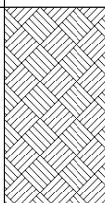
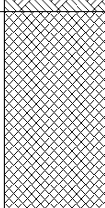

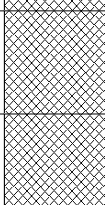
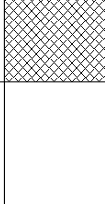

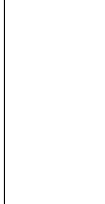
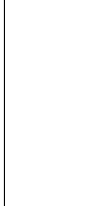
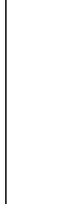
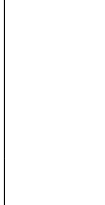
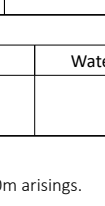
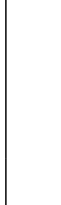
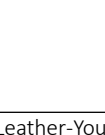

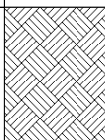




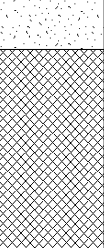



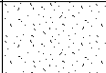
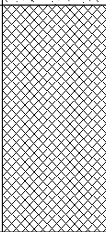

Project ID: GL24466		Client: The Big Yellow Construction Company Ltd		E: 528767.17 N: 185123.60					
Location: Big Yellow, Kentish Town		Consultant: Campbell Reith Hill LLP							
		Plant used: Hand Excavated		Date: 12/08/2021					
Geology Description		Legend	Depth	Elevation (maOD)	Sample / In-Situ Test Information		Installation & Backfill		
				36.89	Type	Depth	Results / Remarks		
Grass over TOPSOIL. Soft dark brown slightly sandy slightly gravelly CLAY. Gravel is subangular fine to coarse flint.				0.30	36.59	D1	0.15		
At 0.25m: Plastic membrane.									
MADE GROUND. Dark brown slightly sandy clayey GRAVEL with rare pockets of light brown clay. Gravel is subangular fine to coarse flint with occasional brick, possible clinker and rare cast iron.									
MADE GROUND. Soft to firm slightly sandy gravelly CLAY. Gravel is angular fine to coarse brick with rare flint.									
At 0.70m: Rare cast iron fragments.				0.60	36.29	D3	0.70		
MADE GROUND. Dark brown slightly sandy clayey GRAVEL with rare pockets of light brown clay. Gravel is angular to subangular fine to coarse flint with occasional brick.									
From 0.95m: Low cobble content. Cobbles are brick.				0.75	36.14				
Trial pit terminated at 1.00m.									
				1.00	35.89				
									


Project ID: GL24466		Client: The Big Yellow Construction Company Ltd		E: 528790.40 N: 185115.97				
Location: Big Yellow, Kentish Town		Consultant: Campbell Reith Hill LLP						
		Plant used: Hand Excavated		Date: 12/08/2021				
Geology Description		Legend	Depth	Elevation (maOD)	Sample / In-Situ Test Information		Installation & Backfill	
				37.00	Type	Depth	Results / Remarks	
Grass over TOPSOIL. Soft dark brown slightly sandy slightly gravelly CLAY. Gravel is subangular fine to coarse flint with rare brick.			0.20	36.80	D1	0.15		
MADE GROUND. Dark brown sandy clayey GRAVEL. Gravel is subangular fine to coarse flint with occasional brick and possible clinker. At 0.30m: Plastic membrane. At 0.35m: 20mm and 40mm rebar.  From 0.50m: Low cobble content. Cobbles are brick.  At 0.60m: Rope and metal cap.  At 0.75m: Rare concrete cobble.					D2	0.35		
					D3	0.80		
Trial pit terminated at 1.00m.			1.00	36.00				
Weather: Sunny and dry		Water Strike						
Pit Stability: Stable		Date	Water Strike (m)	Time Elapsed (mins)	Standing Level (m)	Remarks		
Shoring Used:						No groundwater encountered		
Pit Dimensions: L: 0.40m x W: 0.40m		Remarks						
Norwich Office: 01603 613111 London Office: 020 7537 9233 Cambridge Office: 01223 781585 Colchester Office: 01206 986675 Testing Services: 01603 416333 E-mail: info@harrisongroupuk.com Website: www.harrisongroupuk.com		1. Backfill: GL to 1.00m arisings.						
		Logged by: T. Leather-Younghusband			Checked by: J. Keay		Fm-Hn-R-3069-Rev E	



		Trial Pit Record			TP01		Sheet 1 of 1	
Project ID: GL24466		Client: The Big Yellow Construction Company Ltd			E: 528825.14 N: 185137.88			
Location: Big Yellow, Kentish Town		Consultant: Campbell Reith Hill LLP						
		Plant used: JCB 3CX			Date: 18/08/2021			
Geology Description		Legend	Depth	Elevation (maOD)	Sample / In-Situ Test Information			Installation & Backfill
				36.66	Type	Depth	Results / Remarks	
MADE GROUND. CONCRETE. At 0.05m: 5mm rebar.			0.50	36.16	B1 ES1	0.60 - 0.80 0.60		
At 0.40m: 5mm rebar.								
MADE GROUND. Greyish brown gravelly fine to coarse SAND with high cobble and boulder content. Gravel is angular to subrounded fine to coarse brick, flint, metal and possible clinker. Cobbles and boulders are concrete and brick. At 0.50m: Blue plastic membrane. From 0.80m: Pocket of dark greyish brown gravelly fine to coarse sand with high cobble content in west side of pit. Gravel is angular to subrounded fine to coarse concrete, brick, possible clinker, possible charcoal and possible slag. Cobbles are brick and concrete.								
MADE GROUND. CONCRETE. MADE GROUND. Reddish brown very gravelly fine to coarse SAND with high cobble content, low boulder content and occasional clayey lenses. Gravel is angular to subrounded fine to coarse brick, concrete, flint and possible clinker. Cobbles are brick and old metal pipe.								
Firm to stiff brown mottled light grey CLAY.			1.20	35.46	B2 ES2	0.90 - 1.20 1.00		
			1.40	35.26	B3 ES3	1.60 - 1.80 1.70	90 kPa	
			2.20	34.46				
			2.90	33.76				
Trial pit terminated at 2.90m.								
Weather: Sunny and dry		Water Strike						
Pit Stability: Stable		Date	Water Strike (m)	Time Elapsed (mins)	Standing Level (m)	Remarks		
		18-08-2021	2.20			Perched water		
Shoring Used:								
Pit Dimensions: L: 2.40m x W: 0.80m		Remarks						
Norwich Office: 01603 613111 London Office: 020 7537 9233 Cambridge Office: 01223 781585 Colchester Office: 01206 986675 Testing Services: 01603 416333 E-mail: info@harrisingroupuk.com Website: www.harrisingroupuk.com		1. Historical foundations possibly encountered in northeast to east face of pit. Foundation slab at 1.20mbgl. 2. Backfill: GL to 2.90m arisings.						
		Logged by: J. Blyth			Checked by: J. Keay		Fm-Hn-R-3069-Rev E	

Project ID:	<b>GL24466</b>	Client:	The Big Yellow Construction Company Ltd	E:	528803.30	N:	185149.10
Location:	Big Yellow, Kentish Town	Consultant:	Campbell Reith Hill LLP				
		Plant used:	JCB 3CX	Date:	18/08/2021		

Geology Description	Legend	Depth	Elevation (maOD)	Sample / In-Situ Test Information			Installation & Backfill
				Type	Depth	Results / Remarks	
MADE GROUND. CONCRETE. <i>At 0.05m: 5mm rebar.</i>			36.66				
MADE GROUND. Greyish brown gravelly fine to coarse SAND with high cobble and boulder content. Gravel is angular to subrounded fine to coarse concrete, brick, flint, glass, metal, possible clinker and possible charcoal. Cobbles are brick, concrete and metal. <i>At 0.30m: Plastic membrane.</i>		0.30	36.36	ES1	0.50		
				B1	0.60 - 0.80		
				ES2	1.00		
Trial pit terminated at 1.20m: Concrete encountered		1.20	35.46				

Weather: Sunny and dry		Water Strike				
Pit Stability: Stable		Date	Water Strike (m)	Time Elapsed (mins)	Standing Level (m)	Remarks
Shoring Used:						No groundwater encountered
Pit Dimensions: L: 2.50m x W: 0.90m		Remarks  1. Pit terminated early due to concrete encountered. Old chamber with 0.40m x 0.40m entrance uncovered. Possible old drain cover and drainage pipe/tank. 2. Backfill: GL to 1.20m arisings.				
Norwich Office: 01603 613111 London Office: 020 7537 9233 Cambridge Office: 01223 781585 Colchester Office: 01206 986675 Testing Services: 01603 416333 E-mail: info@harrisonsgroupuk.com Website: www.harrisonsgroupuk.com						
		Logged by: J. Blvth			Checked by: J. Keav	
		Fm-Hn-R-3069-Rev E				


**harrisongroup**
**Photograph Record Sheet**

Project: Big Yellow, Kentish Town

Client: The Big Yellow Self Storage Company Ltd

Project ID: GL24466

Exploratory Hole Reference.: TP01

Date: 18/08/2021



Remarks:

Engineer: J. Blyth

Checked: J. Keay




**harrisongroup**
**Photograph Record Sheet**

Project: Big Yellow, Kentish Town

Client: The Big Yellow Self Storage Company Ltd

Project ID: GL24466

Exploratory Hole Reference.: TP02

Date: 18/08/2021




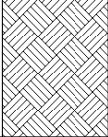

Remarks:

Engineer: J. Blyth

Checked: J. Keay





		<h1>Trial Pit Record</h1>			<h1>SSS02</h1>		Sheet 1 of 1	
Project ID: <b>GL24466</b>		Client: The Big Yellow Construction Company Ltd			E: 528785.61    N: 185117.69			
Location: Big Yellow, Kentish Town		Consultant: Campbell Reith Hill LLP						
		Plant used: Hand Excavated			Date: 12/08/2021			
Geology Description		Legend	Depth	Elevation (maOD) 37.03	Sample / In-Situ Test Information			Installation & Backfill
Grass over TOPSOIL. Soft dark brown slightly sandy slightly gravelly CLAY. Gravel is subangular fine to coarse flint with rare brick.			0.20	36.83	ES1	0.20	Results / Remarks	
Trial pit terminated at 0.20m.								
Weather: Sunny and dry		Water Strike						
Pit Stability: Stable		Date	Water Strike (m)	Time Elapsed (mins)	Standing Level (m)	Remarks		
Shoring Used:						No groundwater encountered		
Pit Dimensions: L: 0.30m x W: 0.30m		Remarks						
Norwich Office: 01603 613111 London Office: 020 7537 9233 Cambridge Office: 01223 781585 Colchester Office: 01206 986675 Testing Services: 01603 416333 E-mail: info@harrisingroupuk.com Website: www.harrisingroupuk.com								
		Logged by: T. Leather-Younghusband			Checked by: J. Keay		Fm-Hn-R-3069-Rev E	

## Soakaway Test

Location ID - Test Number

**TP01**

Project ID: **GL24466**

Client: The Big Yellow Construction Company Ltd

E: 528825.14

N: 185137.88

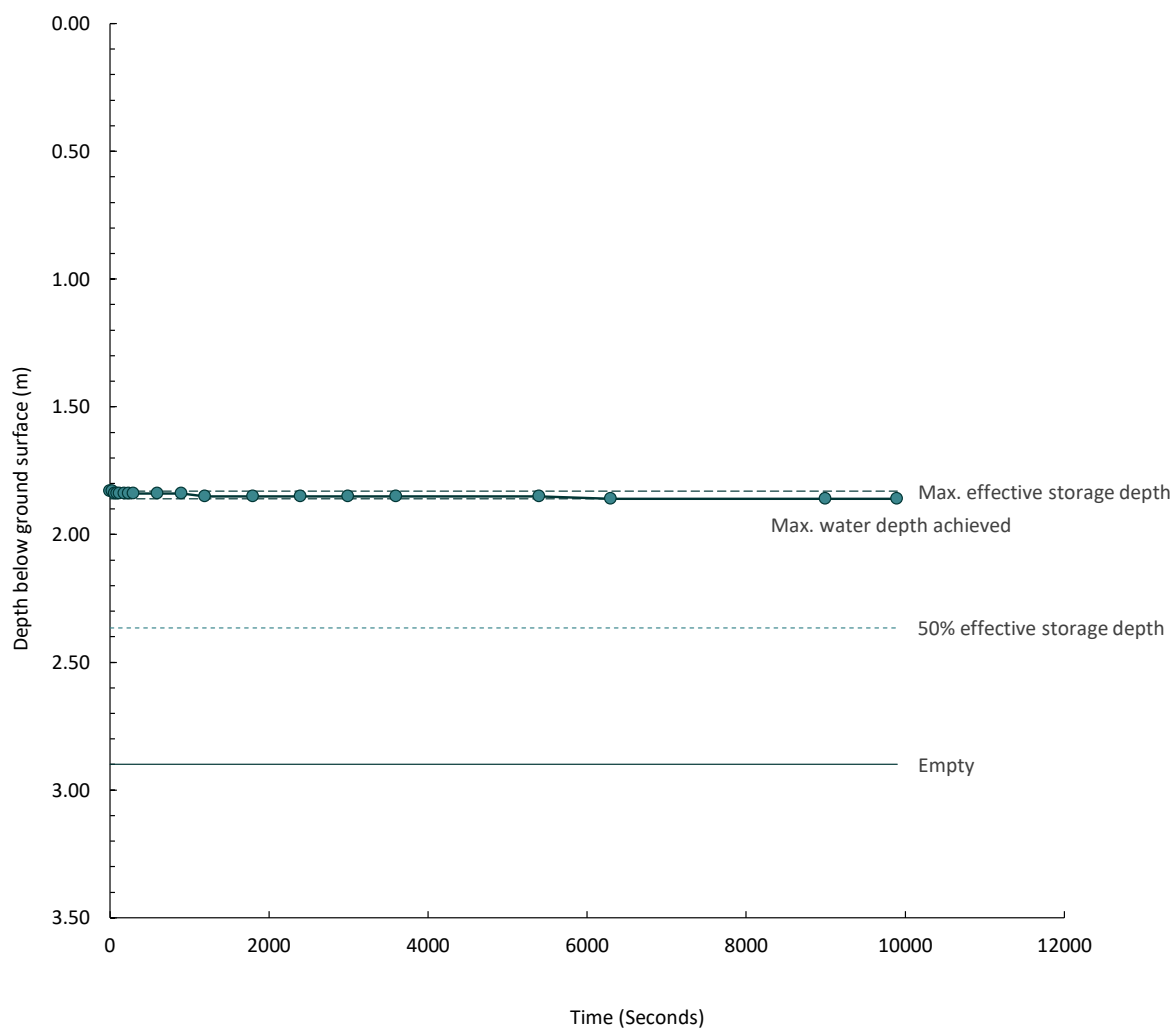
Location: Big Yellow, Kentish Town

Consultant: Campbell Reith Hill LLP

Ground Level: 36.66 maOD

Infilling 1

Test Date: 18/08/2021


**Soil Infiltration Rate:** N/A

### Pit Dimensions

Length (m)	Width (m)	Depth at Start of Test (m)	Depth at End of Test (m)
2.40	0.80	2.90	2.90

Fill Porosity: 100%

Test Duration (hh:mm): 02:45

Soakaway Construction: Vertical sides trimmed square

Norwich Office: 01603 613111  
London Office: 020 7537 9233  
Cambridge Office: 01223 781585  
Colchester Office: 01206 986675  
Testing Services: 01603 416333  
E-mail: [info@harrisingroupuk.com](mailto:info@harrisingroupuk.com)  
Website: [www.harrisingroupuk.com](http://www.harrisingroupuk.com)



Water measuring device:  
Dip Meter  
Weather conditions:  
Sunny and dry  
Test in accordance with  
BRE DG 365 Revised 2016

Remarks:  
1. Groundwater was not encountered during testing, but perched water encountered at 2.20m.

