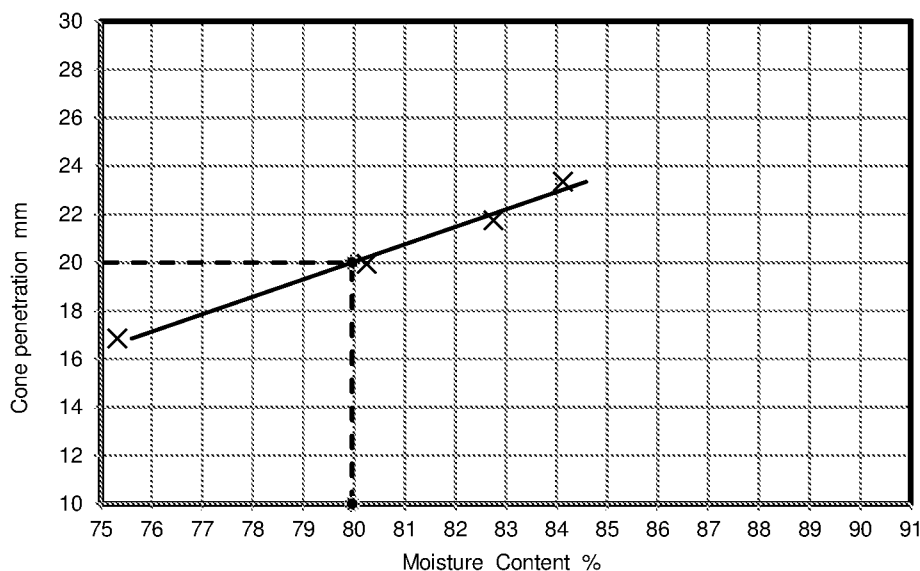
Project No. 1801024.001

Client

TEC

Soil Description

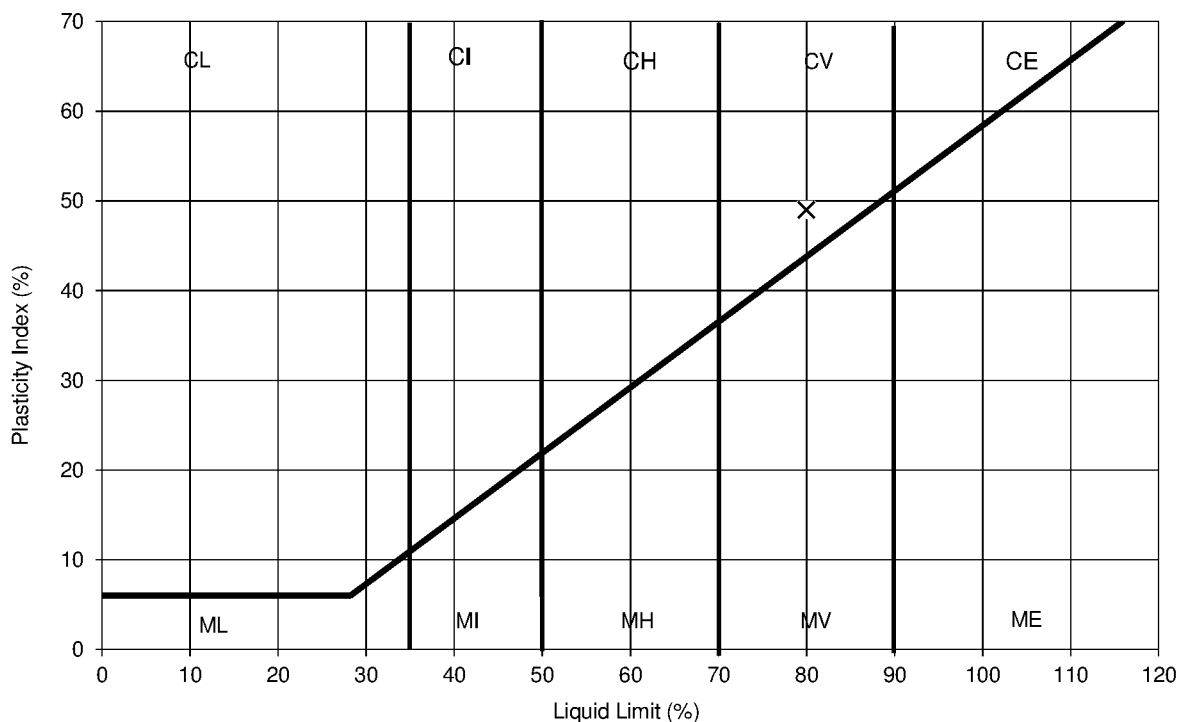
Medium strength dark grey silty CLAY



NATURAL MOISTURE CONTENT	37	%
% PASSING 425µm SIEVE	98	%
LIQUID LIMIT	80	%
PLASTIC LIMIT	31	%
PLASTICITY INDEX	49	%

Remarks

PLASTICITY INDEX



TEST METHOD

BS1377: Part 2 :Clause 4.4 : 1990 Determination of the liquid limit by the cone penetrometer method

BS1377: Part 2 :Clause 5.0 : 1990: Determination of the plastic limit and plasticity index

BS1377: Part 2 :Clause 3.2 : 1990:Determination of the moisture content by the oven drying

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

Checked and Approved

Initials: J.P

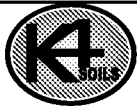
Date: 17/04/2018



2519

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

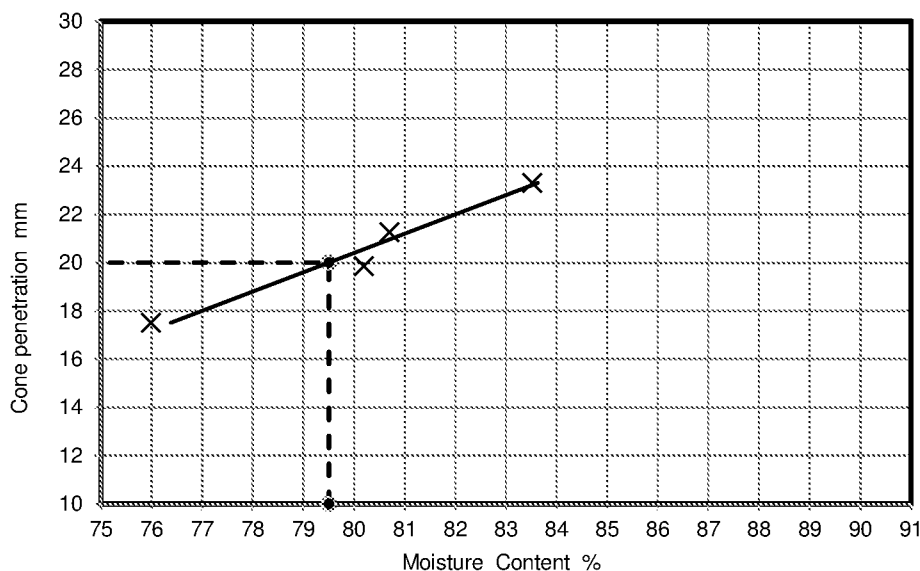
MSF-5 R2



LIQUID LIMIT, PLASTIC LIMIT AND PLASTICITY INDEX

Job No.	24274
Borehole/Pit No.	BH4
Sample No.	-
Depth Top	8.00 m
Depth Base	- m
Sample Type	U
Samples received	28/03/2018
Schedules received	26/03/2018
Project Started	29/03/2018
Date Tested	16/04/2018

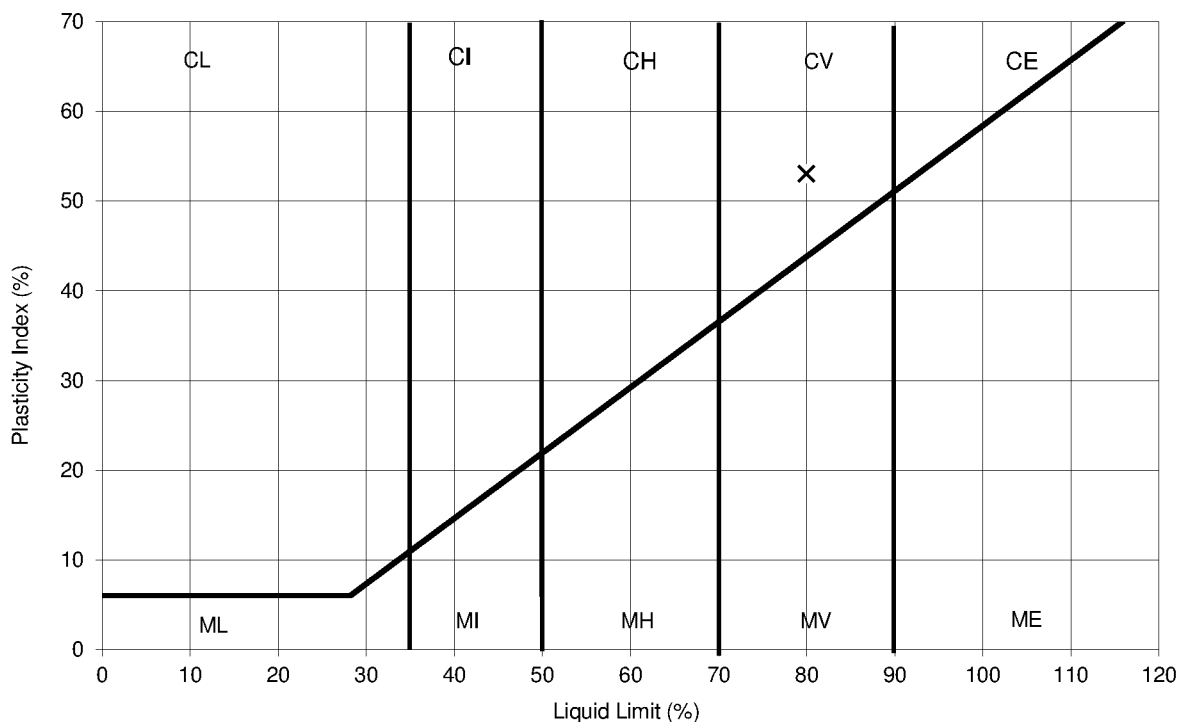
Site Name	Yapton Road, Barnham		
Project No.	1801024.001	Client	TEC
Soil Description	High strength fissured dark grey silty CLAY		



NATURAL MOISTURE CONTENT	28	%
% PASSING 425µm SIEVE	98	%
LIQUID LIMIT	80	%
PLASTIC LIMIT	27	%
PLASTICITY INDEX	53	%

Remarks

PLASTICITY INDEX



TEST METHOD

BS1377: Part 2 :Clause 4.4 : 1990 Determination of the liquid limit by the cone penetrometer method
 BS1377: Part 2 :Clause 5.0 : 1990: Determination of the plastic limit and plasticity index
 BS1377: Part 2 :Clause 3.2 : 1990:Determination of the moisture content by the oven drying

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

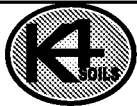
Checked and Approved

Initials: J.P
 Date: 17/04/2018

2519

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

MSF-5 R2



LIQUID LIMIT, PLASTIC LIMIT AND PLASTICITY INDEX

Job No.	24274
Borehole/Pit No.	BH5
Sample No.	-
Depth Top	9.50 m
Depth Base	- m
Sample Type	U
Samples received	28/03/2018
Schedules received	26/03/2018
Project Started	29/03/2018
Date Tested	16/04/2018

Site Name Yapton Road, Barnham

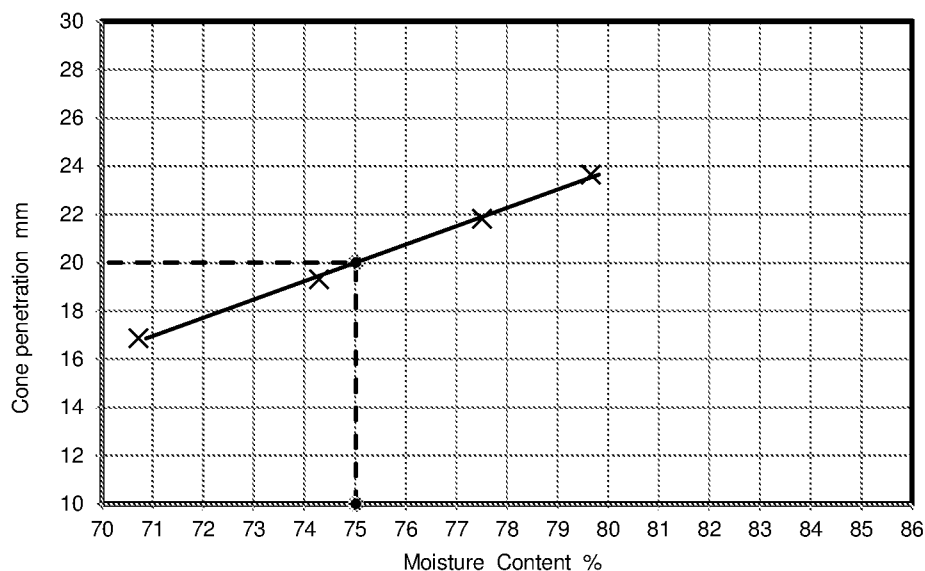
Project No. 1801024.001

Client

TEC

Soil Description

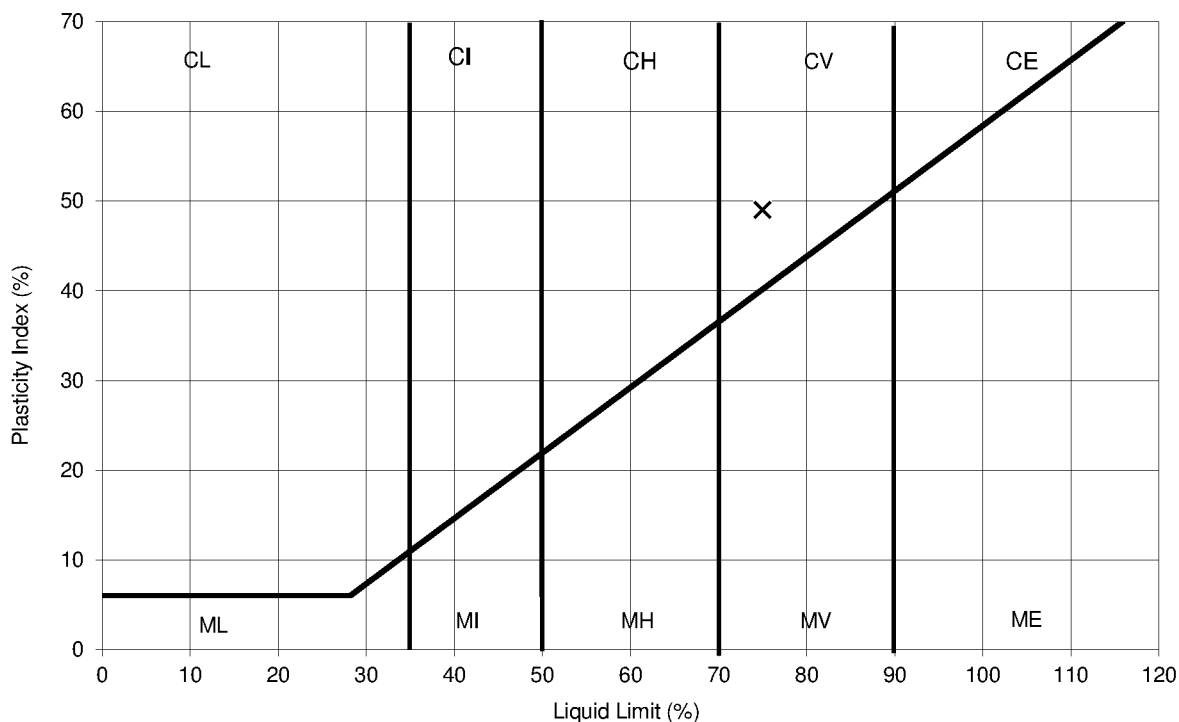
High strength fissured dark grey silty CLAY



NATURAL MOISTURE CONTENT	28	%
% PASSING 425µm SIEVE	100	%
LIQUID LIMIT	75	%
PLASTIC LIMIT	26	%
PLASTICITY INDEX	49	%

Remarks

PLASTICITY INDEX



TEST METHOD

BS1377: Part 2 :Clause 4.4 : 1990 Determination of the liquid limit by the cone penetrometer method

BS1377: Part 2 :Clause 5.0 : 1990: Determination of the plastic limit and plasticity index

BS1377: Part 2 :Clause 3.2 : 1990:Determination of the moisture content by the oven drying

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

Checked and Approved

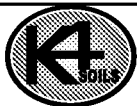
Initials: J.P

Date: 17/04/2018

2519

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

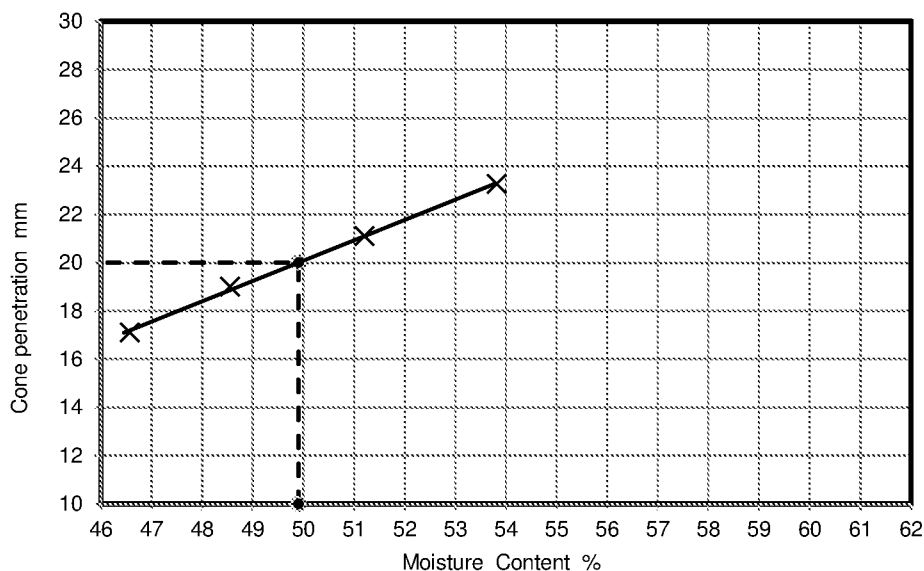
MSF-5 R2



LIQUID LIMIT, PLASTIC LIMIT AND PLASTICITY INDEX

Job No.	24274
Borehole/Pit No.	BH6
Sample No.	-
Depth Top	6.50 m
Depth Base	- m
Sample Type	U
Samples received	28/03/2018
Schedules received	26/03/2018
Project Started	29/03/2018
Date Tested	16/04/2018

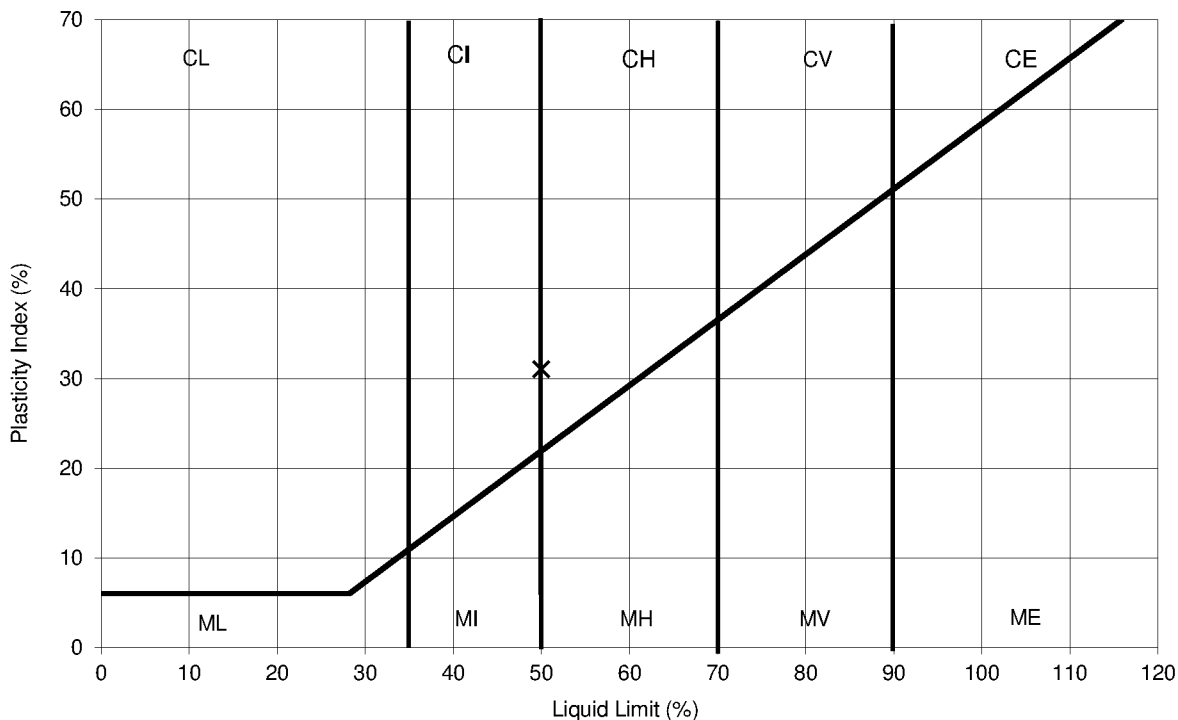
Site Name	Yapton Road, Barnham		
Project No.	1801024.001	Client	TEC
Soil Description	Medium strength slightly fissured reddish brown mottled bluish grey silty CLAY		



NATURAL MOISTURE CONTENT	17	%
% PASSING 425µm SIEVE	100	%
LIQUID LIMIT	50	%
PLASTIC LIMIT	19	%
PLASTICITY INDEX	31	%

Remarks

PLASTICITY INDEX



TEST METHOD

BS1377: Part 2 :Clause 4.4 : 1990 Determination of the liquid limit by the cone penetrometer method
 BS1377: Part 2 :Clause 5.0 : 1990: Determination of the plastic limit and plasticity index
 BS1377: Part 2 :Clause 3.2 : 1990:Determination of the moisture content by the oven drying

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

Checked and Approved

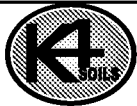
Initials: J.P
 Date: 17/04/2018



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

MSF-5 R2



LIQUID LIMIT, PLASTIC LIMIT AND PLASTICITY INDEX

Job No.	24274
Borehole/Pit No.	TP12
Sample No.	-
Depth Top	1.20 m
Depth Base	- m
Sample Type	D
Samples received	28/03/2018
Schedules received	26/03/2018
Project Started	29/03/2018
Date Tested	16/04/2018

Site Name Yapton Road, Barnham

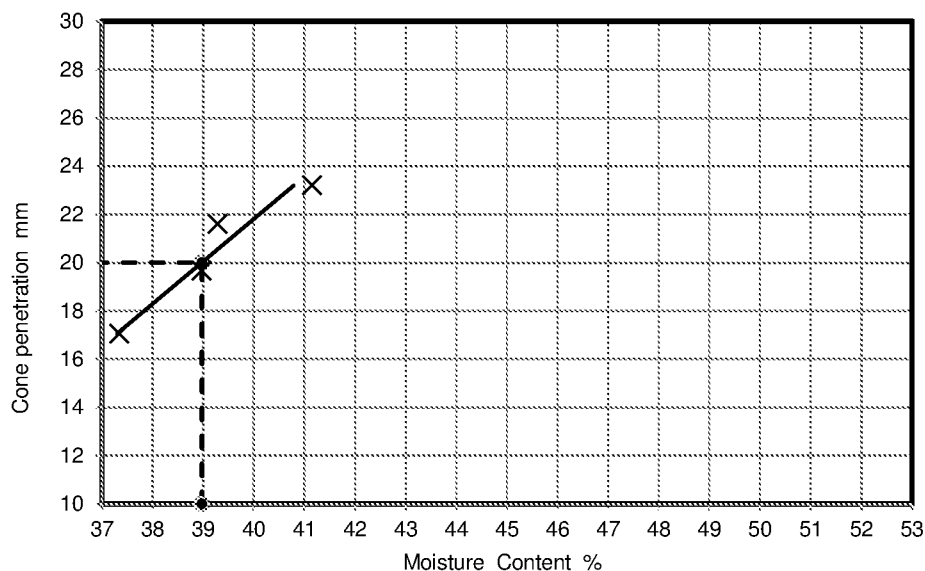
Project No. 1801024.001

Client

TEC

Soil Description

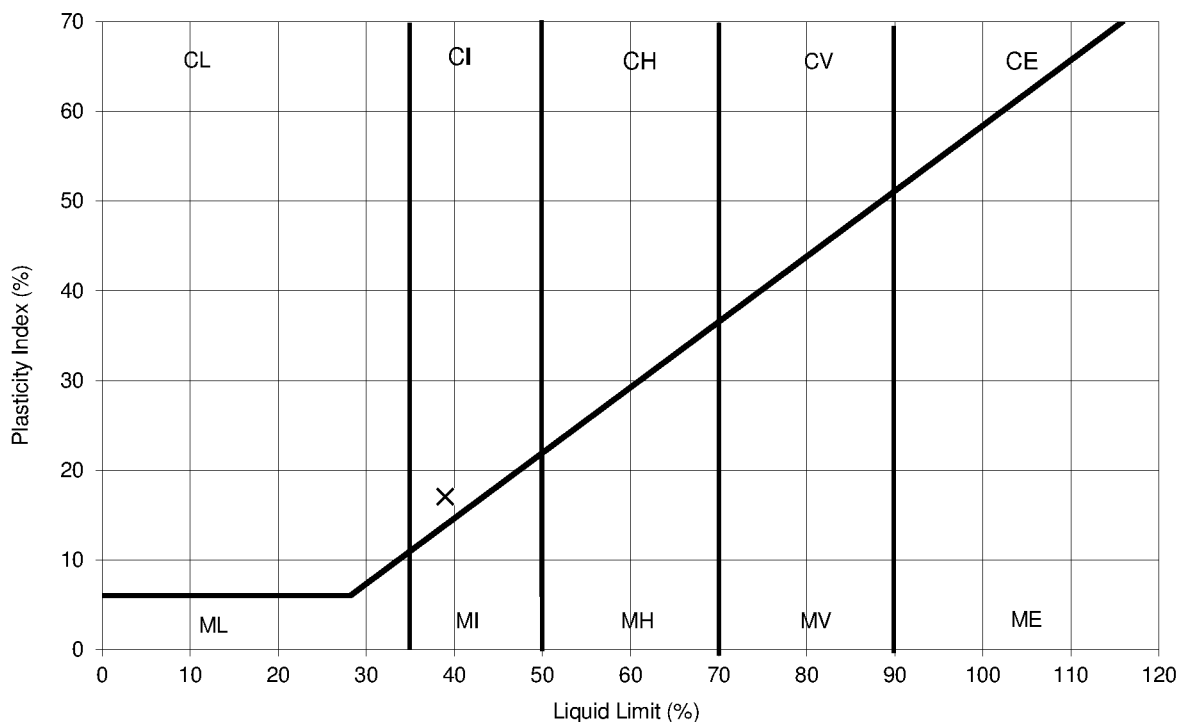
Orange brown slightly gravelly sandy silty CLAY with traces of roots (gravel is fm and sub-angular)



NATURAL MOISTURE CONTENT	23	%
% PASSING 425µm SIEVE	95	%
LIQUID LIMIT	39	%
PLASTIC LIMIT	22	%
PLASTICITY INDEX	17	%

Remarks

PLASTICITY INDEX



TEST METHOD

BS1377: Part 2 :Clause 4.4 : 1990 Determination of the liquid limit by the cone penetrometer method

BS1377: Part 2 :Clause 5.0 : 1990: Determination of the plastic limit and plasticity index

BS1377: Part 2 :Clause 3.2 : 1990:Determination of the moisture content by the oven drying

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

Checked and Approved

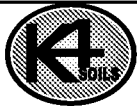
Initials: J.P

Date: 17/04/2018

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

MSF-5 R2



LIQUID LIMIT, PLASTIC LIMIT AND PLASTICITY INDEX

Job No.	24274
Borehole/Pit No.	TP13
Sample No.	-
Depth Top	1.20 m
Depth Base	- m
Sample Type	D
Samples received	28/03/2018
Schedules received	26/03/2018
Project Started	29/03/2018
Date Tested	16/04/2018

Site Name Yapton Road, Barnham

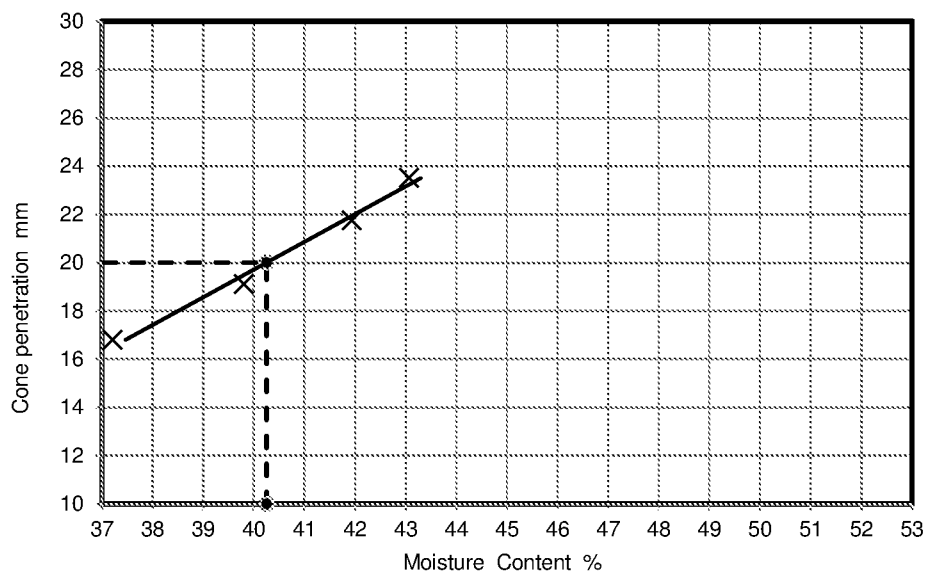
Project No. 1801024.001

Client

TEC

Soil Description

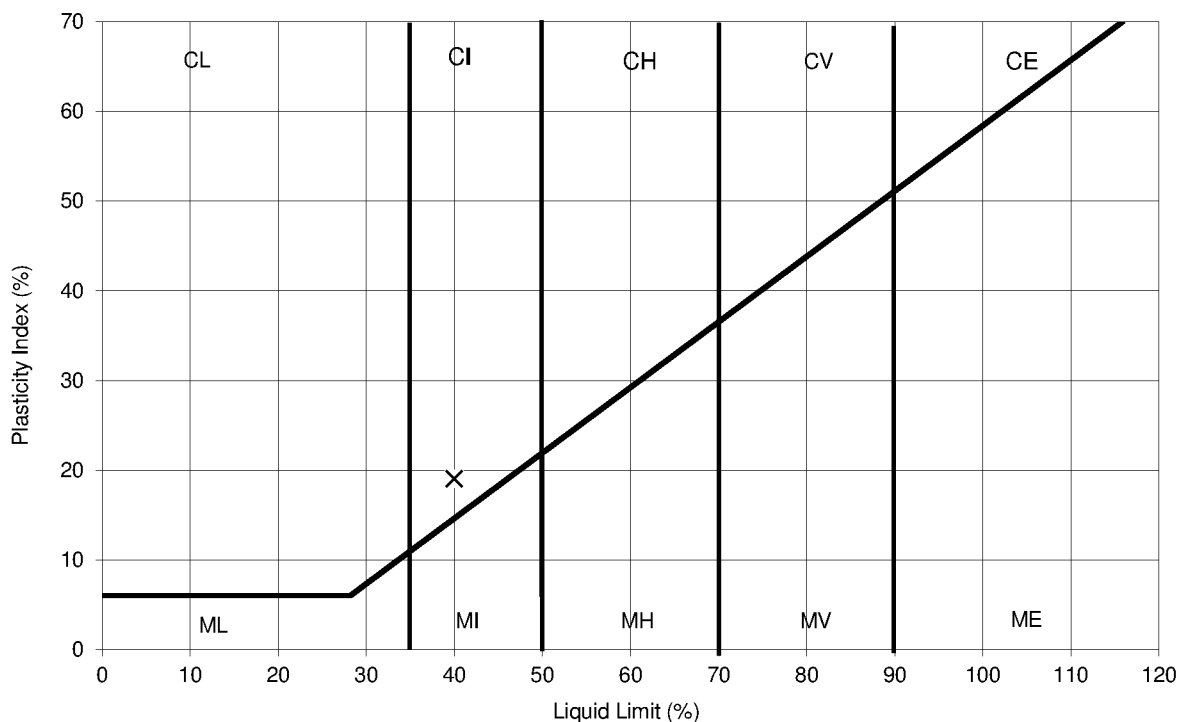
Orange brown slightly gravelly sandy silty CLAY (gravel is fm and sub-angular)