Operator: J. Blyth



Checked by: J. Keay

Approved by: J. Keay



Fm-Hn-R-3064-Rev C

## **APPENDIX C**



### **GAS AND GROUNDWATER MONITORING**



				Gas and PID Monitoring Results																			
Project ID: GL24466				Client: The Big Yellow Construction Company Ltd				Equipment Model / Serial Number													Manufacturer's Calibration Date		
Date: 25/08/2021				Location: Big Yellow, Kentish Town				Gas Analyser: GA5000 / G501752													03/03/2020		
Weather conditions: Cloudy and dry								PID: Tiger Handheld VOC Detector / T-113655													14/05/2020		
Pump Running Time (Purge): Standard 30 secs. Pump Running Time (Sampling): Standard 180 secs. Flow Details: 5 sec average for 1 min.								PID Details: "<" indicates reading is under the detection limit. ">" indicates reading is over the upper limit. "**" level to be determined.															
Field engineer(s): T. Leather-Younghusband					Remarks:																		
Location ID	Monitoring Pipe and Diameter	Date Monitored	Time	Air Temp (°C)	Atmospheric Pressure 48Hrs Prior to Sampling (mB)	Atmospheric Pressure 24Hrs Prior to Sampling (mB)	Atmospheric Pressure 3Hrs Prior to Sampling (mB)	Atmospheric Pressure When Sampled (mB)	Relative Pressure (mB)	Peak PID (ppm)	Stable PID (ppm)	Methane (%)	Peak Methane (%)	Methane LEL (%)	Carbon Dioxide (%)	Oxygen (%)	Carbon Monoxide (ppm)	Hydrogen Sulphide (ppm)	Flow (l/hr)	Remarks			
BH01	PIPE1 (50mm)	25/08/2021	09:55:00	16.4	1027	1030	1027	1023	0.14	0.8	4.3	0.0	0.1	2.0	4.4	18.8	0.0	0.0	0.0				
			09:55:15							1.2		0.0			4.5	15.5	0.0	0.0	0.0				
			09:55:30							2.0		0.0			4.5	15.2	0.0	0.0	0.0				
			09:55:45							2.5		0.0			4.5	15.2	0.0	0.0	0.0				
			09:56:00							2.8		0.0			4.5	15.2	0.0	0.0	0.0				
			09:56:30							3.1		0.0			4.5	15.2	0.0	0.0	0.0				
			09:57:00							3.4		0.0			4.5	15.2	0.0	0.0	0.0				
			09:58:00							4.0		0.0			4.5	15.2	0.0	0.0	0.0				
			09:59:00							4.4		0.0			4.5	15.2	0.0	0.0	0.0				
			10:00:00							4.3		0.0			4.5	15.2	0.0	0.0	0.0				
	PIPE2 (19mm)	25/08/2021	10:02:00	16.4	1028	1030	1027	1023	-0.10	1.9	1.2	0.0	0.0	0.0	0.9	18.5	0.0	0.0	0.0				
			10:02:15							2.4		0.0			0.9	19.9	0.0	0.0	0.0				
			10:02:30							3.1		0.0			0.9	20.0	0.0	0.0	0.0				
			10:02:45							2.4		0.0			1.0	19.9	0.0	0.0	0.0				
			10:03:00							1.9		0.0			1.1	19.8	0.0	0.0	0.0				
			10:03:30							1.7		0.0			1.3	19.3	0.0	0.0	0.0				
			10:04:00							1.6		0.0			1.5	19.0	0.0	0.0	0.0				
			10:05:00							1.2		0.0			1.8	18.9	0.0	0.0	0.0				
			BH02	PIPE1 (50mm)	25/08/2021	10:50:00	17.1	1028	1030	1027	1025	-0.02	1.2	1.6	0.1	0.1	2.0	2.2	16.0	0.0	0.0	0.0	
						10:50:15							1.9		0.1			2.2	11.5	0.0	0.0	0.0	
10:50:30										2.3		0.1			2.2	11.3	0.0	0.0	0.0				
10:50:45										2.3		0.1			2.2	11.3	0.0	0.0	0.0				
10:51:00										2.2		0.1			2.2	11.3	0.0	0.0	0.0				
10:51:30										2.0		0.1			2.2	11.3	0.0	0.0	0.0				
	PIPE1 (50mm)	25/08/2021	10:52:00						1.9		0.1			2.2	11.2	0.0	0.0	0.0					
			10:53:00							1.6		0.1			2.2	11.1	0.0	0.0	0.0				
			BH03	PIPE1 (50mm)	25/08/2021	09:20:00	16.1	1027	1030	1027	1023	0.26	0.8	0.9	0.2	0.2	4.0	4.2	18.4	0.0	0.0	0.0	
						09:20:15							0.9		0.2			4.3	13.2	0.0	0.0	0.0	
						09:20:30							0.8		0.2			4.3	12.4	0.0	0.0	0.0	
						09:20:45							0.9		0.2			4.3	12.3	0.0	0.0	0.0	
09:21:00										0.9		0.2			4.3	12.2	0.0	0.0	0.0				
09:21:30										1.0		0.2			4.4	12.1	0.0	0.0	0.0				
	PIPE1 (50mm)	25/08/2021	09:22:00						1.0		0.2			4.6	12.0	0.0	0.0	0.0					
			09:23:00							0.9		0.2			4.7	11.8	0.0	0.0	0.0				
			WS01	PIPE1 (50mm)	25/08/2021	11:03:00	17.4	1028	1030	1027	1025	0.09	0.6	0.7	0.0	0.0	0.0	2.2	17.7	0.0	0.0	0.0	Bung had been disturbed. Replaced for 1hr prior to monitoring.
						11:03:15							1.3		0.0			2.3	19.2	0.0	0.0	0.0	
						11:03:30							1.1		0.0			2.3	19.3	0.0	0.0	0.0	
						11:03:45							1.0		0.0			2.3	19.3	0.0	0.0	0.0	
11:04:00										1.0		0.0			2.3	19.3	0.0	0.0	0.0				
11:04:30										0.9		0.0			2.4	19.3	0.0	0.0	0.0				
	PIPE1 (50mm)	25/08/2021	11:05:00						0.8		0.0			2.4	19.3	0.0	0.0	0.0					
			11:06:00							0.7		0.0			2.4	19.3	0.0	0.0	0.0				
			WS02	PIPE1 (50mm)	25/08/2021	10:26:00	16.5	1028	1030	1027	1024	-0.09	1.4	2.1	0.4	0.4	8.0	3.5	17.9	0.0	0.0	0.0	
						10:26:15							2.4		0.4			3.5	14.9	0.0	0.0	0.0	
						10:26:30							2.5		0.4			3.5	14.8	0.0	0.0	0.0	
						10:26:45							2.6		0.4			3.5	14.7	0.0	0.0	0.0	
10:27:00										2.6		0.4			3.5	14.7	0.0	0.0	0.0				
10:27:30										2.5		0.4			3.6	14.7	0.0	0.0	0.0				
	PIPE1 (50mm)	25/08/2021	10:28:00						2.4		0.4			3.6	14.7	0.0	0.0	0.0					
			10:29:00							2.1		0.4			3.6	14.7	0.0	0.0	0.0				



Bung had been disturbed.  
Replaced for 1hr prior to monitoring.



				Gas and PID Monitoring Results																			
Project ID: GL24466				Client: The Big Yellow Construction Company Ltd								Equipment				Model / Serial Number				Manufacturer's Calibration Date			
Date: 25/08/2021				Location: Big Yellow, Kentish Town								Gas Analyser: GA5000 / G501752				03/03/2020							
Weather conditions: Cloudy and dry												PID: Tiger Handheld VOC Detector / T-113655				14/05/2020							
Pump Running Time (Purge): Standard 30 secs. Pump Running Time (Sampling): Standard 180 secs. Flow Details: 5 sec average for 1 min.												PID Details: "<" indicates reading is under the detection limit. ">" indicates reading is over the upper limit. "**" level to be determined.											
Field engineer(s): T. Leather-Younghusband				Remarks:																			
Location ID	Monitoring Pipe and Diameter	Date Monitored	Time	Air Temp (°C)	Atmospheric Pressure 48Hrs Prior to Sampling (mB)	Atmospheric Pressure 24Hrs Prior to Sampling (mB)	Atmospheric Pressure 3Hrs Prior to Sampling (mB)	Atmospheric Pressure When Sampled (mB)	Relative Pressure (mB)	Peak PID (ppm)	Stable PID (ppm)	Methane (%)	Peak Methane (%)	Methane LEL (%)	Carbon Dioxide (%)	Oxygen (%)	Carbon Monoxide (ppm)	Hydrogen Sulphide (ppm)	Flow (l/hr)	Remarks			
WS03	PIPE1 (50mm)	25/08/2021	09:37:00	16.3	1027	1030	1027	1023	0.07	0.8	0.5	0.1	0.1	2.0	0.3	16.9	0.0	0.0	0.0				
			09:37:15							0.8		0.0			0.2	20.3	0.0	0.0	0.0				
			09:37:30							0.7		0.0			0.2	20.6	0.0	0.0	0.0				
			09:37:45							0.6		0.0			0.2	20.8	0.0	0.0	0.0				
			09:38:00							0.6		0.0			0.2	20.9	0.0	0.0	0.0				
			09:38:30							0.6		0.0			0.2	20.9	0.0	0.0	0.0				
			09:39:00							0.5		0.0			0.2	21.1	0.0	0.0	0.0				
			09:40:00							0.5		0.0			0.1	21.2	0.0	0.0	0.0				





				Groundwater Monitoring Results																													
Project ID: GL24466				Client: The Big Yellow Construction Company Ltd								Weather conditions: Cloudy and dry																					
Date: 25/08/2021				Location: Big Yellow, Kentish Town								Ground conditions: -																					
<sup>1</sup> = All (m) depth measurements are recorded as meters from the top of the installation cover.										<sup>2</sup> = I: Inertial, S: Submersible, B: Bailer, P: Peristaltic Pump.						<sup>3</sup> = Purge volume standardisation: 50mm standpipe = 6 x water column, 35mm = 3.5 x water column, 19mm = 1 x water column.																	
Field engineer(s): T. Leather-Younghusband										Remarks:																							
Location ID	Monitoring Pipe and Diameter	Date Monitored	Time	Surface Elevation (maOD)	LNAPL Depth <sup>1</sup> (mbgl)	LNAPL Depth (maOD)	Water Level <sup>1</sup> (mbgl)	Water Level (maOD)	DNAPL Depth <sup>1</sup> (mbgl)	DNAPL Depth (maOD)	Depth to base <sup>1</sup> (mbgl)	Depth to base (maOD)	Readings:											Sampling Method <sup>2</sup> (I, S, B, P)	Water Column (m)	Purged Volume <sup>3</sup> (L)	Sample Ref	Comments: (e.g. problems encountered, standpipe conditions, unusual odours, colour, turbidity, sheens)					
													Barometric Pressure (mB)	Air Temp (°C)	Downhole Temp (°C)	pH	Electrical Conductivity (µS/cm)	DO (%)	Redox Potential (mV)	Resistivity (Ohm-cm)	Salinity (psu)	Density (g/cm³)	TDS (ppt)						Water Pressure (psi)				
BH01	PIPE1 (50mm)	25/08/2021	09:55:00	36.55	N/E		Dry		N/E		3.95	32.60																					
BH02	PIPE1 (50mm)	25/08/2021	10:50:00	36.81	N/E		3.65	33.16	N/E		3.69	33.12													0.04								
BH03	PIPE1 (50mm)	25/08/2021	09:20:00	36.59	N/E		Dry		N/E		2.80	33.79																					
WS01	PIPE1 (50mm)	25/08/2021	11:03:00	36.60	N/E		2.82	33.78	N/E		3.68	32.92													0.86								
WS02	PIPE1 (50mm)	25/08/2021	10:26:00	36.82	N/E		2.23	34.59	N/E		2.34	34.48													0.11								
WS03	PIPE1 (50mm)	25/08/2021	09:37:00	36.61	N/E		Dry		N/E		1.35	35.26																					