NATURAL MOISTURE CONTENT	19	%
% PASSING 425µm SIEVE	90	%
LIQUID LIMIT	40	%
PLASTIC LIMIT	21	%
PLASTICITY INDEX	19	%

Remarks

PLASTICITY INDEX



TEST METHOD

BS1377: Part 2 :Clause 4.4 : 1990 Determination of the liquid limit by the cone penetrometer method

BS1377: Part 2 :Clause 5.0 : 1990: Determination of the plastic limit and plasticity index

BS1377: Part 2 :Clause 3.2 : 1990:Determination of the moisture content by the oven drying

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

Checked and Approved

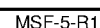
Initials: J.P

Date: 17/04/2018

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

MSF-5 R2

[illegible]



Unconsolidated Undrained Triaxial Compression Test without measurement of pore pressure - Multistage test

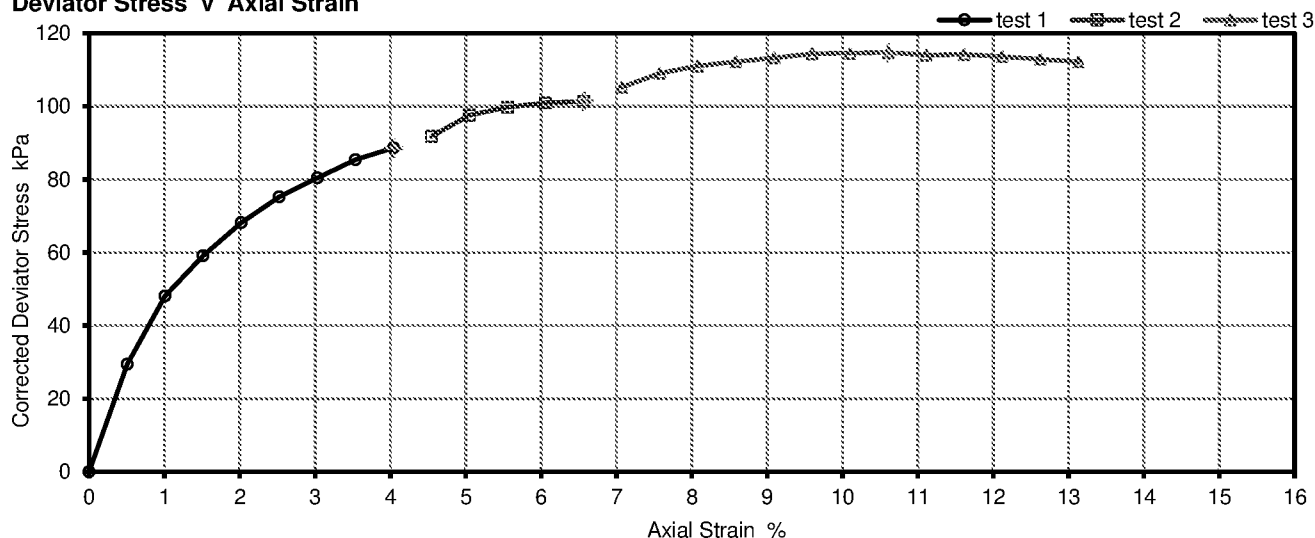
	Unconsolidated Undrained Triaxial Compression Test without measurement of pore pressure - Multistage test			Job Ref	24274
				Borehole/Pit No.	BH1
Site Name	Yapton Road, Barnham			Sample No.	-
Project No.	1801024.001	Client	TEC	Depth Top	5.00 m
Soil Description	Medium strength dark grey silty CLAY			Depth Base	- m
				Sample Type	U
				Samples received	28/03/2018
				Schedules received	26/03/2018
Test Method	BS1377:Part 7:1990, clause 9, multistage test on a single specimen			Date of test	12/04/2018

Remarks

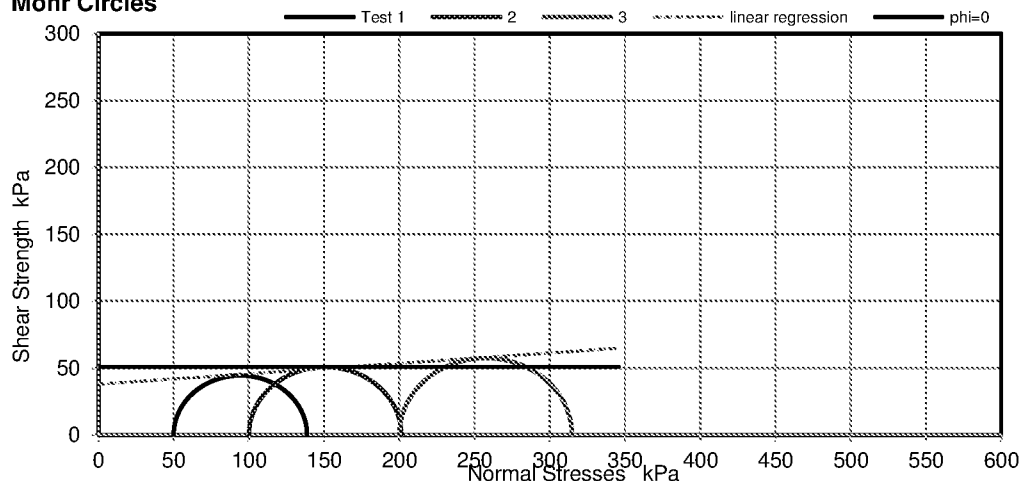
Position within sample

Length	mm	198.0		
Diameter	mm	102.0		
Bulk Density	Mg/m3	1.97		
Moisture Content	%	33		
Dry Density	Mg/m3	1.48		
Rate of Strain	%/min	2.00		
Stage Number		1	2	3
Cell Pressure	kPa	50	100	200
Axial Strain	%	4.0	6.6	10.6
Deviator Stress, ($\sigma_1 - \sigma_3$)f	kPa	88.6	101.3	114.7
Shear strength, cu	kPa	44.3	50.7	57.4
Mode of failure		Brittle		

Deviator Stress v Axial Strain



Mohr Circles



$\phi_u = 0$

Average cu 51 kPa

Linear Regression

ϕ_u 4.5 °

cu 38 kPa

Mohr circles and their interpretation is not covered by BS1377. These are provided for information only.



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

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Initials: J.P

Date: 17/04/2018



Unconsolidated Undrained Triaxial Compression Test without measurement of pore pressure - Multistage test

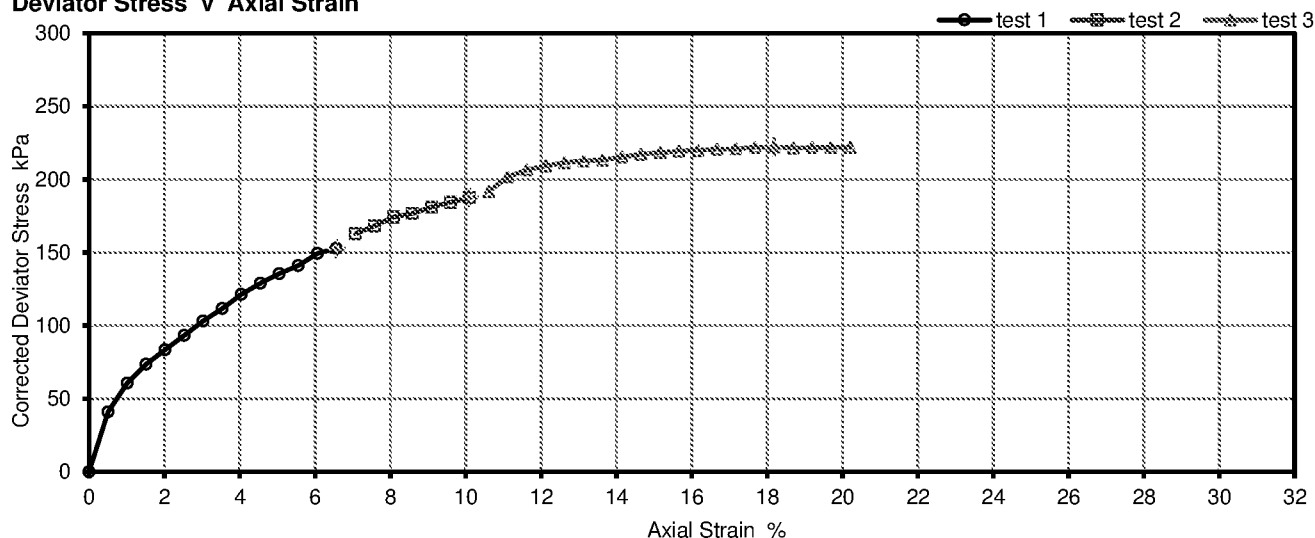
Job Ref	24274		
Borehole/Pit No.	BH2		
Site Name	Yapton Road, Barnham		
Sample No.	-		
Project No.	1801024.001	Client	TEC
Depth Top	8.00 m		
Depth Base	- m		
Soil Description	High strength slightly fissured dark grey slightly sandy silty CLAY		
Sample Type	U		
Samples received	28/03/2018		
Schedules received	26/03/2018		
Test Method	BS1377:Part 7:1990, clause 9, multistage test on a single specimen		
Date of test	12/04/2018		

Remarks

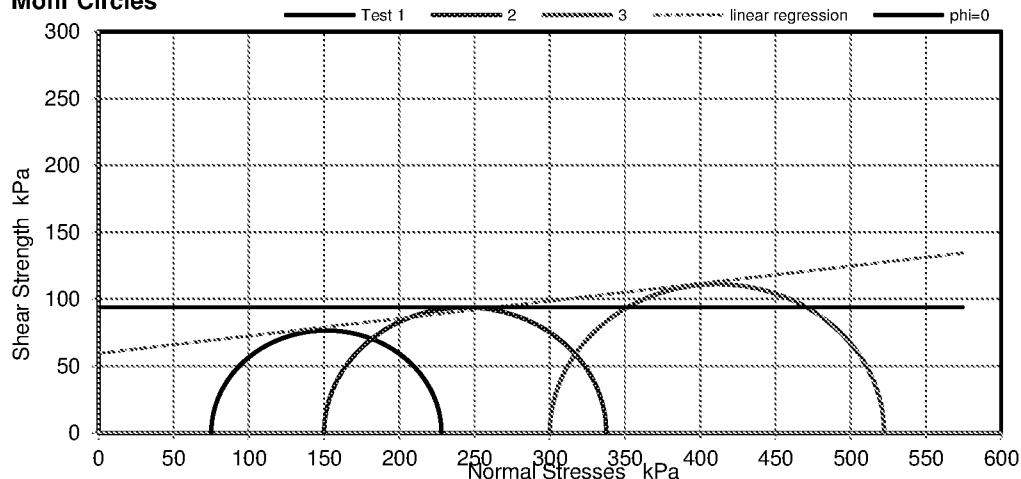
Position within sample

Length	mm	198.0		
Diameter	mm	102.0		
Bulk Density	Mg/m3	2.07		
Moisture Content	%	21		
Dry Density	Mg/m3	1.70		
Rate of Strain	%/min	2.00		
Stage Number		1	2	3
Cell Pressure	kPa	75	150	300
Axial Strain	%	6.6	10.1	18.2
Deviator Stress, ($\sigma_1 - \sigma_3$)f	kPa	153.0	187.6	222.2
Shear strength, cu	kPa	76.5	93.8	111.1
Mode of failure		Brittle		

Deviator Stress v Axial Strain



Mohr Circles



$$\phi_u = 0$$

Average cu 94 kPa

Linear Regression

ϕ_u 7.5 °

cu 59 kPa

Mohr circles and their interpretation is not covered by BS1377. These are provided for information only.



Test Report by K4 SOILS LABORATORY
Unit 8 Olds Close Olds Approach
Watford Herts WD18 0RU

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Date: 17/04/2018



Unconsolidated Undrained Triaxial Compression Test without measurement of pore pressure - Multistage test

Job Ref	24274
Borehole/Pit No.	BH3
Sample No.	-
Depth Top	6.50 m
Depth Base	- m
Sample Type	U
Samples received	28/03/2018
Schedules received	26/03/2018
Date of test	12/04/2018

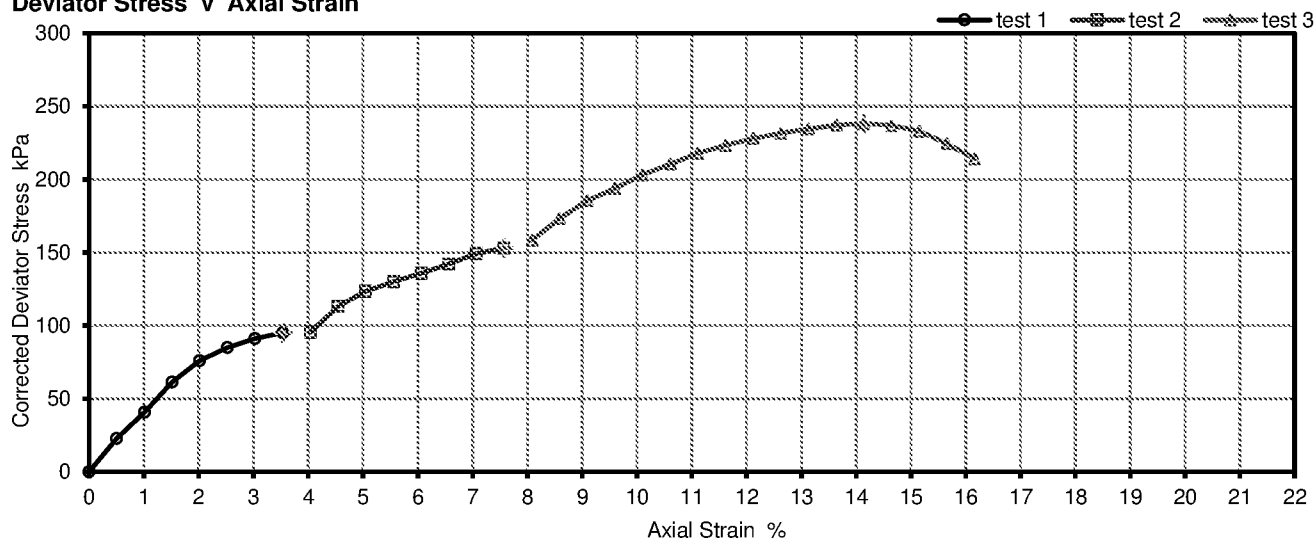
Site Name	Yapton Road, Barnham		
Project No.	1801024.001	Client	TEC
Soil Description	High strength fissured dark grey silty CLAY with partings of light grey silty fine sand		
Test Method	BS1377:Part 7:1990, clause 9, multistage test on a single specimen		

Remarks

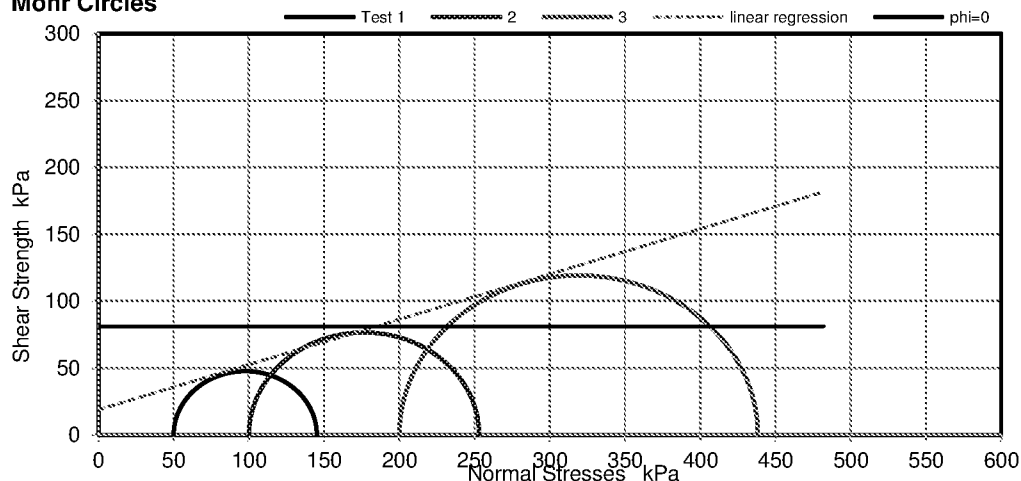
Position within sample

Length	mm	198.0		
Diameter	mm	102.0		
Bulk Density	Mg/m3	1.90		
Moisture Content	%	22		
Dry Density	Mg/m3	1.55		
Rate of Strain	%/min	2.00		
Stage Number		1	2	3
Cell Pressure	kPa	50	100	200
Axial Strain	%	3.5	7.6	14.1
Deviator Stress, ($\sigma_1 - \sigma_3$)f	kPa	95.1	153.1	238.3
Shear strength, cu	kPa	47.6	76.5	119.2
Mode of failure		Brittle		

Deviator Stress v Axial Strain



Mohr Circles



$$\phi_u = 0$$

Average cu 81 kPa

Linear Regression

$$\phi_u = 18.7^\circ$$

cu 19 kPa

Mohr circles and their interpretation is not covered by BS1377. These are provided for information only.



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Unit 8 Olds Close Olds Approach
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Date: 17/04/2018



Unconsolidated Undrained Triaxial Compression Test without measurement of pore pressure - Multistage test

Job Ref		24274	
Borehole/Pit No.		BH4	
Site Name		Yapton Road, Barnham	
Sample No.		-	
Project No.	1801024.001	Client	TEC
Soil Description		Depth Top	8.00 m
		Depth Base	- m
		Sample Type	U
		Samples received	28/03/2018
High strength fissured dark grey silty CLAY		Schedules received	26/03/2018
		Date of test	12/04/2018
Test Method		BS1377:Part 7:1990, clause 9, multistage test on a single specimen	

Remarks

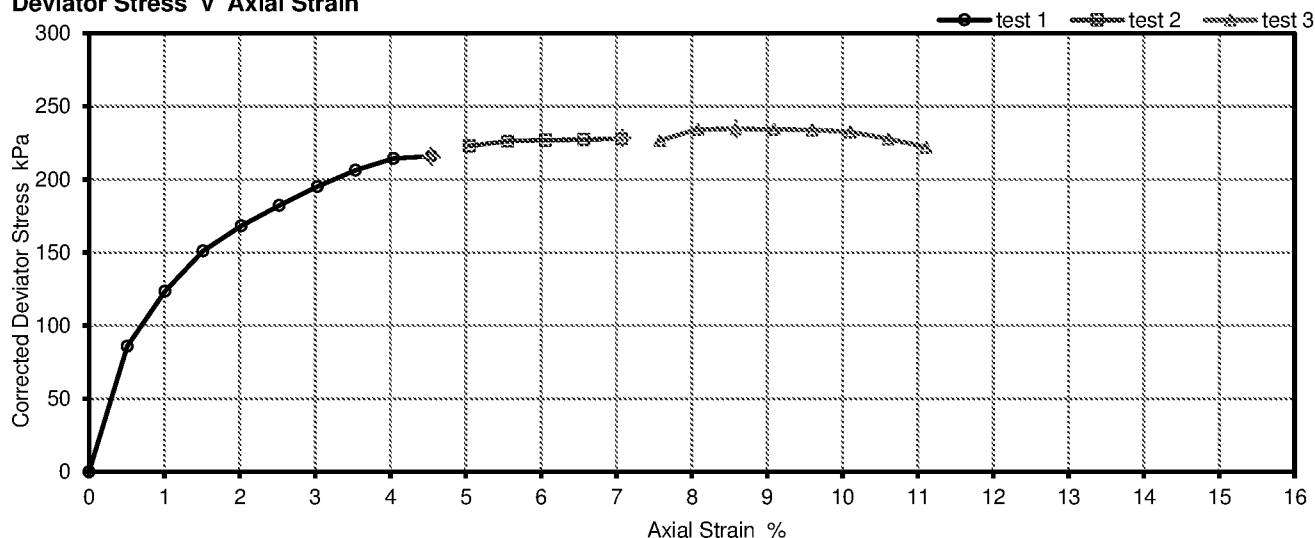


Position within sample

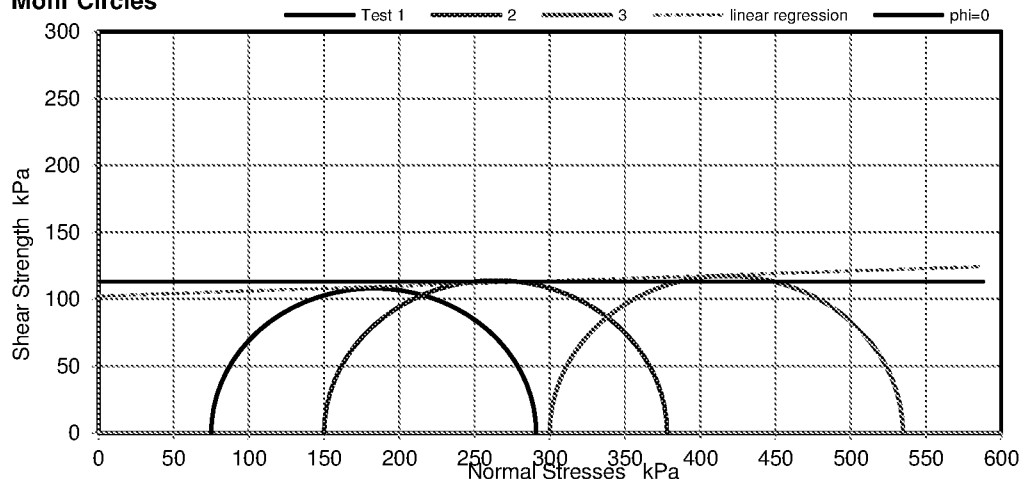


Length	mm	198.0		
Diameter	mm	102.0		
Bulk Density	Mg/m3	1.99		
Moisture Content	%	28		
Dry Density	Mg/m3	1.56		
Rate of Strain	%/min	2.00		
Stage Number		1	2	3
Cell Pressure	kPa	75	150	300
Axial Strain	%	4.5	7.1	8.6
Deviator Stress, ($\sigma_1 - \sigma_3$)f	kPa	215.9	227.9	234.7
Shear strength, cu	kPa	107.9	114.0	117.3
Mode of failure		Brittle		

Deviator Stress v Axial Strain



Mohr Circles



$\phi_u = 0$

Average cu 113 kPa

Linear Regression

ϕ_u 2.2 °

cu 102 kPa

Mohr circles and their interpretation is not covered by BS1377. These are provided for information only.



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Unit 8 Olds Close Olds Approach
Watford Herts WD18 9RU

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Date: 17/04/2018



Unconsolidated Undrained Triaxial Compression Test without measurement of pore pressure - Multistage test

Job Ref	24274
Borehole/Pit No.	BH5
Sample No.	-
Depth Top	9.50 m
Depth Base	- m
Sample Type	U
Samples received	28/03/2018
Schedules received	26/03/2018
Date of test	12/04/2018

Site Name Yapton Road, Barnham

Project No. 1801024.001 Client TEC

Soil Description High strength fissured dark grey silty CLAY

Test Method BS1377:Part 7:1990, clause 9, multistage test on a single specimen

Remarks

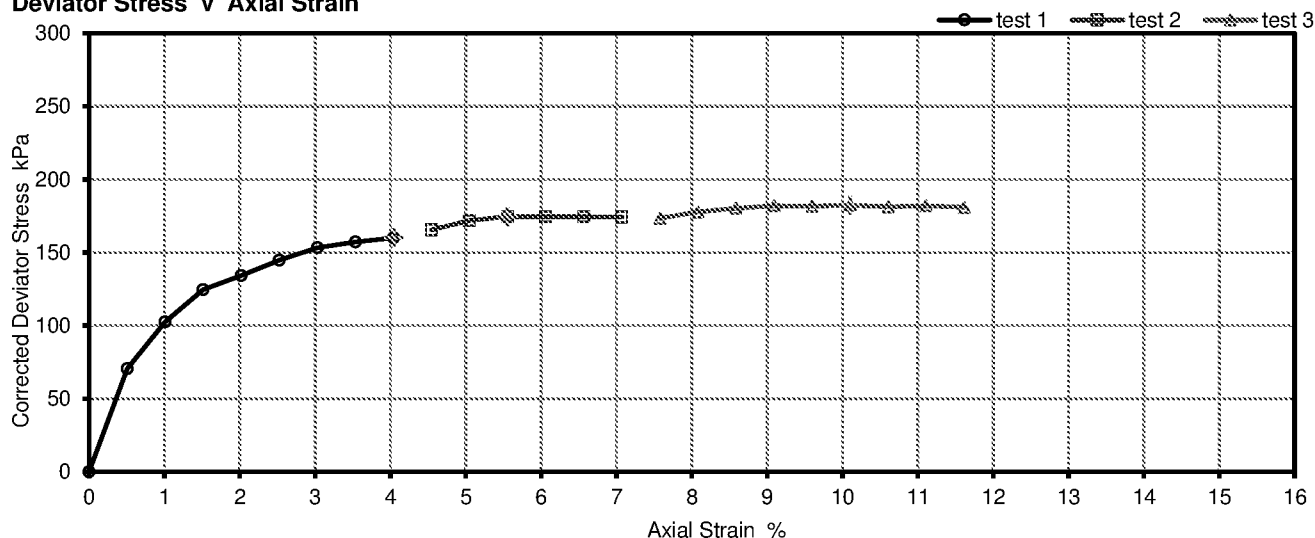


Position within sample

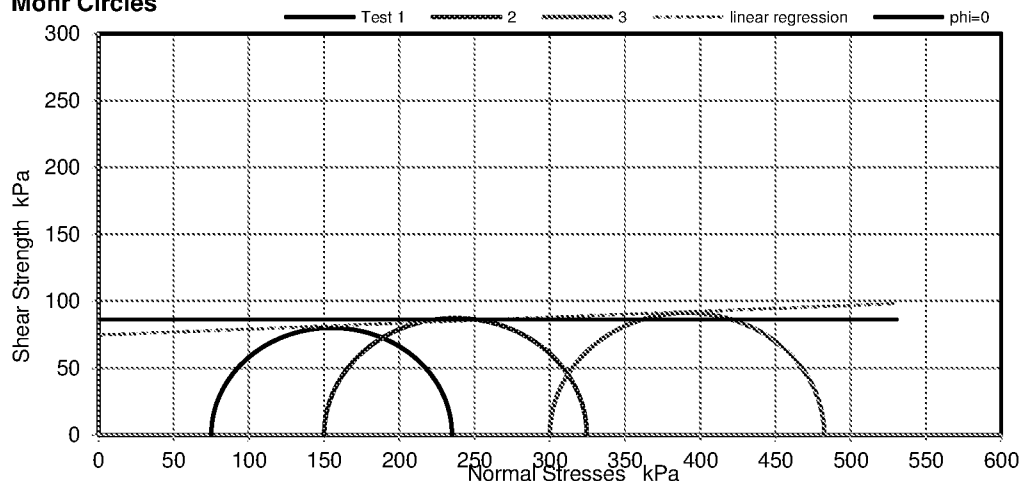


Length	mm	198.0
Diameter	mm	102.0
Bulk Density	Mg/m3	2.05
Moisture Content	%	27
Dry Density	Mg/m3	1.62
Rate of Strain	%/min	2.00
Stage Number		1 2 3
Cell Pressure	kPa	75 150 300
Axial Strain	%	4.0 5.6 10.1
Deviator Stress, ($\sigma_1 - \sigma_3$)f	kPa	160.0 174.6 182.4
Shear strength, cu	kPa	80.0 87.3 91.2
Mode of failure		Brittle

Deviator Stress v Axial Strain



Mohr Circles



$\phi_u = 0$

Average cu 86 kPa

Linear Regression

ϕ_u 2.6 °

cu 75 kPa

Mohr circles and their interpretation is not covered by BS1377. These are provided for information only.