				Gas and PID Monitoring Results																				
Project ID: GL24466				Client: The Big Yellow Construction Company Ltd				Equipment				Model / Serial Number									Manufacturer's Calibration Date			
Date: 31/08/2021				Location: Big Yellow, Kentish Town				Gas Analyser: GA5000 / G501752				PID: Tiger Handheld VOC Detector / T-113655									03/03/2020			
Weather conditions: Cloudy and dry				Pump Running Time (Purge): Standard 30 secs. Pump Running Time (Sampling): Standard 180 secs. Flow Details: 5 sec average for 1 min.				PID Details: "<" indicates reading is under the detection limit. ">" indicates reading is over the upper limit. "**" level to be determined.																
Field engineer(s): T. Leather-Younghusband					Remarks:																			
Location ID	Monitoring Pipe and Diameter	Date Monitored	Time	Air Temp (°C)	Atmospheric Pressure 48Hrs Prior to Sampling (mB)	Atmospheric Pressure 24Hrs Prior to Sampling (mB)	Atmospheric Pressure 3Hrs Prior to Sampling (mB)	Atmospheric Pressure When Sampled (mB)	Relative Pressure (mB)	Peak PID (ppm)	Stable PID (ppm)	Methane (%)	Peak Methane (%)	Methane LEL (%)	Carbon Dioxide (%)	Oxygen (%)	Carbon Monoxide (ppm)	Hydrogen Sulphide (ppm)	Flow (l/hr)	Remarks				
BH01	PIPE1 (50mm)	31/08/2021	12:26:00	16.7	1025	1026	1030	1028	0.31	0.1	4.9	0.1	0.1	2.0	0.0	22.6	0.0	0.0	0.0					
			12:26:15							1.4		0.1			3.8	19.0	0.0	0.0	0.0					
			12:26:30							2.3		0.1			3.8	18.1	0.0	0.0	0.0					
			12:26:45							2.7		0.1			3.8	18.0	0.0	0.0	0.0					
			12:27:00							3.0		0.1			3.8	18.0	0.0	0.0	0.0					
			12:27:30							3.4		0.1			3.8	18.0	0.0	0.0	0.0					
			12:28:00							3.6		0.1			3.8	18.0	0.0	0.0	0.0					
			12:29:00							3.9		0.1			3.8	17.9	0.0	0.0	0.0					
			12:30:00							4.3		0.1			3.9	17.8	0.0	0.0	0.0					
			12:31:00							4.7		0.1			3.9	17.8	0.0	0.0	0.0					
			12:32:00							4.9		0.1			3.9	17.8	0.0	0.0	0.0					
			12:33:00							4.9		0.1			3.9	17.8	0.0	0.0	0.0					
	PIPE2 (19mm)	31/08/2021	12:46:00	16.9	1025	1027	1030	1028	1.66	1.5	1.2	0.1	0.1	2.0	0.9	22.4	0.0	0.0	0.1					
			12:46:15							1.4		0.1			2.4	19.4	0.0	0.0	0.1					
			12:46:30							1.2		0.1			2.4	18.0	0.0	0.0	0.1					
			12:46:45							1.1		0.1			2.4	17.9	0.0	0.0	0.1					
			12:47:00							1.0		0.1			2.5	17.8	0.0	0.0	0.1					
			12:47:30							0.9		0.1			2.5	17.5	0.0	0.0	0.1					
			12:48:00							0.8		0.1			2.8	16.6	0.0	0.0	0.1					
			12:49:00							1.2		0.1			3.3	16.1	0.0	0.0	0.1					
			12:50:00							1.2		0.1			3.3	16.0	0.0	0.0	0.1					
			BH02	PIPE1 (50mm)	31/08/2021	14:38:00	17.5	1025	1027	1030	1028	-0.03	0.6	0.5	0.0	0.0	0.0	0.4	22.4	0.0	0.0	0.0		
						14:38:15							1.6		0.0			2.9	7.5	0.0	0.0	0.0		
						14:38:30							1.8		0.0			2.9	7.0	0.0	0.0	0.0		
14:38:45										1.8		0.0			2.9	7.0	0.0	0.0	0.0					
14:39:00										1.8		0.0			2.9	6.9	0.0	0.0	0.0					
14:39:30										1.6		0.0			2.9	6.8	0.0	0.0	0.0					
14:40:00										1.5		0.0			2.9	6.8	0.0	0.0	0.0					
14:41:00										1.2		0.0			2.9	6.7	0.0	0.0	0.0					
			14:42:00						0.9		0.0			3.0	6.7	0.0	0.0	0.0						
			14:43:00							0.7		0.0			3.0	6.6	0.0	0.0	0.0					
			14:44:00							0.5		0.0			3.0	6.6	0.0	0.0	0.0					
			14:45:00							0.5		0.0			2.9	6.5	0.0	0.0	0.0					
BH03	PIPE1 (50mm)	31/08/2021	14:00:00	18.1	1025	1027	1030	1027	0.15	0.7	0.4	0.0	0.0	0.0	0.2	22.7	0.0	0.0	0.0					
			14:00:15							0.6		0.0			4.1	18.3	0.0	0.0	0.0					
			14:00:30							0.6		0.0			4.3	16.2	0.0	0.0	0.0					
			14:00:45							0.6		0.0			4.5	15.8	0.0	0.0	0.0					
			14:01:00							0.6		0.0			4.7	15.4	0.0	0.0	0.0					
			14:01:30							0.6		0.0			5.0	14.9	0.0	0.0	0.0					
			14:02:00							0.5		0.0			5.4	14.5	0.0	0.0	0.0					
			14:03:00							0.4		0.0			5.6	14.1	0.0	0.0	0.0					
WS01	PIPE1 (50mm)	31/08/2021	12:58:00	16.9	1025	1027	1030	1028	0.03	0.4	0.2	0.0	0.0	0.0	0.3	22.0	0.0	0.0	0.0					
			12:58:15							0.4		0.0			1.6	22.0	0.0	0.0	0.0					
			12:58:30							0.3		0.0			1.7	21.5	0.0	0.0	0.0					
			12:58:45							0.3		0.0			1.8	21.4	0.0	0.0	0.0					
			12:59:00							0.3		0.0			1.8	21.4	0.0	0.0	0.0					
			12:59:30							0.3		0.0			1.9	21.4	0.0	0.0	0.0					
			13:00:00							0.2		0.0			1.9	21.4	0.0	0.0	0.0					
			13:01:00							0.2		0.0			1.9	21.4	0.0	0.0	0.0					



					Gas and PID Monitoring Results																	
Project ID: GL24466		Client: The Big Yellow Construction Company Ltd		Equipment		Model / Serial Number															Manufacturer's Calibration Date	
Date: 31/08/2021		Location: Big Yellow, Kentish Town		Gas Analyser: GA5000 / G501752																	03/03/2020	
Weather conditions: Cloudy and dry				PID: Tiger Handheld VOC Detector / T-113655																	14/05/2020	
Pump Running Time (Purge): Standard 30 secs. Pump Running Time (Sampling): Standard 180 secs. Flow Details: 5 sec average for 1 min.										PID Details: "<" indicates reading is under the detection limit. ">" indicates reading is over the upper limit. "**" level to be determined.												
Field engineer(s): T. Leather-Younghusband					Remarks:																	
Location ID	Monitoring Pipe and Diameter	Date Monitored	Time	Air Temp (°C)	Atmospheric Pressure 48Hrs Prior to Sampling (mB)	Atmospheric Pressure 24Hrs Prior to Sampling (mB)	Atmospheric Pressure 3Hrs Prior to Sampling (mB)	Atmospheric Pressure When Sampled (mB)	Relative Pressure (mB)	Peak PID (ppm)	Stable PID (ppm)	Methane (%)	Peak Methane (%)	Methane LEL (%)	Carbon Dioxide (%)	Oxygen (%)	Carbon Monoxide (ppm)	Hydrogen Sulphide (ppm)	Flow (l/hr)	Remarks		
WS02	PIPE1 (50mm)	31/08/2021	14:18:00	18.1	1025	1027	1030	1028	-0.15	1.2	0.7	0.0	0.1	2.0	0.6	22.4	0.0	0.0	0.0			
			14:18:15							1.6		0.1			3.7	17.3	0.0	0.0	0.0			
			14:18:30							1.8		0.1			3.7	15.2	0.0	0.0	0.0			
			14:18:45							1.9		0.1			3.7	15.1	0.0	0.0	0.0			
			14:19:00							1.8		0.1			3.7	15.1	0.0	0.0	0.0			
			14:19:30							1.8		0.1			3.7	15.0	0.0	0.0	0.0			
			14:20:00							1.6		0.1			3.7	15.0	0.0	0.0	0.0			
			14:21:00							1.3		0.1			3.7	15.0	0.0	0.0	0.0			
			14:22:00							0.7		0.1			3.4	15.3	0.0	0.0	0.0			
			14:23:00							0.7		0.1			3.2	15.5	0.0	0.0	0.0			
WS03	PIPE1 (50mm)	31/08/2021	12:10:00	16.9	1025	1027	1029	1028	0.07	0.2	0.0	0.1	0.1	2.0	0.0	22.6	0.0	0.0	0.0			
			12:10:15							0.2		0.1			0.1	22.7	0.0	0.0	0.0			
			12:10:30							0.1		0.1			0.1	22.5	0.0	0.0	0.0			
			12:10:45							0.0		0.1			0.1	22.5	0.0	0.0	0.0			
			12:11:00							0.0		0.1			0.1	22.4	0.0	0.0	0.0			
			12:11:30							0.0		0.1			0.1	22.4	0.0	0.0	0.0			
			12:12:00							0.0		0.1			0.1	22.3	0.0	0.0	0.0			
			12:13:00							0.0		0.1			0.2	22.3	0.0	0.0	0.0			