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Unit 8 Olds Close Olds Approach
Watford Herts WD18 9RU

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Unconsolidated Undrained Triaxial Compression Test without measurement of pore pressure - Multistage test

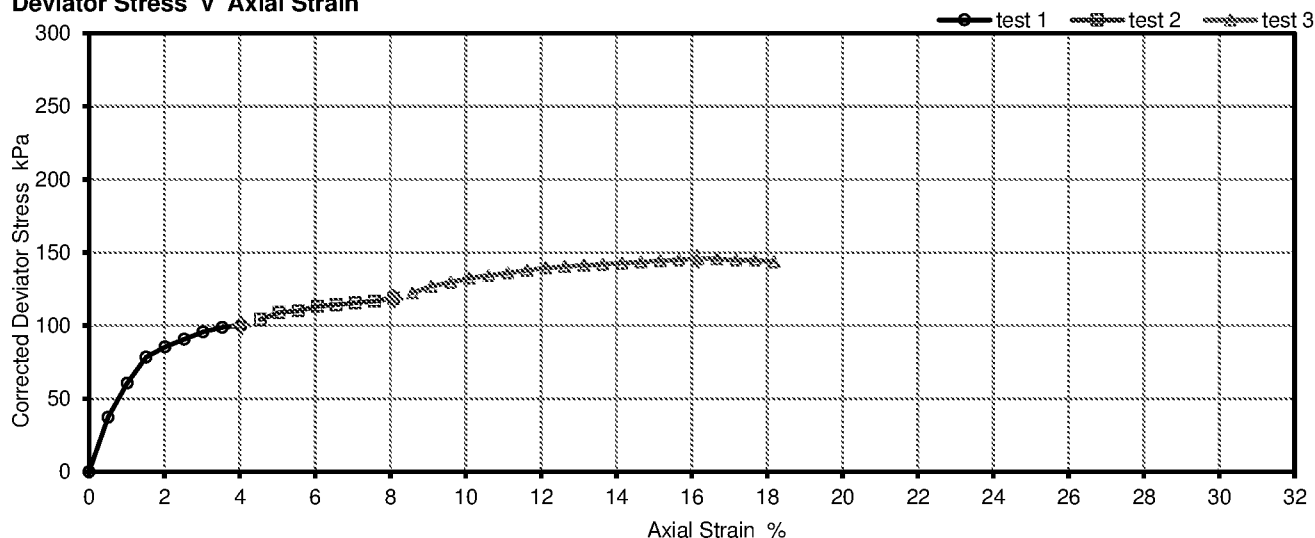
	Unconsolidated Undrained Triaxial Compression Test without measurement of pore pressure - Multistage test			Job Ref	24274
				Borehole/Pit No.	BH6
Site Name	Yapton Road, Barnham			Sample No.	-
Project No.	1801024.001	Client	TEC	Depth Top	6.50 m
Soil Description	Medium strength slightly fissured reddish brown mottled bluish grey silty CLAY			Depth Base	- m
				Sample Type	U
				Samples received	28/03/2018
				Schedules received	26/03/2018
Test Method	BS1377:Part 7:1990, clause 9, multistage test on a single specimen			Date of test	12/04/2018

Remarks

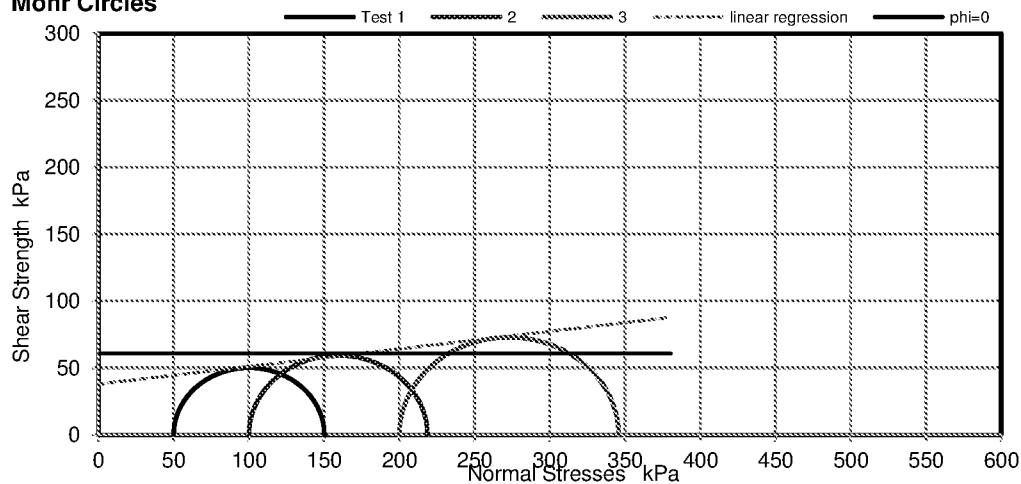
Position within sample

Length	mm	198.0		
Diameter	mm	102.0		
Bulk Density	Mg/m3	2.01		
Moisture Content	%	19		
Dry Density	Mg/m3	1.69		
Rate of Strain	%/min	2.00		
Stage Number		1	2	3
Cell Pressure	kPa	50	100	200
Axial Strain	%	4.0	8.1	16.2
Deviator Stress, ($\sigma_1 - \sigma_3$)f	kPa	100.1	118.7	145.8
Shear strength, cu	kPa	50.1	59.3	72.9
Mode of failure		Brittle		

Deviator Stress v Axial Strain



Mohr Circles



$$\phi_u = 0$$

Average cu 61 kPa

Linear Regression

ϕ_u 7.5 °

cu 38 kPa

Mohr circles and their interpretation is not covered by BS1377. These are provided for information only.



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

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Initials: J.P

Date: 17/04/2018



Unconsolidated Undrained Triaxial Compression tests without measurement of pore pressure Summary of Results

Tests carried out in accordance with BS1377:Part 7 : 1990 clause 8 or 9 as appropriate to test

Job No.	Project Name	Programme	
24274	Yapton Road, Barnham	Samples received	28/03/2018
		Schedule received	26/03/2018
Project No.	Client	Project started	29/03/2018
1801024.001	TEC	Testing Started	12/04/2018

Hole No.	Sample				Soil Description	Test Type	Density		w	Length	Diameter	σ_3	At failure				Remarks
	Ref	Top	Base	Type			bulk	dry					Axial strain	$\sigma_1 - \sigma_3$	CU	Mode	
		m	m				Mg/m ³		%	mm	mm	kPa	%	kPa	kPa		
BH1	-	5.00	-	U	Medium strength dark grey silty CLAY	UUM	1.97	1.48	33	198	102	50 100 200	4.0 6.6 10.6	89 101 115	44 51 57	B	
BH2	-	8.00	-	U	High strength slightly fissured dark grey slightly sandy silty CLAY	UUM	2.07	1.70	21	198	102	75 150 300	6.6 10.1 18.2	153 188 222	76 94 111	B	
BH3	-	6.50	-	U	High strength fissured dark grey silty CLAY with partings of light grey silty fine sand	UUM	1.90	1.55	22	198	102	50 100 200	3.5 7.6 14.1	95 153 238	48 77 119	B	
BH4	-	8.00	-	U	High strength fissured dark grey silty CLAY	UUM	1.99	1.56	28	198	102	75 150 300	4.5 7.1 8.6	216 228 235	108 114 117	B	
BH5	-	9.50	-	U	High strength fissured dark grey silty CLAY	UUM	2.05	1.62	27	198	102	75 150 300	4.0 5.6 10.1	160 175 182	80 87 91	B	
BH6	-	6.50	-	U	Medium strength slightly fissured reddish brown mottled bluish grey silty CLAY	UUM	2.01	1.69	19	198	102	50 100 200	4.0 8.1 16.2	100 119 146	50 59 73	B	

Legend UU - single stage test (single and multiple specimens) σ_3 Cell pressure Mode of failure ; B - Brittle
UUM - Multistage test on a single specimen $\sigma_1 - \sigma_3$ Maximum corrected deviator stress P - Plastic
suffix R - remoulded or recompacted cu Undrained shear strength, $\frac{1}{2}(\sigma_1 - \sigma_3)$ C - Compound

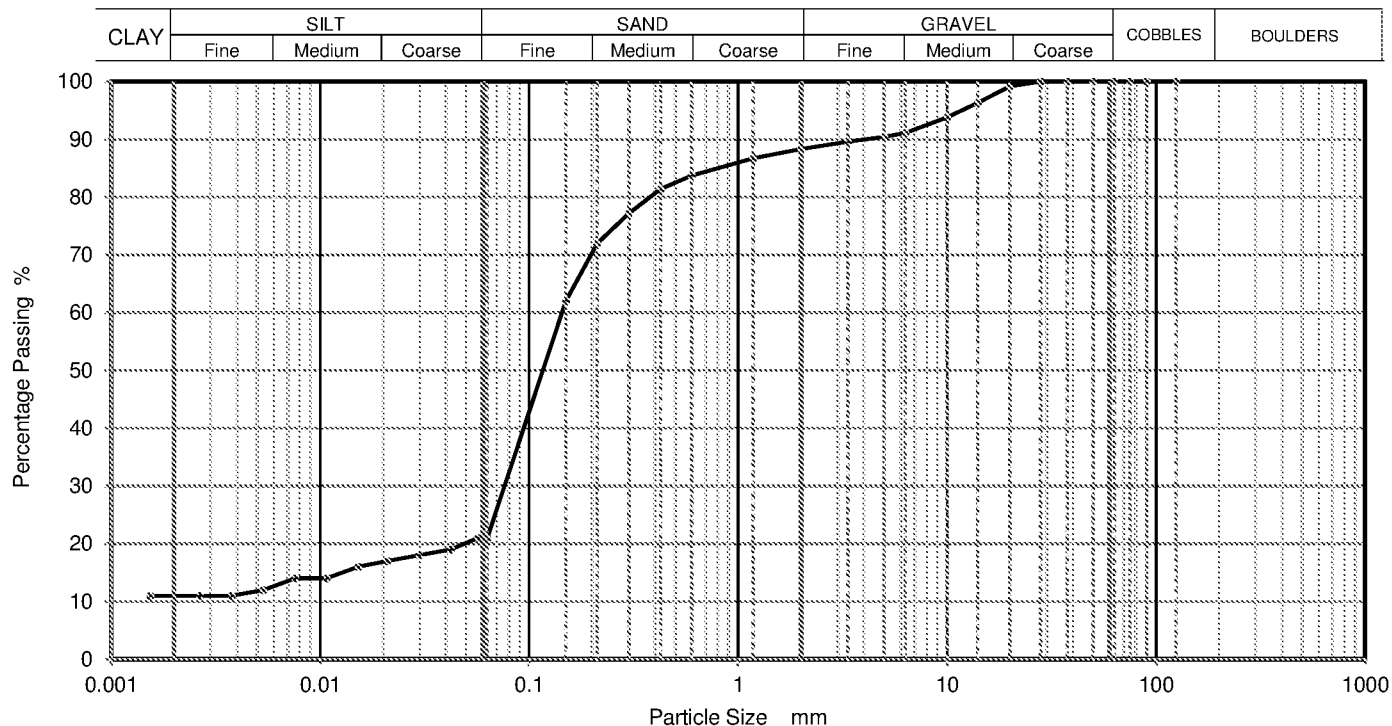
 ARUN DISTRICT COUNCIL 2019	Test Report by K4 SOILS LABORATORY Unit 8 Olds Close Olds Approach Watford Herts WD18 9RU	Checked and Approved Initials: J.P Date: 17/04/2018
	Approved Signatories:	MSF-S-R7b



PARTICLE SIZE DISTRIBUTION

Job Ref	24274
Borehole/Pit No.	TP1
Sample No.	-
Depth Top	2.30 m
Depth Base	- m
Sample Type	B
Samples received	28/03/2018
Schedules received	26/03/2018
Project started	29/03/2018
Date tested	12/04/2018

Site Name	Yapton Road, Barnham		
Project No.	1801024.001	Client	TEC
Soil Description	Light brown silty clayey gravelly SAND (gravel is fmc and sub-angular to sub-rounded)		
Test Method	BS1377:Part 2: 1990, clause 9.0		



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.0570	21
90	100	0.0422	19
75	100	0.0298	18
63	100	0.0210	17
50	100	0.0153	16
37.5	100	0.0107	14
28	100	0.0076	14
20	99	0.0053	12
14	96	0.0038	11
10	94	0.0027	11
6.3	91	0.0015	11
5	90		
3.35	90		
2	88		
1.18	87		
0.6	84	Particle density (assumed) 2.70 Mg/m ³	
0.425	81		
0.3	77		
0.212	72		
0.15	62		
0.063	21		

Dry Mass of sample, g

1728

Sample Proportions	% dry mass
Very coarse	0.0
Gravel	11.7
Sand	67.4
Silt	10.3
Clay	10.6

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	
Curvature Coefficient	

Remarks

Preparation and testing in accordance with BS1377 unless noted below



K4 Soils Laboratory
Unit 8, Olds Close, Watford, Herts, WD18 9RU

Checked and Approved

Initials: J.P

Date: 17/04/2018

MSF-5-R3



PARTICLE SIZE DISTRIBUTION

Job Ref 24274

Borehole/Pit No. TP11

Site Name Yapton Road, Barnham

Sample No. -

Project No. 1801024.001

Client

TEC

Depth Top 2.00 m

Soil Description

Brown clayey silty gravelly SAND (gravel is fmc and sub-angular to sub-rounded)

Depth Base - m

Sample Type B

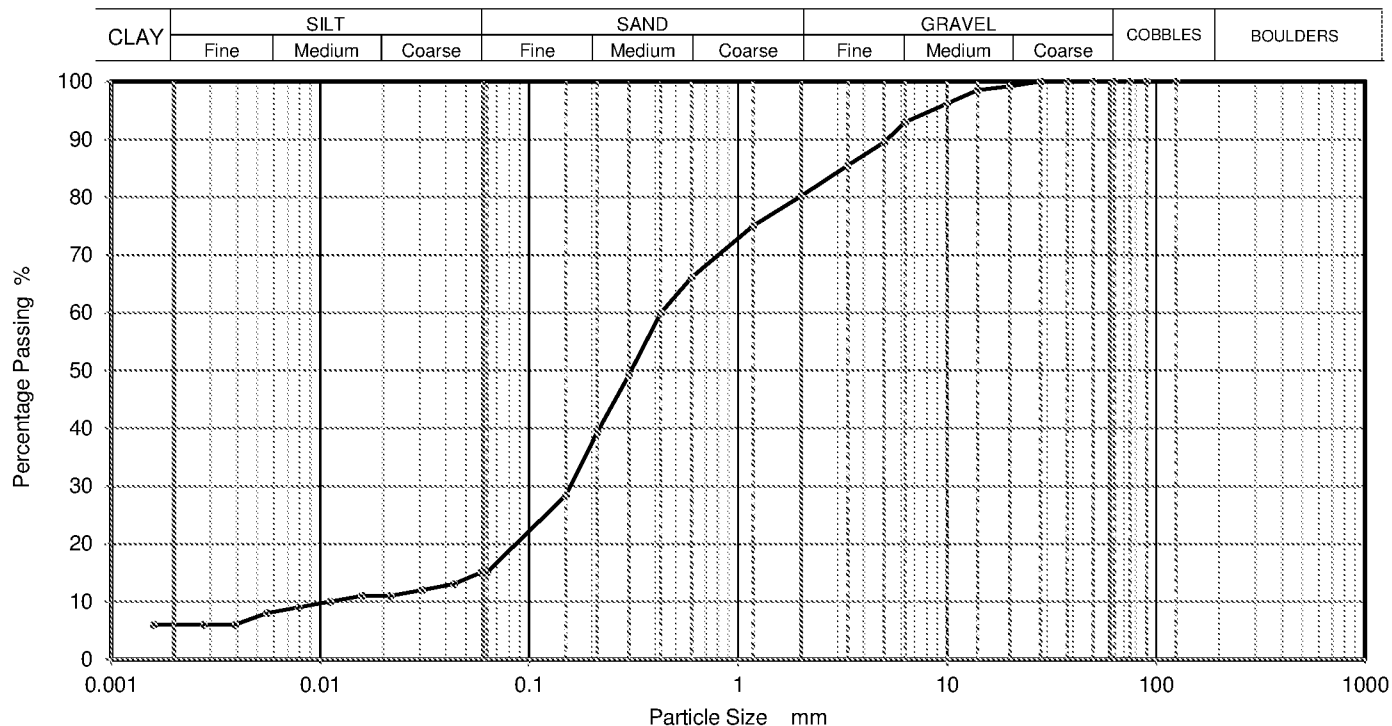
Samples received 28/03/2018

Schedules received 26/03/2018

Test Method BS1377:Part 2: 1990, clause 9.0

Project started 29/03/2018

Date tested 12/04/2018



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.0588	15
90	100	0.0436	13
75	100	0.0307	12
63	100	0.0217	11
50	100	0.0158	11
37.5	100	0.0112	10
28	100	0.0079	9
20	99	0.0056	8
14	99	0.0039	6
10	96	0.0028	6
6.3	93	0.0016	6
5	90		
3.35	86		
2	80		
1.18	75		
0.6	66	Particle density (assumed) 2.70 Mg/m3	
0.425	60		
0.3	49		
0.212	39		
0.15	28		
0.063	15		

Dry Mass of sample, g

1868

Sample Proportions	% dry mass
Very coarse	0.0
Gravel	19.8
Sand	65.1
Silt	8.6
Clay	6.5

Grading Analysis		
D100	mm	
D60	mm	0.426
D30	mm	0.158
D10	mm	0.0102
Uniformity Coefficient		42
Curvature Coefficient		5.7

Remarks

Preparation and testing in accordance with BS1377 unless noted below



K4 Soils Laboratory

Unit 8, Olds Close, Watford, Herts, WD18 9RU

Email: james@k4soils.com

Checked and Approved

Initials: J.P

Date: 17/04/2018

ELAB



2683



Unit A2
Windmill Road
Ponswood Industrial Estate
St Leonards on Sea
East Sussex
TN38 9RY

TEL: 01323 810000

THE ENVIRONMENTAL LABORATORY LTD

Analytical Report Number: 18-17137

Issue: 1

Date of Issue: 23/04/2018

Contact: James Phaure

Customer Details: K4 Soils Laboratory Ltd
Unit 8
Watford
Hertfordshire
WD18 9RU

Quotation No: Q16-00568

Order No: Not Supplied

Customer Reference: 24274

Date Received: 18/04/2018

Date Approved: 23/04/2018

Details: Yapton Road, Barnham

Approved by:

Mike Varley, Technical Manager

Any comments, opinions or interpretations expressed herein are outside the scope of UKAS accreditation (Accreditation Number 2683)



Sample Summary

Report No.: 18-17137

Elab No.	Client's Ref.	Date Sampled	Date Scheduled	Description	Deviations
133056	TP11 B 2.00	Not Provided	18/04/2018	Sandy loam	a
133057	TP2 D 0.70	Not Provided	18/04/2018	Silty loam	a



2683



Results Summary

Report No.: 18-17137

ELAB Reference	133056	133057
Customer Reference	B	D
Sample ID		
Sample Type	SOIL	SOIL
Sample Location	TP11	TP2
Sample Depth (m)	2.00	0.70
Sampling Date	Not Provided	Not Provided

Determinand	Codes	Units	LOD		
Anions					
Water Soluble Chloride	M	mg/kg	40	< 40	< 40
Water Soluble Nitrate	M	mg/kg	40	< 40	< 40
Water Soluble Sulphate	M	g/l	0.02	0.02	0.03
Water Soluble Sulphate	M	mg/kg	40	< 40	52
Inorganics					
Ammonia as NH ₄	N	mg/kg	0.1	1.5	3.2
Total Sulphur	N	%	0.01	0.01	0.02
Acid Soluble Sulphate (SO ₄)	U	%	0.02	0.02	0.05
Miscellaneous					
Moisture Content	N	%	0.1	18.7	24.7
pH	M	pH units	0.1	7.6	7.5
Stones Content	N	%	0.1	24.5	< 0.1



Method Summary

Report No.: 18-17137

Parameter	Codes	Analysis Undertaken On	Date Tested	Method Number	Technique
Soil					
Ammonia in soil	N	As submitted sample	19/04/2018		
pH	M	Air dried sample	20/04/2018	113	Electromeric
Acid Soluble Sulphate	U	Air dried sample	23/04/2018	115	Ion Chromatography
Water soluble anions	M	Air dried sample	19/04/2018	172	Ion Chromatography
Total organic carbon/Total sulphur	N	Air dried sample	19/04/2018	216	IR

Tests marked N are not UKAS accredited



Report Information

Report No.: 18-17137

Key

U	hold UKAS accreditation
M	hold MCERTS and UKAS accreditation
N	do not currently hold UKAS accreditation
^	MCERTS accreditation not applicable for sample matrix
*	UKAS accreditation not applicable for sample matrix
S	Subcontracted to approved laboratory UKAS Accredited for the test
SM	Subcontracted to approved laboratory MCERTS/UKAS Accredited for the test
NS	Subcontracted to approved laboratory. UKAS accreditation is not applicable.
I/S	Insufficient Sample
U/S	Unsuitable sample
n/t	Not tested
<	means "less than"
>	means "greater than"

Soil sample results are expressed on an air dried basis (dried at < 30°C)

Comments or interpretations are beyond the scope of UKAS accreditation

The results relate only to the items tested

PCB congener results may include any coeluting PCBs

Uncertainty of measurement for the determinands tested are available upon request

Deviation Codes

-
- | | |
|---|--|
| a | No date of sampling supplied |
| b | No time of sampling supplied (Waters Only) |
| c | Sample not received in appropriate containers |
| d | Sample not received in cooled condition |
| e | The container has been incorrectly filled |
| f | Sample age exceeds stability time (sampling to receipt) |
| g | Sample age exceeds stability time (sampling to analysis) |

Where a sample has a deviation code, the applicable test result may be invalid.

Sample Retention and Disposal

All soil samples will be retained for a period of one month

All water samples will be retained for 7 days following the date of the test report

Charges may apply to extended sample storage

APPENDIX I

Ground Gas Monitoring Results

Name of Site: Yapton Road, Barnham
 Project Code: 1801024
 Date: 9th April 2018 **Equipment**
 Completed by: JW Gas Analyser: GFM-430 Gas Analyser
 Authorised by: ET Condition: Good
 Dipmeter: Red Dipmeter
 Condition: Good

Last Three Days

Atmospheric Trend: 1009 - 1005mb (generally falling)
 Temperature Range: 5 - 13°C
 Rainfall: 2.4mm

On-site Weather Conditions: Light rain.**General Site Conditions / Ground Conditions / On site Activities:** Wet grass, inactive site.**GAS MONITORING TO BE UNDERTAKEN IN ACCORDANCE WITH TEC METHOD STATEMENT**

Borehole Information	Time (seconds)	Borehole Flow Rate (l/hr)	DP (Pa)	Gas Concentrations						Groundwater Level	Borehole Depth	Comments
				CH ₄ (% v/v)	CO ₂ (% v/v)	O ₂ (% v/v)	LEL (%)	H ₂ S (ppm)	CO (ppm)			
BH ref: BH2	0	1.6	6.0	0.0	0.0	20.3	0	0	0			Silty at base.
Time: 11:50	15	1.6	6.0	0.0	0.3	20.6	0	0	0			
Atmospheric Pressure (mb)	30	1.5	6.0	0.0	0.2	20.6	0	1	0			
Before: 1006	45	1.5	6.0	0.0	0.2	20.6	0	1	0			
After: 1006	60	1.5	6.0	0.0	0.1	20.6	0	0	0			
Well Condition: Good	120	1.5	6.0	0.0	0.1	20.7	0	1	1			
	180											
Well Diameter: 50mm	240									0.74m	2.55m	
	300											

Borehole Information	Time (seconds)	Borehole Flow Rate (l/hr)	DP (Pa)	Gas Concentrations						Groundwater Level	Borehole Depth	Comments
				CH ₄ (% v/v)	CO ₂ (% v/v)	O ₂ (% v/v)	LEL (%)	H ₂ S (ppm)	CO (ppm)			
BH ref: BH6	0	1.4	5.0	0.0	0.1	20.4	0	0	0			Silty at base.
Time: 12:18	15	1.4	5.0	0.0	0.0	21.0	0	1	0			
Atmospheric Pressure (mb)	30	1.3	5.0	0.0	0.0	20.9	0	0	0			
Before: 1005	45	1.4	5.0	0.0	0.0	20.8	0	0	1			
After: 1006	60	1.4	5.0	0.0	0.0	20.8	0	1	1			
Well Condition: Good	120	1.5	6.0	0.0	0.0	20.9	0	1	1			
	180											
Well Diameter: 50mm	240									0.90m	3.25m	
	300											

Borehole Information	Time (seconds)	Borehole Flow Rate (l/hr)	DP (Pa)	Gas Concentrations						Groundwater Level	Borehole Depth	Comments
				CH ₄ (% v/v)	CO ₂ (% v/v)	O ₂ (% v/v)	LEL (%)	H ₂ S (ppm)	CO (ppm)			
BH ref: BH5	0	-63.8	-900	0.0	1.7	15.3	0	0	0			Hissing noise for first 45 seconds of monitoring. Very silty at base.
Time: 12:42	15	-36.0	-400	0.0	2.0	15	0	1	2			
Atmospheric Pressure (mb)	30	-12.0	-91	0.0	2.0	14.7	0	1	5			
Before: 1005	45	-2.6	-10	0.0	2.0	14.6	0	1	5			
After: 1004	60	0.0	0	0.0	2.0	14.7	0	3	6			
Well Condition: Good	120	0.4	1	0.0	0.6	19.1	0	2	7			
	180	1.0	4	0.0	0.0	20.7	0	2	2			
Well Diameter: 50mm	240	1.2	4	0.0	0.1	20.5	0	1	1	0.67m	1.97m	
	300	1.3	5	0.0	0.0	20.7	0	1	0			

Name of Site: Yapton Road, Barnham
 Project Code: 1801024
 Date: 16th April 2018 **Equipment**
 Completed by: JL Gas Analyser: GFM-430 Gas Analyser
 Authorised by: ET Condition: Good
 Dipmeter: Red Dipmeter
 Condition: Good

Last Three Days

Atmospheric Trend: 1007 - 1016mb (generally rising)
 Temperature Range: 2 - 13°C
 Rainfall: 0.4mm

On-site Weather Conditions: Dry and sunny.**General Site Conditions / Ground Conditions / On site Activities:** Good**GAS MONITORING TO BE UNDERTAKEN IN ACCORDANCE WITH TEC METHOD STATEMENT**

Borehole Information	Time (seconds)	Borehole Flow Rate (l/hr)	DP (Pa)	Gas Concentrations						Groundwater Level	Borehole Depth	Comments
				CH ₄ (% v/v)	CO ₂ (% v/v)	O ₂ (% v/v)	LEL (%)	H ₂ S (ppm)	CO (ppm)			
BH ref: BH2	0	0.0	0.0	0.0	0.8	20	0	0	2	0.95m	2.6m	Silty at base.
Time: 11:50	15	0.0	0.0	0.0	0.8	18.6	0	0	2			
<u>Atmospheric Pressure (mb)</u>	30	0.0	0.0	0.0	0.8	18.4	0	0	1			
Before: 1014	45	0.0	0.0	0.0	0.8	18.4	0	0	1			
After: 1015	60	0.0	0.0	0.0	0.8	18.3	0	0	0			
Well Condition: Good	120	0.0	0.0	0.0	1.2	18	0	0	1			
	180			0.0	1.3	17.4	0	0	0			
Well Diameter: 50mm	240			0.0	1.6	14.1	0	0	0			
	300			0.0	2.2	11.9	0	0	0			

Borehole Information	Time (seconds)	Borehole Flow Rate (l/hr)	DP (Pa)	Gas Concentrations						Groundwater Level	Borehole Depth	Comments
				CH ₄ (% v/v)	CO ₂ (% v/v)	O ₂ (% v/v)	LEL (%)	H ₂ S (ppm)	CO (ppm)			
BH ref: BH6	0	0.4	1.0	0.0	0.1	20.9	0	0	2	1.08m	3.36m	Silty at base.
Time: 12:05	15	0.4	1.0	0.0	0.1	20.8	0	0	2			
<u>Atmospheric Pressure (mb)</u>	30	0.3	0.0	0.0	0.1	20.7	0	0	2			
Before: 1015	45	0.3	0.0	0.0	0.1	20.7	0	0	1			
After: 1015	60	0.4	0.0	0.0	0.1	20.7	0	0	1			
Well Condition: Good	120	0.3	0.0	0.0	0.0	20.7	0	0	2			
	180	0.4	0.0		0.0	20.7	0	0	1			
Well Diameter: 50mm	240				0.0	20.7	0	0	0			
	300				0.0	20.7	0	0	2			

Borehole Information	Time (seconds)	Borehole Flow Rate (l/hr)	DP (Pa)	Gas Concentrations						Groundwater Level	Borehole Depth	Comments
				CH ₄ (% v/v)	CO ₂ (% v/v)	O ₂ (% v/v)	LEL (%)	H ₂ S (ppm)	CO (ppm)			
BH ref: BH5	0	-8.3	-30	0.0	1.9	14.1	0	0	3	1.03	2.23m	Silty at base.
Time: 12:20	15	-3.2	-11	0.0	1.9	14.1	0	0	2			
<u>Atmospheric Pressure (mb)</u>	30	0.0	0	0.0	1.9	14	0	0	2			
Before: 1015	45	0.0	0	0.0	1.9	13.9	0	0	3			
After: 1015	60	0.0	0	0.0	1.9	13.9	0	0	4			
Well Condition: Good	120	0.0	0	0.0	1.9	14.6	0	0	4			
	180	0.0	0	0.0	1.7	15	0	0	3			
Well Diameter: 50mm	240			0.0	1.2	16.7	0	0	3			
	300			0.0	2.6	18.3	0	0	3			

Name of Site: Yapton Road, Barnham Project Code: 1801024 Date: 06th / 11th June 2018 Completed by: CL / JW Authorised by: ET		Equipment: GFM-430 Gas Analyser Condition: Good Dipmeter: Red Dipmeter Condition: Good	Last Three Days: Atmospheric Trend: Temperature Range: Rainfall:	On-site Weather Conditions: Dry and Sunny General Site Conditions / Ground Conditions / On site Activities: Inactive site. Heavily vegetated.
GAS MONITORING TO BE UNDERTAKEN IN ACCORDANCE WITH TEC METHOD STATEMENT				

GAS MONITORING TO BE UNDERTAKEN IN ACCORDANCE WITH TEC METHOD STATEMENT

[illegible]

Borehole Information	Time (seconds)	Borehole Flow Rate (l/hr)	DP (Pa)	Gas Concentrations						Groundwater Level	Borehole Depth	Comments
				CH ₄ (%v/v)	CO ₂ (%v/v)	O ₂ (%v/v)	LEL (%)	H ₂ S (ppm)	CO (ppm)			
BH ref: BH6	0	0.0	0.0	0.0	0.0	20.5	0	0	42			
Time: 13.45	15	0.0	0.0	0.0	0.6	20.5	0	0	50			
<u>Atmospheric Pressure (mb)</u>	30	0.0	0.0	0.0	0.6	20.7	0	0	45			
Before: 1015	45	0.0	0.0	0.0	0.6	20.5	0	0	43			
After: 1016	60	0.0	0.0	0.0	0.5	20.6	0	0	42			
Well Condition: Good	120	0.0	0.0	0.0	0.4	20.6	0	0	41			
	180			0.0	0.3	20.7	0	0	41			
Well Diameter: 50mm	240			0.0	0.3	20.7	0	0	38			
	300			0.0	0.2	20.8	0	0	40			

Borehole Information	Time (seconds)	Borehole Flow Rate (l/hr)	DP (Pa)	Gas Concentrations						Groundwater Level	Borehole Depth	Comments
				CH ₄ (%v/v)	CO ₂ (%v/v)	O ₂ (%v/v)	LEL (%)	H ₂ S (ppm)	CO (ppm)			
BH ref: BH5	0	0.0	0	0.0	4.8	16.9	0	0	0			
Time: 14.00	15	-0.2	0	0.0	8.2	7.4	0	0	0			
<u>Atmospheric Pressure (mb)</u>	30	0.0	0	0.0	8.4	5.8	0	0	0			
Before: 1013	45	0.0	0	0.0	8.6	5.6	0	0	0			
After: 1014	60	0.0	0	0.0	8.6	5.6	0	0	0			
Well Condition: Good	120			0.0	8.7	5.4	0	0	0			
	180											
Well Diameter: 50mm	240											
	300											

APPENDIX J

DCP-TRL Results

TEC
TOWER EVAS CONSULTING

DCP1

[illegible]

The CBR Adjustment Factors are applied to unpaved roads on the assumption that the effect of moisture will be a maximum at the top surface and will reduce linearly to zero at a depth of 1000 mm.