				Groundwater Monitoring Results																														
Project ID: GL24466				Client: The Big Yellow Construction Company Ltd								Weather conditions: Cloudy and dry																						
Date: 31/08/2021				Location: Big Yellow, Kentish Town								Ground conditions: -																						
<sup>1</sup> = All (m) depth measurements are recorded as meters from the top of the installation cover.										<sup>2</sup> = I: Inertial, S: Submersible, B: Bailer, P: Peristaltic Pump.					<sup>3</sup> = Purge volume standardisation: 50mm standpipe = 6 x water column, 35mm = 3.5 x water column, 19mm = 1 x water column.																			
Field engineer(s): T. Leather-Younghusband										Remarks:																								
Location ID	Monitoring Pipe and Diameter	Date Monitored	Time	Surface Elevation (maOD)	LNAPL Depth <sup>1</sup> (mbgl)	LNAPL Depth (maOD)	Water Level <sup>1</sup> (mbgl)	Water Level (maOD)	DNAPL Depth <sup>1</sup> (mbgl)	DNAPL Depth (maOD)	Depth to base <sup>1</sup> (mbgl)	Depth to base (maOD)	Readings: SmarTROLL Multiparameter Handheld / PN0093230											Sampling Method <sup>2</sup> (I, S, B, P)	Water Column (m)	Purged Volume <sup>3</sup> (L)	Sample Ref	Comments: (e.g. problems encountered, standpipe conditions, unusual odours, colour, turbidity, sheens)						
													Barometric Pressure (mB)	Air Temp (°C)	Downhole Temp (°C)	pH	Electrical Conductivity (µS/cm)	DO (%)	Redox Potential (mV)	Resistivity (Ohm-cm)	Salinity (psu)	Density (g/cm³)	TDS (ppt)						Water Pressure (psi)					
BH01	PIPE1 (50mm)	31/08/2021	12:26:00	36.55	N/E		Dry		N/E		3.97	32.58																						
	PIPE2 (19mm)	31/08/2021	12:50:00	36.55	N/E		6.42	30.13	N/E		9.25	27.30			16.0	7.6	33	98.0	162.3					P	2.83		EW1-SP2	Slightly cloudy.						
BH02	PIPE1 (50mm)	31/08/2021	14:38:00	36.81	N/E		3.63	33.18	N/E		3.69	33.12													0.06									
BH03	PIPE1 (50mm)	31/08/2021	14:00:00	36.59	N/E		2.64	33.95	N/E		2.79	33.80													0.15									
WS01	PIPE1 (50mm)	31/08/2021	13:10:00	36.60	N/E		2.83	33.77	N/E		3.68	32.92			16.8	7.5	349	95.7	91.9					P	0.85		EW1-SP1	Slightly cloudy.						
WS02	PIPE1 (50mm)	31/08/2021	14:18:00	36.82	N/E		2.17	34.65	N/E		2.33	34.49													0.16									
WS03	PIPE1 (50mm)	31/08/2021	12:10:00	36.61	N/E		Dry		N/E		1.34	35.27																						



					Gas and PID Monitoring Results																	
Project ID: GL24466					Client: The Big Yellow Construction Company Ltd					Equipment					Model / Serial Number					Manufacturer's Calibration Date		
Date: 10/09/2021					Location: Big Yellow, Kentish Town					Gas Analyser: GA5000 / G501752										03/03/2020		
Weather conditions: Cloudy and dry										PID: Tiger Handheld VOC Detector / T-113655										14/05/2020		
Pump Running Time (Purge): Standard 30 secs. Pump Running Time (Sampling): Standard 180 secs. Flow Details: 5 sec average for 1 min.										PID Details: "<" indicates reading is under the detection limit. ">" indicates reading is over the upper limit. "**" level to be determined.												
Field engineer(s): T. Leather-Younghusband					Remarks:																	
Location ID	Monitoring Pipe and Diameter	Date Monitored	Time	Air Temp (°C)	Atmospheric Pressure 48Hrs Prior to Sampling (mB)	Atmospheric Pressure 24Hrs Prior to Sampling (mB)	Atmospheric Pressure 3Hrs Prior to Sampling (mB)	Atmospheric Pressure When Sampled (mB)	Relative Pressure (mB)	Peak PID (ppm)	Stable PID (ppm)	Methane (%)	Peak Methane (%)	Methane LEL (%)	Carbon Dioxide (%)	Oxygen (%)	Carbon Monoxide (ppm)	Hydrogen Sulphide (ppm)	Flow (l/hr)	Remarks		
BH01	PIPE1 (50mm)	10/09/2021	14:03:00	19.4	1011	1007	1010	1007	0.00	0.6	5.5	0.2	0.2	4.0	0.1	20.6	0.0	0.0	0.0			
			14:03:15							1.1		0.2			4.1	16.9	0.0	0.0	0.0			
			14:03:30							2.5		0.2			4.4	15.3	0.0	0.0	0.0			
			14:03:45							3.2		0.2			4.7	14.7	0.0	0.0	0.0			
			14:04:00							3.6		0.2			4.9	14.5	0.0	0.0	0.0			
			14:04:30							4.1		0.2			5.0	14.3	0.0	0.0	0.0			
			14:05:00							4.4		0.2			5.0	14.3	0.0	0.0	0.0			
			14:06:00							4.7		0.2			5.0	14.3	0.0	0.0	0.0			
			14:07:00							5.0		0.2			5.1	14.3	0.0	0.0	0.0			
			14:08:00							5.3		0.2			5.0	14.3	0.0	0.0	0.0			
			14:09:00							5.5		0.2			5.0	14.3	0.0	0.0	0.0			
			14:10:00							5.5		0.2			4.9	14.3	0.0	0.0	0.0			
			14:15:00	19.4	1011	1007	1010	1008	5.58	2.9	1.3	0.2	0.2	4.0	0.4	20.2	0.0	0.0	3.8			
			14:15:15							2.7		0.2			1.7	18.5	0.0	1.0	1.8			
BH02	PIPE1 (50mm)	10/09/2021	14:15:30							2.2		0.2			1.7	17.4	0.0	1.0	1.3			
			14:15:45							1.9		0.2			1.7	17.3	0.0	1.0	0.6			
			14:16:00							1.8		0.2			1.7	17.3	0.0	1.0	0.2			
			14:16:30							1.6		0.2			1.7	17.2	0.0	1.0	0.1			
			14:17:00							1.4		0.2			1.7	17.2	0.0	1.0	0.0			
			14:18:00							1.3		0.2			2.5	10.3	0.0	1.0	0.0			
			14:29:00	19.4	1011	1007	1009	1008	0.02	1.9	1.1	0.2	0.2	4.0	0.1	21.1	0.0	1.0	0.0			
			14:29:15							2.2		0.2			3.3	7.9	0.0	2.0	0.0			
			14:29:30							2.3		0.2			3.3	3.5	0.0	3.0	0.0			
			14:29:45							2.3		0.2			3.3	3.4	0.0	3.0	0.0			
			14:30:00							2.1		0.2			3.3	3.4	0.0	3.0	0.0			
			14:30:30							1.9		0.2			3.3	3.3	0.0	3.0	0.0			
			14:31:00							1.6		0.2			3.3	3.3	0.0	3.0	0.0			
			14:32:00							1.1		0.2			3.3	3.3	0.0	3.0	0.0			
BH03	PIPE1 (50mm)	10/09/2021	15:35:00	19.4	1010	1006	1010	1008	0.03	0.6	0.5	0.2	0.2	4.0	0.2	21.0	0.0	1.0	0.0			
			15:35:15							1.3		0.2			0.1	6.3	2.0	0.0	0.0			
			15:35:30							1.2		0.2			0.1	1.6	3.0	0.0	0.0			
			15:35:45							1.1		0.2			0.0	1.5	3.0	0.0	0.0			
			15:36:00							1.0		0.2			0.0	1.4	3.0	0.0	0.0			
			15:36:30							0.8		0.2			0.0	1.1	3.0	0.0	0.0			
			15:37:00							0.6		0.2			0.0	0.9	3.0	0.0	0.0			
			15:38:00							0.5		0.2			0.1	0.5	3.0	0.0	0.0			
			13:46:00	19.4	1011	1008	1010	1007	0.00	0.9	0.3	0.5	4.3	86.0	0.1	20.8	0.0	0.0	0.0			
			13:46:15							0.8		3.8			6.6	10.8	0.0	0.0	0.0			
			13:46:30							0.6		3.8			6.7	6.9	0.0	1.0	0.0			
			13:46:45							0.6		3.8			6.8	6.6	0.0	1.0	0.0			
			13:47:00							0.5		3.9			6.9	6.4	0.0	1.0	0.0			
			13:47:30							0.5		4.1			7.1	6.3	0.0	1.0	0.0			
WS01	PIPE1 (50mm)	10/09/2021	13:48:00							0.5		4.3			7.3	6.1	0.0	1.0	0.0			
			13:49:00							0.3		4.2			7.3	6.0	0.0	1.0	0.0			
			14:59:00	19.4	1010	1007	1010	1008	0.02	0.8	0.2	0.2	0.2	4.0	0.2	20.7	0.0	1.0	0.0			
			14:59:15							0.7		0.2			0.6	20.9	0.0	1.0	0.0			
			14:59:30							0.6		0.2			0.6	20.5	0.0	1.0	0.0			
			14:59:45							0.5		0.2			0.7	20.4	0.0	1.0	0.0			
			15:00:00							0.4		0.2			0.8	20.3	0.0	0.0	0.0			
			15:00:30							0.4		0.2			0.9	20.2	0.0	0.0	0.0			
			15:01:00							0.3		0.2			1.0	20.2	0.0	0.0	0.0			
			15:02:00							0.2		0.2			1.2	20.2	0.0	0.0	0.0			