TRL Dynamic Cone Penetration Test Results

Yapton Road, Barnham

[illegible]

DCP2

Address	Yapton Road, Barnham
Postcode	1801024.001
Device	DCP2
Start Date	19/03/2018
Soil Type	Sandy clay
Soil Condition	Moderate

[illegible]

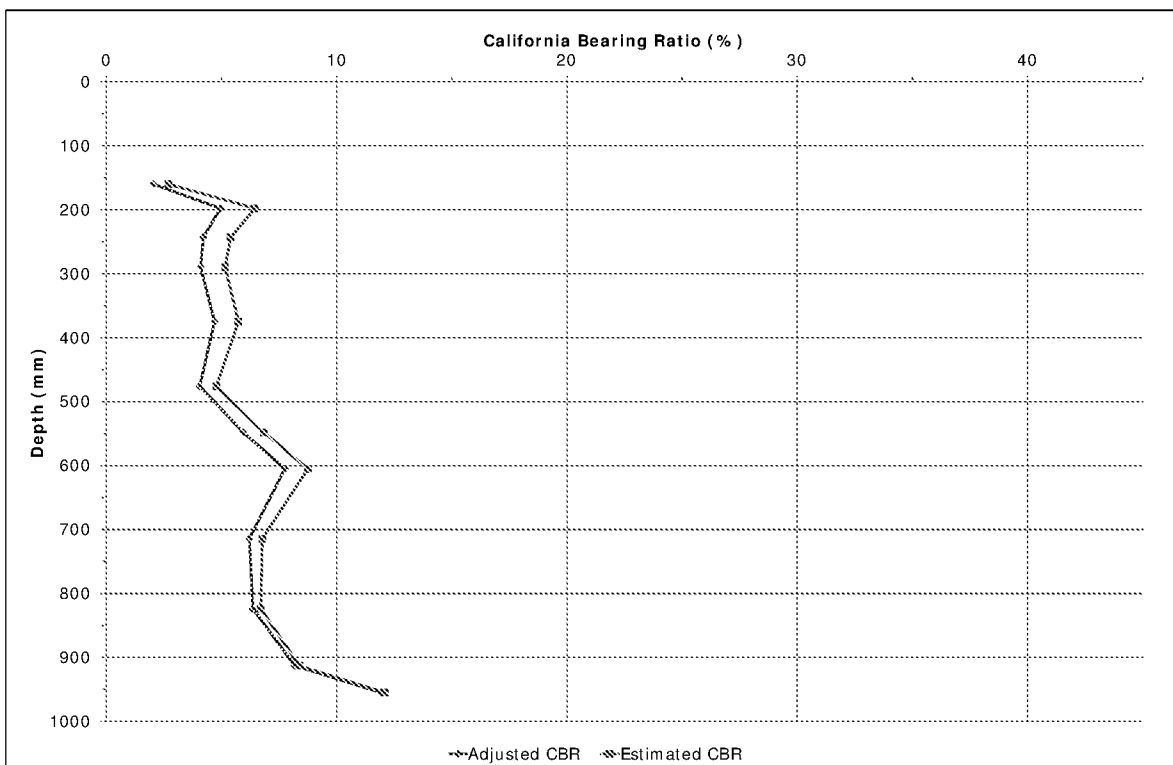
Notes: CBR Value calculated using Jones CBR and Rolt (1991), "Operating instructions for the TRL dynamic cone penetrometer" (2nd edition). Information Note. Crowthorne: Transport Research Laboratory, as follows:

$$\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \text{ Log}_{10}(\text{DPI})$$

Adjusted CSR values obtained from Table 4.2 of Simon Done and Proustin Samuel (2006).

2. "Measuring Road Pavement Strength and Designing Low Volume Sealed Roads using the Dynamic Cone Penetrometer" Unpublished TRL Project Report UPR/IE 76/08 Project Record No R7783.

The CBR Adjustment Factors are applied to unpaved roads on the assumption that the effect of moisture will be a maximum at the top surface and will reduce linearly to zero at a depth of 1000 mm.



Yapton Road, Barnham

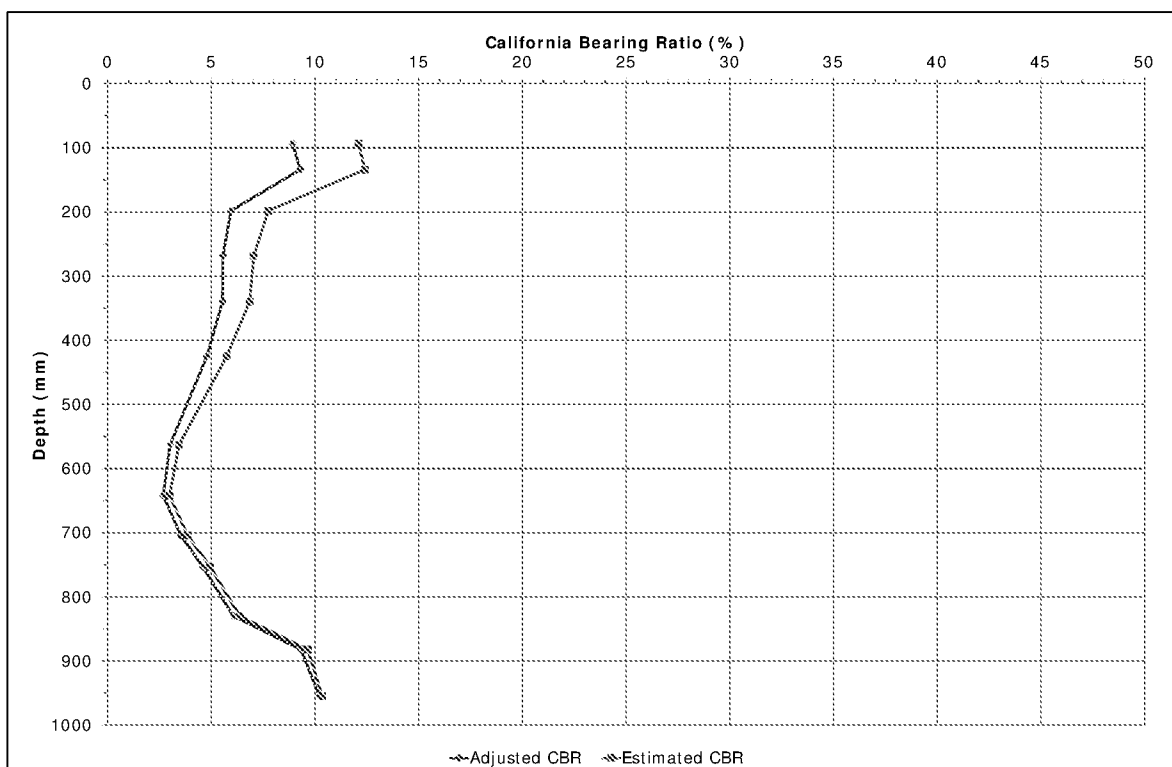
[illegible]

Address	Yapton Road, Barnham
Postcode	1801024.001
Case No	DGP3
Case Date	19/03/2018
Soils	sandy clay
Seismic Hazard	Moderate

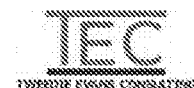
[illegible]
$$\text{Log}_{10}(\text{CSR}) = 2.48 - 1.057 \text{ Log}_{10}(\text{DPI})$$

*Measuring Road Pavement Strength and Designing Low Volume Sealed Roads using the Dynamic Cone Penetrometer" Unpublished TRL Project Report UPRRI/76/06 Project Record No R7783.

The CBR Adjustment Factors are applied to unpaved roads on the assumption that the effect of moisture will be a maximum at the top surface and will reduce linearly to zero at a depth of 1000 mm.



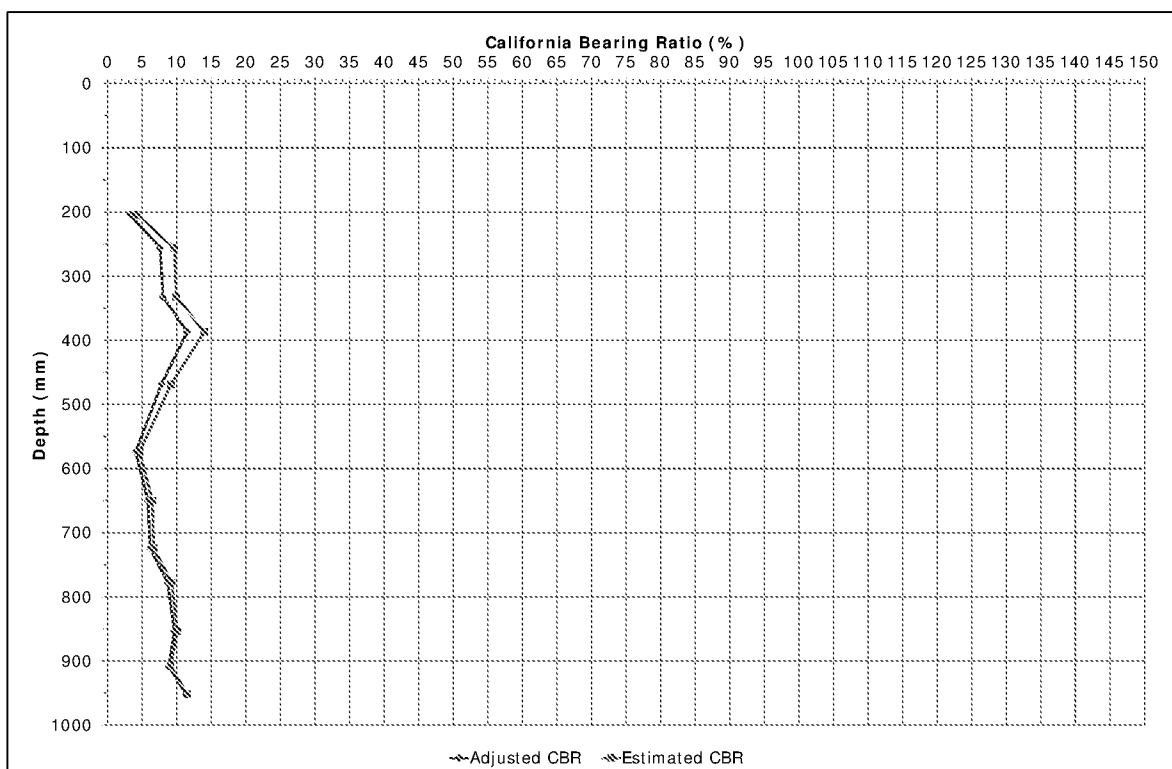
Yapton Road, Barnham

[illegible]

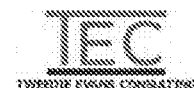
Address	Yapton Road, Barnham
Postcode	1801024 001
Reference	DCP4
Date Recd	19/03/2018
Soil Type	sandy clay
Contaminant Level	Moderate

[illegible]
$$\text{Log}_{10}(\text{CSR}) = 2.48 - 1.057 \text{ Log}_{10}(\text{DPI})$$

The CBR Adjustment Factors are applied to unpaved roads on the assumption that the effect of moisture will be a maximum at the top surface and will reduce linearly to zero at a depth of 1000 mm.



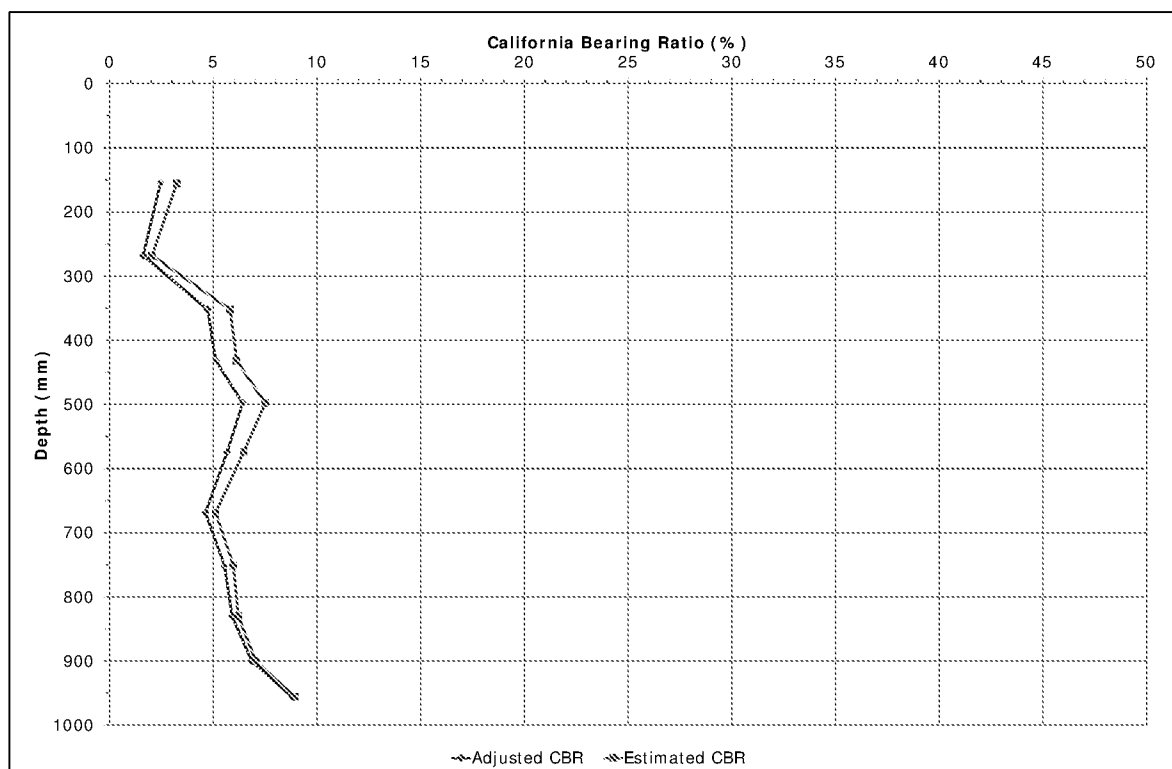
Yapton Road, Barnham

[illegible]

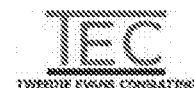
Address	Yapton Road, Barnham
Postcode	1801024 001
Region	DCP5
Date built	19/03/2018
Soil Type	sandy clay
Groundwater level	Moderate

[illegible]
$$\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \text{Log}_{10}(\text{DPI})$$

The CSR Adjustment Factors are applied to unpaved roads on the assumption that the effect of moisture will be a maximum at the top surface and will reduce linearly to zero at a depth of 1000 mm.



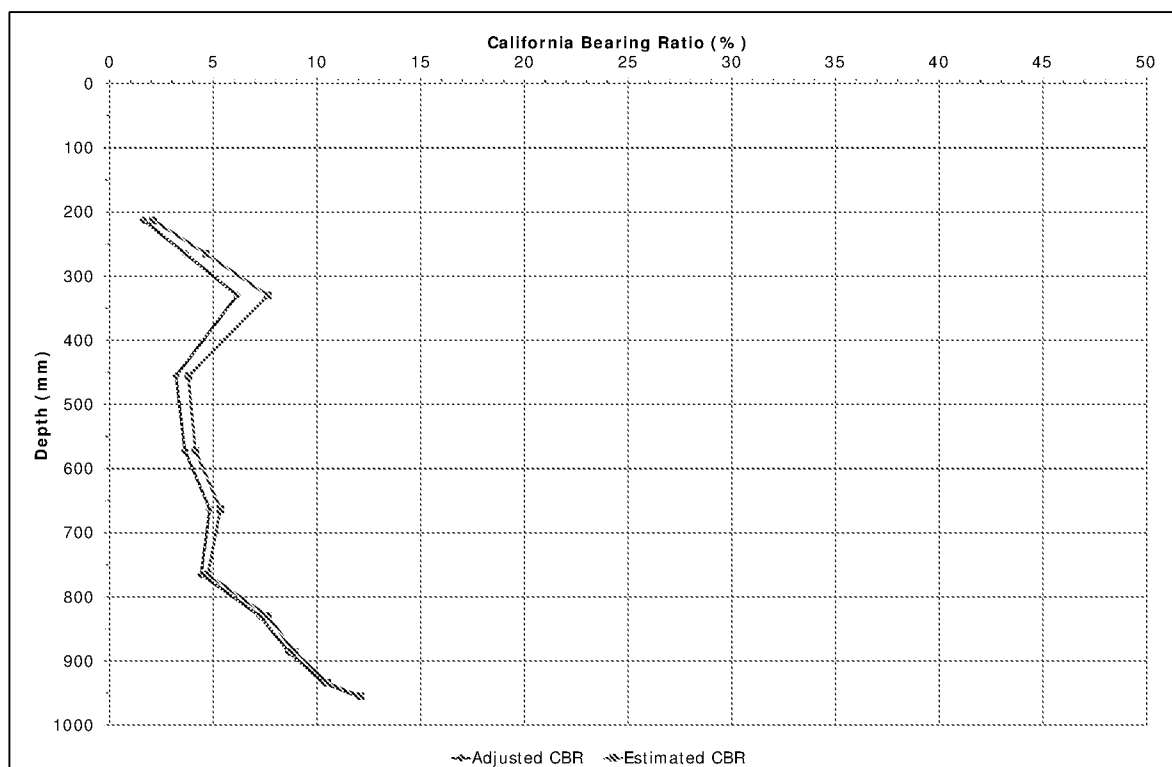
Yapton Road, Barnham

[illegible]

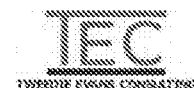
Address	Yapton Road, Barnham
Postcode	1801024 001
Reference	DCP6
Date Recd	19/03/2018
Soil Type	sandy clay
Contaminant Level	Moderate

[illegible]
$$\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \text{ Log}_{10}(\text{DPI})$$

The CBR Adjustment Factors are applied to unpaved roads on the assumption that the effect of moisture will be a maximum at the top surface and will reduce linearly to zero at a depth of 1000 mm.



Yapton Road, Barnham

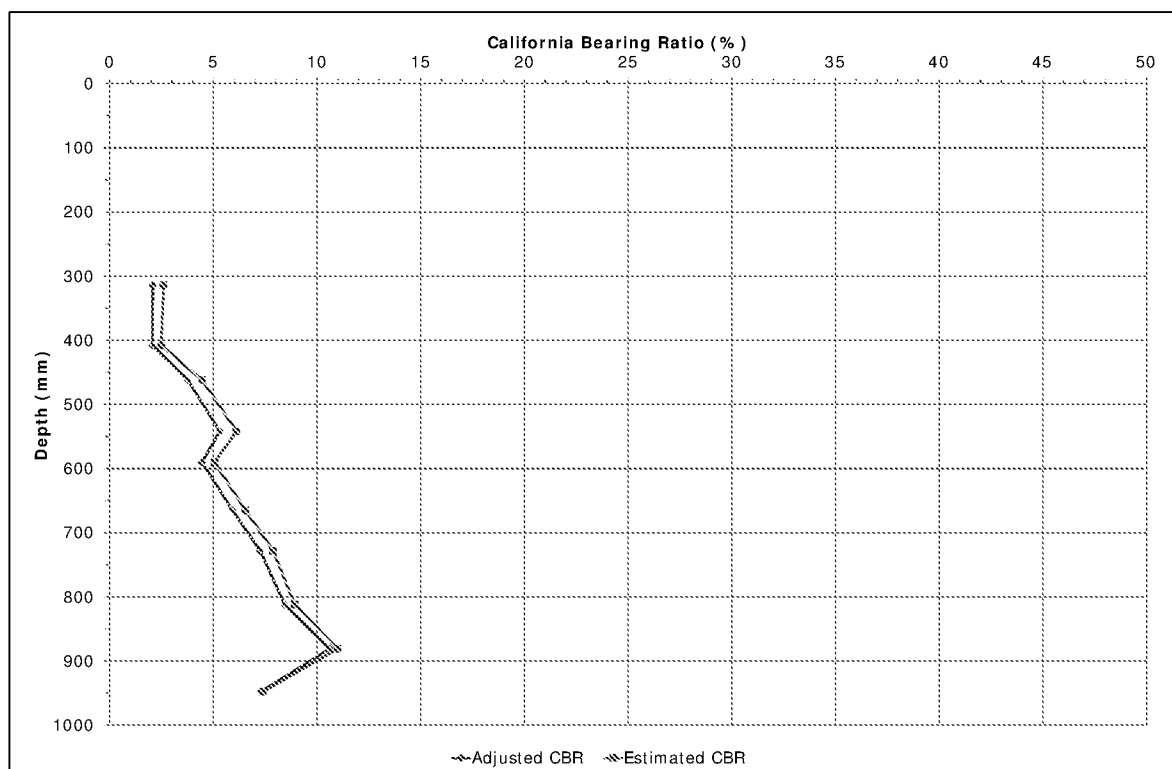
[illegible]

Address	Yapton Road, Barnham
Postcode	1801024 001
Region	DCP7
Date built	19/03/2018
Soil Type	sandy clay
Groundwater level	Moderate

[illegible]
$$\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \text{Log}_{10}(\text{DPI})$$

Adjusted CBR values obtained from Table 4.2 of Simon Done and Piouslin Samuel (2005), "Measuring Road Pavement Strength and Designing Low Volume Sealed Roads using the Dynamic Cone Penetrometer." Unpublished TRL Project Report UPR15/75/06 Project Record No R7783.

The CSR Adjustment Factors are applied to unpaved roads on the assumption that the effect of moisture will be a maximum at the top surface and will reduce linearly to zero at a depth of 1000 mm.



TRL Dynamic Cone Penetration Test Results

Yapton Road, Barnham

[illegible]

DCP8

Address	Yapton Road, Barnham
Postcode	1801024.001
Local ID	DCP8
Date of issue	19/03/2018
Soil type	sandy clay
Groundwater	Moderate

[illegible]

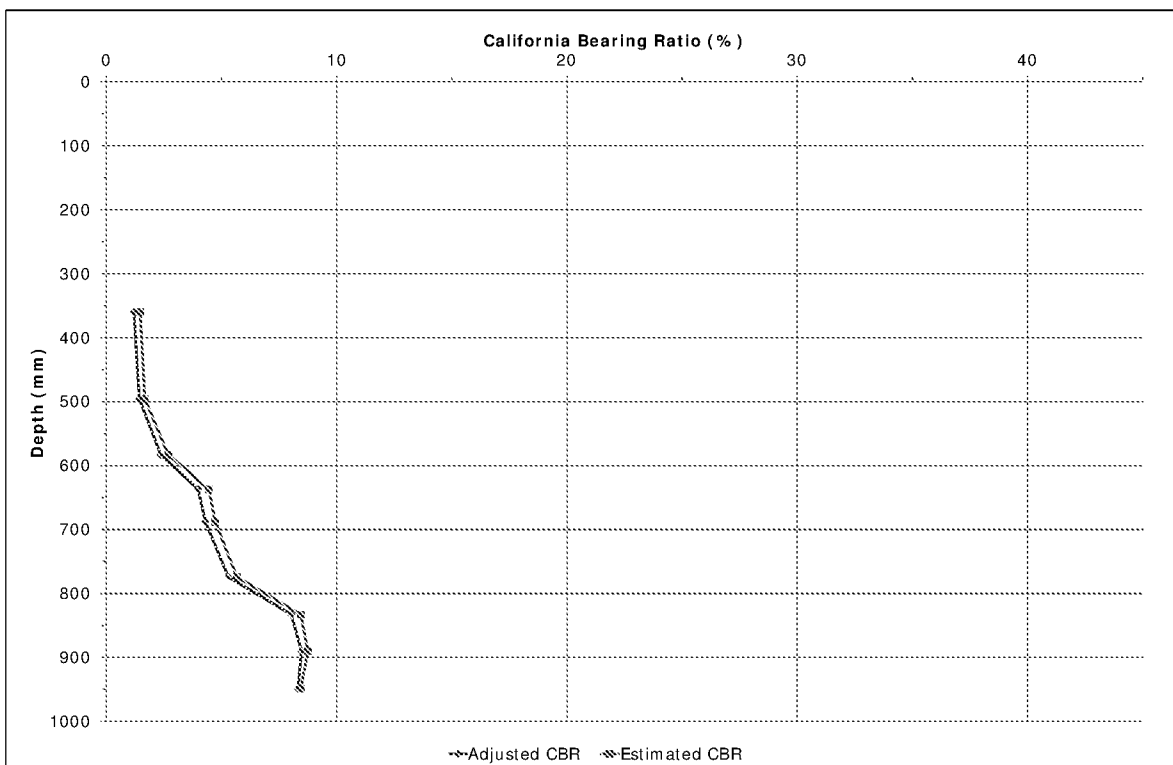
Notes: CBR Value calculated using Jones CBR and Rolt (1991), "Operating instructions for the TRL dynamic cone penetrometer" (2nd edition). Information Note, Crowthorne: Transport Research Laboratory, as follows:

$$\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \text{ Log}_{10}(\text{DPI})$$

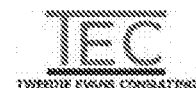
Adjusted CSR values obtained from Table 4.2 of Simon Done and Prouslin Samuel (2006).

2. "Measuring Road Pavement Strength and Designing Low Volume Sealed Roads using the Dynamic Cone Penetrometer" Unpublished TRL Project Report UPR/IE 76/08 Project Record No R7783.

The CBR Adjustment Factors are applied to unpaved roads on the assumption that the effect of moisture will be a maximum at the top surface and will reduce linearly to zero at a depth of 1000 mm.



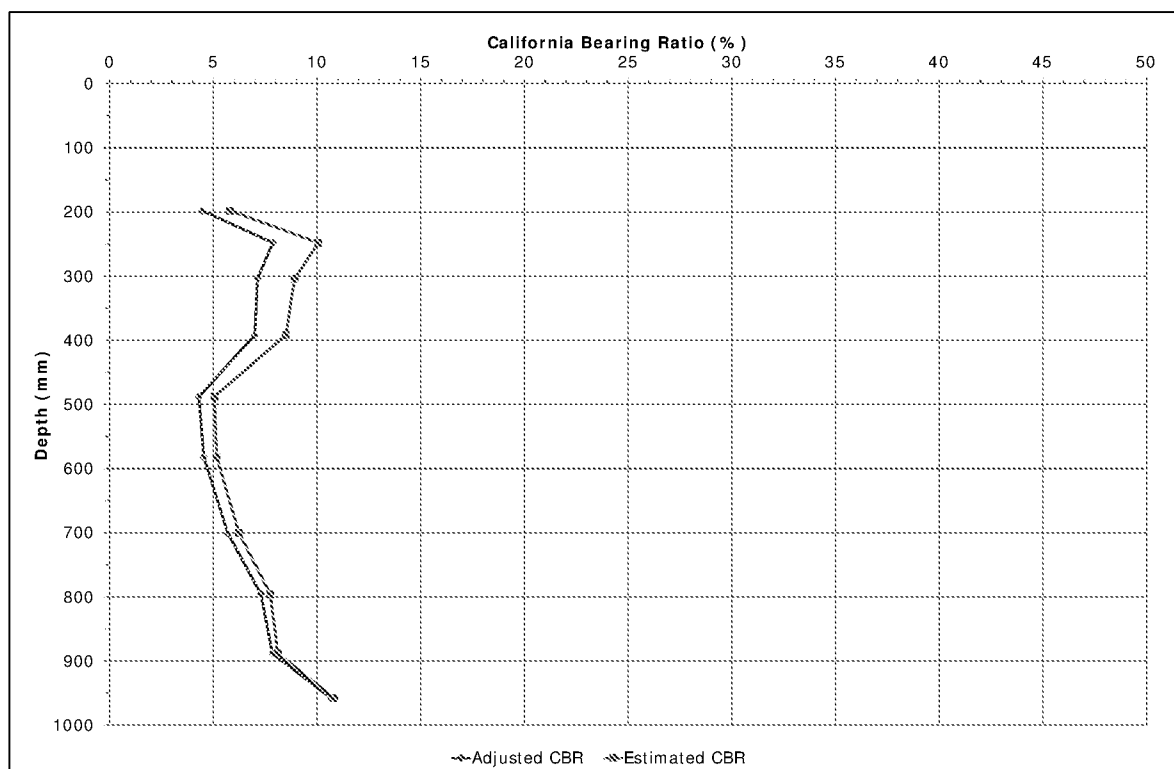
Yapton Road, Barnham

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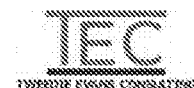
Address	Yapton Road, Barnham
Postcode	1801024 001
Region	DCP9
Open Date	19/03/2018
Soil Type	sandy clay
Groundwater	Moderate

[illegible]
$$\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \text{ Log}_{10}(\text{DPI})$$

The CBR Adjustment Factors are applied to unpaved roads on the assumption that the effect of moisture will be a maximum at the top surface and will reduce linearly to zero at a depth of 1000 mm.



Yapton Road, Barnham

[illegible]

Address	Yapton Road, Barnham
Postcode	1801024 001
Region	DCP10
Visit Date	19/03/2018
Soil Type	sandy clay
Soil Condition	Moderate

[illegible]
$$\text{Log}_{10}(\text{CSR}) = 2.48 - 1.057 \text{ Log}_{10}(\text{DPI})$$

^aAdjusted CBR values obtained from Table 4.2 of Simon-Denis and Plouffe-Samuel (2005), "Measuring Road Pavement Strength and Designing Low Volume Sealed Roads using the Dynamic Cone Penetrometer." Unpublished TRL Project Report UPR15/75/06 Project Record No R7783.

The CSR Adjustment Factors are applied to unpaved roads on the assumption that the effect of moisture will be a maximum at the top surface and will reduce linearly to zero at a depth of 1000 mm.