					Gas and PID Monitoring Results																	
Project ID: GL24466		Client: The Big Yellow Construction Company Ltd			Equipment		Model / Serial Number											Manufacturer's Calibration Date				
Date: 10/09/2021		Location: Big Yellow, Kentish Town			Gas Analyser: GA5000 / G501752		03/03/2020															
Weather conditions: Cloudy and dry					PID: Tiger Handheld VOC Detector / T-113655		14/05/2020															
Pump Running Time (Purge): Standard 30 secs. Pump Running Time (Sampling): Standard 180 secs. Flow Details: 5 sec average for 1 min.					PID Details: "<" indicates reading is under the detection limit. ">" indicates reading is over the upper limit. "**" level to be determined.																	
Field engineer(s): T. Leather-Younghusband					Remarks:																	
Location ID	Monitoring Pipe and Diameter	Date Monitored	Time	Air Temp (°C)	Atmospheric Pressure 48Hrs Prior to Sampling (mB)	Atmospheric Pressure 24Hrs Prior to Sampling (mB)	Atmospheric Pressure 3Hrs Prior to Sampling (mB)	Atmospheric Pressure When Sampled (mB)	Relative Pressure (mB)	Peak PID (ppm)	Stable PID (ppm)	Methane (%)	Peak Methane (%)	Methane LEL (%)	Carbon Dioxide (%)	Oxygen (%)	Carbon Monoxide (ppm)	Hydrogen Sulphide (ppm)	Flow (l/hr)	Remarks		
WS02	PIPE1 (50mm)	10/09/2021	14:43:00	19.4	1011	1007	1009	1008	-0.09	2.3	2.0	0.2	0.3		6.0	0.3	20.2	0.0	1.0	0.0		
			14:43:15							2.4		0.3			3.9	15.0	0.0	1.0	0.0			
			14:43:30							2.4		0.3			3.9	13.2	0.0	1.0	0.0			
			14:43:45							2.7		0.3			4.0	13.1	0.0	1.0	0.0			
			14:44:00							2.8		0.3			4.0	13.1	0.0	1.0	0.0			
			14:44:30							2.7		0.3			4.0	13.1	0.0	1.0	0.0			
			14:45:00							2.5		0.3			4.0	13.1	0.0	1.0	0.0			
			14:46:00							2.0		0.3			4.0	13.2	0.0	1.0	0.0			
WS03	PIPE1 (50mm)	10/09/2021	13:55:00	19.4	1011	1007	1010	1008	-0.12	0.4	0.0	0.4	0.4	8.0	0.5	19.8	0.0	0.0	0.0			
			13:55:15							0.4		0.3			0.5	19.4	0.0	0.0	0.0			
			13:55:30							0.3		0.2			0.6	19.0	0.0	0.0	0.0			
			13:55:45							0.2		0.2			0.6	19.2	0.0	0.0	0.0			
			13:56:00							0.1		0.2			0.5	19.4	0.0	0.0	0.0			
			13:56:30							0.0		0.2			0.3	19.9	0.0	0.0	0.0			
			13:57:00							0.0		0.2			0.3	19.9	0.0	0.0	0.0			
			13:58:00							0.0		0.2			0.3	19.9	0.0	0.0	0.0			

				Groundwater Monitoring Results																									
Project ID: GL24466				Client: The Big Yellow Construction Company Ltd								Weather conditions: Cloudy and dry																	
Date: 10/09/2021				Location: Big Yellow, Kentish Town								Ground conditions: -																	
<sup>1</sup> = All (m) depth measurements are recorded as meters from the top of the installation cover.										<sup>2</sup> = I: Inertial, S: Submersible, B: Bailer, P: Peristaltic Pump.						<sup>3</sup> = Purge volume standardisation: 50mm standpipe = 6 x water column, 35mm = 3.5 x water column, 19mm = 1 x water column.													
Field engineer(s): T. Leather-Younghusband										Remarks:																			
Location ID	Monitoring Pipe and Diameter	Date Monitored	Time	Surface Elevation (maOD)	LNAPL Depth <sup>1</sup> (mbgl)	LNAPL Depth (maOD)	Water Level <sup>1</sup> (mbgl)	Water Level (maOD)	DNAPL Depth <sup>1</sup> (mbgl)	DNAPL Depth (maOD)	Depth to base <sup>1</sup> (mbgl)	Depth to base (maOD)	Readings:											Sampling Method <sup>2</sup> (I, S, B, P)	Water Column (m)	Purged Volume <sup>3</sup> (L)	Sample Ref	Comments: (e.g. problems encountered, standpipe conditions, unusual odours, colour, turbidity, sheens)	
BH01	PIPE1 (50mm)	10/09/2021	14:12:00	36.55	N/E		Dry		N/E		4.93	31.62	Barometric Pressure (mB)	Air Temp (°C)	Downhole Temp (°C)	pH	Electrical Conductivity (µS/cm)	DO (%)	Redox Potential (mV)	Resistivity (Ohm-cm)	Salinity (psu)	Density (g/cm³)	TDS (ppt)	Water Pressure (psi)					
	PIPE2 (19mm)	10/09/2021	14:25:00	36.55	N/E		4.26	32.29	N/E		9.19	27.36														4.93			
BH02	PIPE1 (50mm)	10/09/2021	14:36:00	36.81	N/E		3.64	33.17	N/E		3.67	33.14														0.03			
BH03	PIPE1 (50mm)	10/09/2021	13:53:00	36.59	N/E		2.54	34.05	N/E		2.80	33.79														0.26			
WS01	PIPE1 (50mm)	10/09/2021	15:10:00	36.60	N/E		2.93	33.67	N/E		3.70	32.90														0.77			
WS02	PIPE1 (50mm)	10/09/2021	14:52:00	36.82	N/E		Dry		N/E		2.34	34.48																	
WS03	PIPE1 (50mm)	10/09/2021	13:59:00	36.61	N/E		Dry		N/E		1.35	35.26																	

					Gas and PID Monitoring Results																	
Project ID: GL24466		Client: The Big Yellow Construction Company Ltd			Equipment		Model / Serial Number										Manufacturer's Calibration Date					
Date: 22/09/2021		Location: Big Yellow, Kentish Town			Gas Analyser:		GA5000 / G501752										03/03/2020					
Weather conditions: Sunny and dry					PID:		Tiger Handheld VOC Detector / T-113655										14/05/2020					
Pump Running Time (Purge): Standard 30 secs. Pump Running Time (Sampling): Standard 180 secs. Flow Details: 5 sec average for 1 min.					PID Details: "<" indicates reading is under the detection limit. ">" indicates reading is over the upper limit. "*" level to be determined.																	
Field engineer(s): J. Blyth					Remarks:																	
Location ID	Monitoring Pipe and Diameter	Date Monitored	Time	Air Temp (°C)	Atmospheric Pressure 48Hrs Prior to Sampling (mB)	Atmospheric Pressure 24Hrs Prior to Sampling (mB)	Atmospheric Pressure 3Hrs Prior to Sampling (mB)	Atmospheric Pressure When Sampled (mB)	Relative Pressure (mB)	Peak PID (ppm)	Stable PID (ppm)	Methane (%)	Peak Methane (%)	Methane LEL (%)	Carbon Dioxide (%)	Oxygen (%)	Carbon Monoxide (ppm)	Hydrogen Sulphide (ppm)	Flow (l/hr)	Remarks		
BH01	PIPE1 (50mm)	22/09/2021	15:35:00	21.4	1023	1030	1027	1025	0.07	0.3	4.7	0.0	0.0	0.0	0.2	23.4	1.0	0.0	0.0			
			15:35:15							1.8		0.0			4.9	16.5	1.0	0.0	0.0			
			15:35:30							2.6		0.0			4.9	16.3	0.0	0.0	0.1			
			15:35:45							3.0		0.0			4.9	16.3	0.0	0.0	0.1			
			15:36:00							3.3		0.0			4.9	16.3	0.0	0.0	0.1			
			15:36:30							3.7		0.0			5.0	16.2	0.0	0.0	0.1			
			15:37:00							3.8		0.0			5.0	16.2	0.0	0.0	0.1			
			15:38:00							4.1		0.0			5.0	16.0	0.0	0.0	0.1			
			15:39:00							4.4		0.0			5.1	15.8	0.0	0.0				
			15:40:00							4.6		0.0			5.1	15.7	0.0	0.0				
			15:41:00							4.7		0.0			5.0	15.7	0.0	0.0				
			15:42:00							4.7		0.0			5.0	15.7	0.0	0.0				
BH02	PIPE1 (50mm)	22/09/2021	15:00:00	21.3	1023	1030	1028	1026	-0.03	0.3	0.9	0.0	0.0	0.0	0.1	23.5	1.0	0.0	0.0			
			15:00:15							1.4		0.0			3.8	11.1	1.0	0.0	0.0			
			15:00:30							1.5		0.0			3.9	10.8	1.0	0.0	0.0			
			15:00:45							1.5		0.0			3.9	10.7	1.0	0.0	0.0			
			15:01:00							1.5		0.0			3.9	10.7	1.0	0.0	0.0			
			15:01:30							1.4		0.0			3.9	10.7	0.0	0.0	0.0			
			15:02:00							1.2		0.0			3.9	10.7	0.0	0.0	0.0			
			15:03:00							0.9		0.0			3.9	10.7	0.0	0.0	0.0			
BH03	PIPE1 (50mm)	22/09/2021	14:40:00	21.1	1023	1030	1028	1026	0.32	0.2	0.1	0.0	0.0	0.0	5.1	13.7	0.0	0.0	0.0	Pre-Nitrogen Purge. Gas sample taken with tedlar bag.		
			14:40:15							0.2		0.0			5.5	12.4	0.0	0.0	0.0			
			14:40:30							0.2		0.0			5.6	12.2	0.0	0.0	0.0			
			14:40:45							0.2		0.0			5.6	12.1	0.0	0.0	0.0			
			14:41:00							0.2		0.0			5.6	12.1	0.0	0.0	0.0			
			14:41:30							0.2		0.0			5.7	12.1	0.0	0.0	0.0			
			14:42:00							0.2		0.0			5.7	12.0	0.0	0.0	0.0			
			14:43:00							0.1		0.0			5.7	12.0	0.0	0.0	0.0	Post-Nitrogen Purge. Gas sample taken with tedlar bag.		
			16:20:00	20.9	1024	1030	1027	1025	0.82	0.7	0.3	0.0	0.0	0.0	0.1	24.0	0.0	0.0	0.0			
			16:20:15							1.2		0.0			0.9	3.0	0.0	0.0	0.0			
			16:20:30							1.0		0.0			1.0	2.5	1.0	0.0	0.0			
			16:20:45							0.8		0.0			1.2	2.5	1.0	0.0	0.0			
			16:21:00							0.7		0.0			1.3	2.6	1.0	0.0	0.0			
			16:21:30							0.6		0.0			2.0	3.6	1.0	0.0	0.0			
			16:22:00							0.5		0.0			2.6	4.2	1.0	0.0	0.0			
			16:23:00							0.4		0.0			3.1	4.8	1.0	0.0	0.0			
			16:24:00							0.4		0.0			3.3	5.2	1.0	0.0				
			16:25:00							0.4		0.0			3.4	5.5	1.0	0.0				
			16:26:00							0.3		0.0			3.5	5.8	0.0	0.0				
			16:27:00							0.3		0.0			3.6	6.1	0.0	0.0				
			16:28:00							0.3		0.0			3.6	6.5	0.0	0.0				
WS01	PIPE1 (50mm)	22/09/2021	16:45:00	20.7	1024	1029	1027	1025	0.00	0.4	0.1	0.0	0.0	0.0	0.2	23.4	0.0	0.0	0.0			
			16:45:15							0.4		0.0			0.5	23.0	0.0	0.0	0.0			
			16:45:30							0.3		0.0			0.6	22.9	0.0	0.0	0.0			
			16:45:45							0.3		0.0			0.6	22.9	0.0	0.0	0.0			
			16:46:00							0.3		0.0			0.7	22.8	0.0	0.0	0.0			
			16:46:30							0.2		0.0			0.8	22.6	0.0	0.0	0.0			
			16:47:00							0.2		0.0			0.9	22.5	0.0	0.0	0.0			
			16:48:00							0.1		0.0			1.0	22.4	0.0	0.0	0.0			
			16:49:00							0.1		0.0			1.1	22.3	0.0	0.0				
			16:50:00							0.1		0.0			1.1	22.3	0.0	0.0				

					Gas and PID Monitoring Results																
Project ID: GL24466		Client: The Big Yellow Construction Company Ltd			Equipment		Model / Serial Number										Manufacturer's Calibration Date				
Date: 22/09/2021		Location: Big Yellow, Kentish Town			Gas Analyser:		GA5000 / G501752										03/03/2020				
Weather conditions: Sunny and dry					PID:		Tiger Handheld VOC Detector / T-113655										14/05/2020				
Pump Running Time (Purge): Standard 30 secs. Pump Running Time (Sampling): Standard 180 secs. Flow Details: 5 sec average for 1 min.					PID Details: "<" indicates reading is under the detection limit. ">" indicates reading is over the upper limit. "*" level to be determined.																
Field engineer(s): J. Blyth					Remarks:																
Location ID	Monitoring Pipe and Diameter	Date Monitored	Time	Air Temp (°C)	Atmospheric Pressure 48Hrs Prior to Sampling (mB)	Atmospheric Pressure 24Hrs Prior to Sampling (mB)	Atmospheric Pressure 3Hrs Prior to Sampling (mB)	Atmospheric Pressure When Sampled (mB)	Relative Pressure (mB)	Peak PID (ppm)	Stable PID (ppm)	Methane (%)	Peak Methane (%)	Methane LEL (%)	Carbon Dioxide (%)	Oxygen (%)	Carbon Monoxide (ppm)	Hydrogen Sulphide (ppm)	Flow (l/hr)	Remarks	
WS02	PIPE1 (50mm)	22/09/2021	14:00:00	21.4	1023	1030	1028	1027	0.00	0.1	0.2	0.0	0.0	0.0	0.1	23.3	0.0	0.0	0.0		
			14:00:15							1.0		0.0			4.1	17.8	1.0	0.0	0.0		
			14:00:30							1.0		0.0			4.2	15.7	0.0	0.0	0.0		
			14:00:45							1.0		0.0			4.2	15.6	0.0	0.0	0.0		
			14:01:00							1.0		0.0			4.2	15.6	0.0	0.0	0.0		
			14:01:30							0.9		0.0			4.2	15.5	0.0	0.0	0.0		
			14:02:00							0.8		0.0			4.2	15.5	0.0	0.0	0.0		
			14:03:00							0.6		0.0			4.1	15.5	0.0	0.0	0.0		
			14:04:00							0.4		0.0			3.8	15.8	0.0	0.0			
			14:05:00							0.3		0.0			3.5	16.1	0.0	0.0			
			14:06:00							0.3		0.0			3.4	16.1	0.0	0.0			
			14:07:00							0.2		0.0			3.1	16.3	0.0	0.0			
			14:08:00							0.2		0.0			3.0	16.4	0.0	0.0			
			14:09:00							0.2		0.0			2.8	16.6	0.0	0.0			
			14:10:00							0.2		0.0			2.7	16.7	0.0	0.0			
			14:11:00							0.2		0.0			2.6	16.8	0.0	0.0			
			14:12:00							0.2		0.0			2.5	17.0	0.0	0.0			
			14:13:00							0.2		0.0			2.5	17.1	0.0	0.0			
WS03	PIPE1 (50mm)	22/09/2021	16:00:00	21.1	1023	1030	1027	1025	-0.02	0.6	0.4	0.0	0.0	0.0	0.1	23.9	0.0	0.0	0.0		
			16:00:15							1.2		0.0			2.8	18.0	0.0	0.0	0.1		
			16:00:30							0.9		0.0			2.7	17.9	0.0	0.0	0.1		
			16:00:45							0.7		0.0			2.6	18.0	0.0	0.0	0.1		
			16:01:00							0.6		0.0			2.5	18.1	0.0	0.0	0.1		
			16:01:30							0.5		0.0			2.3	18.3	0.0	0.0	0.1		
			16:02:00							0.4		0.0			2.3	18.3	0.0	0.0	0.1		
			16:03:00							0.4		0.0			2.3	18.5	0.0	0.0	0.1		

				Groundwater Monitoring Results																									
Project ID: GL24466				Client: The Big Yellow Construction Company Ltd								Weather conditions: Sunny and dry																	
Date: 22/09/2021				Location: Big Yellow, Kentish Town								Ground conditions: -																	
<sup>1</sup> = All (m) depth measurements are recorded as meters from the top of the installation cover.										<sup>2</sup> = I: Inertial, S: Submersible, B: Bailer, P: Peristaltic Pump.						<sup>3</sup> = Purge volume standardisation: 50mm standpipe = 6 x water column, 35mm = 3.5 x water column, 19mm = 1 x water column.													
Field engineer(s): J. Blyth										Remarks:																			
Location ID	Monitoring Pipe and Diameter	Date Monitored	Time	Surface Elevation (maOD)	LNAPL Depth <sup>1</sup> (mbgl)	LNAPL Depth (maOD)	Water Level <sup>1</sup> (mbgl)	Water Level (maOD)	DNAPL Depth <sup>1</sup> (mbgl)	DNAPL Depth (maOD)	Depth to base <sup>1</sup> (mbgl)	Depth to base (maOD)	Readings:										Sampling Method <sup>2</sup> (I, S, B, P)	Water Column (m)	Purged Volume <sup>3</sup> (L)	Sample Ref	Comments: (e.g. problems encountered, standpipe conditions, unusual odours, colour, turbidity, sheens)		
BH01	PIPE1 (50mm)	22/09/2021	15:35:00	36.55	N/E		2.37	34.18	N/E		3.94	32.61	Barometric Pressure (mB)	Air Temp (°C)	Downhole Temp (°C)	pH	Electrical Conductivity (µS/cm)	DO (%)	Redox Potential (mV)	Resistivity (Ohm-cm)	Salinity (psu)	Density (g/cm³)	TDS (ppt)	Water Pressure (psi)		1.57			
	PIPE2 (19mm)	22/09/2021	15:35:00	36.55	N/E		2.44	34.11	N/E		9.18	27.37													6.74				
BH02	PIPE1 (50mm)	22/09/2021	15:00:00	36.81	N/E		2.57	34.24	N/E		3.67	33.14													1.10				
BH03	PIPE1 (50mm)	22/09/2021	14:40:00	36.59	N/E		2.35	34.24	N/E		2.82	33.77													0.47				
WS01	PIPE1 (50mm)	22/09/2021	16:45:00	36.60	N/E		2.86	33.74	N/E		3.68	32.92													0.82				
WS02	PIPE1 (50mm)	22/09/2021	14:00:00	36.82	N/E		2.03	34.79	N/E		2.33	34.49													0.30				
WS03	PIPE1 (50mm)	22/09/2021	16:00:00	36.61	N/E		Dry		N/E		1.34	35.27																	



## **APPENDIX D**

### **GEOTECHNICAL LABORATORY TESTING**

### Harrison Testing Services

Unit 1, Alston Road  
Hellesdon Park Industrial Estate  
Norwich NR6 5DS

Tel: +44 (0) 1603 416333  
www.harrisongroupuk.com  
Email: laboratory@harrisongroupuk.com

### Harrison Group Environmental

12, Waterways Business Centre  
Navigation Drive  
Enfield  
EN3 6JJ

For the attention of: Martin Cooper

Page 1 of 1  
Issue No: 02

Project: **BY Kentish Town**  
Report No: **GL24466-01**  
Your Ref: **GL24466**

Samples received: 25/08/2021  
Instruction received: 25/08/2021  
Testing commenced: 07/09/2021

Please find results attached as summarised below.

Item	Description	Quantity	UKAS Accredited
1	Moisture Content	27	Yes
2	Liquid & Plastic Limits	5	Yes
4	Particle Size Distribution - Wet Sieve Method	6	Yes
5	Particle Size Distribution - Pipette Sedimentation Method	3	Yes
6	Unconsolidated Undrained Shear Strength - Single Stage	17	Yes

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Issued by:

Date Issued:



M. Willson

Laboratory Manager

19 October 2021



4031




# DETERMINATION OF MOISTURE CONTENT


BS 1377 : Part 2 : 1990 : Clause 3.2

Project Name:			BY Kentish Town		Project Number:
Client Name:			The Big Yellow Construction Company Ltd		GL24466
Location	Depth m	Sample Ref	Sample Description	Moisture Content %	Remarks
BH02	0.30	D1	MADE GROUND (Brown clayey slightly sandy GRAVEL. Gravel is of flint and brick fragments).	7.7	
BH02	0.60	D2	MADE GROUND (Grey and grey brown slightly gravelly CLAY. Gravel is of flint and brick fragments).	30	
BH02	0.80	D3	MADE GROUND (Dark grey slightly gravelly CLAY. Gravel is of flint and brick fragments).	30	
BH02	3.40	D4	Brown mottled grey CLAY with selenite crystals.	22	
BH02	3.95-4.05	D5	Brown mottled grey CLAY with selenite crystals.	29	
BH02	4.50-4.95	D6	Brown mottled grey CLAY with selenite crystals.	25	
BH02	6.45-6.55	D7	Brown mottled grey CLAY with selenite crystals.	28	
BH03	1.50-1.95	D3	MADE GROUND (Dark grey brown and grey brown slightly gravelly CLAY. Gravel is of flint and brick fragments).	21	
BH03	2.00	D4	Grey and dark grey mottled orange brown slightly gravelly CLAY with roots. Gravel is of flint.	22	
BH03	2.50	D5	Brown and grey brown slightly gravelly CLAY. Gravel is of flint.	29	
<p>Notes:</p> <ol style="list-style-type: none"> <li>1) Unless we are notified to the contrary, samples will be disposed after a period of one month from this date.</li> <li>2) This report should not be reproduced except in full without the written approval of the laboratory.</li> <li>3) Only those results indicated in this report are UKAS accredited and any opinion or interpretations expressed are outside the scope of UKAS accreditation.</li> </ol>					
Remarks			Approved	Date	Sheet No.:
			MW M. Willson Laboratory Manager	22/09/2021	1 of 3



			<b>DETERMINATION OF MOISTURE CONTENT</b> BS 1377 : Part 2 : 1990 : Clause 3.2		
Project Name:			BY Kentish Town		Project Number:
Client Name:			The Big Yellow Construction Company Ltd		GL24466
Location	Depth m	Sample Ref	Sample Description	Moisture Content %	Remarks
BH03	3.00	D6	Brown mottled grey and orange brown slightly gravelly CLAY. Gravel is of siltstone.	26	
BH03	3.50	D7	Brown mottled grey and orange brown slightly gravelly CLAY. Gravel is of siltstone.	26	
BH03	3.50-3.95	D8	Brown mottled grey and orange brown CLAY.	31	
BH03	4.50	D9	Brown mottled grey and orange brown CLAY.	32	
TP01	2.40-2.60	B4	Brown CLAY.	30	
WS01	0.20	D1	MADE GROUND (Brown slightly gravelly CLAY. Gravel is of flint and brick fragments).	25	
WS01	0.40	D2	MADE GROUND (Brown and dark brown slightly gravelly CLAY. Gravel is of flint and brick fragments).	25	
WS01	0.70	D3	MADE GROUND (Dark grey brown gravelly CLAY. Gravel is of flint and brick fragments).	20	
WS01	1.00	D4	MADE GROUND (Dark grey sandy clayey GRAVEL. Gravel is of flint, quartzite and brick fragments).	17	
WS01	1.50	D5	MADE GROUND (Grey brown and brown gravelly CLAY. Gravel is of brick fragments).	24	
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			<b>DETERMINATION OF MOISTURE CONTENT</b> BS 1377 : Part 2 : 1990 : Clause 3.2		
Project Name:			BY Kentish Town		Project Number:
Client Name:			The Big Yellow Construction Company Ltd		GL24466
Location	Depth m	Sample Ref	Sample Description	Moisture Content %	Remarks
WS01	2.00	D6	MADE GROUND (Brown mottled grey slightly gravelly CLAY. Gravel is of coal and brick fragments).	29	
WS01	2.50	D7	MADE GROUND (Brown mottled grey slightly gravelly CLAY. Gravel is of flint).	29	
WS01	3.00	D8	MADE GROUND (Dark grey gravelly slightly sandy CLAY. Gravel is of flint and brick fragments).	25	
WS01	3.60	D9	Grey and brown CLAY.	34	
WS01	4.50	D10	Brown mottled grey CLAY.	41	
WS02	1.00	D4	MADE GROUND (Grey brown mottled grey slightly gravelly slightly sandy CLAY. Gravel is of brick fragments).	33	
WS02	2.80	D8	Brown mottled occasional grey slightly gravelly CLAY. Gravel is of flint	34	
Notes: 1) Unless we are notified to the contrary, samples will be disposed after a period of one month from this date. 2) This report should not be reproduced except in full without the written approval of the laboratory. 3) Only those results indicated in this report are UKAS accredited and any opinion or interpretations expressed are outside the scope of UKAS accreditation.					
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**DETERMINATION OF LIQUID LIMIT, PLASTIC LIMIT & PLASTICITY INDEX**  
BS1377 : Part 2 : 1990

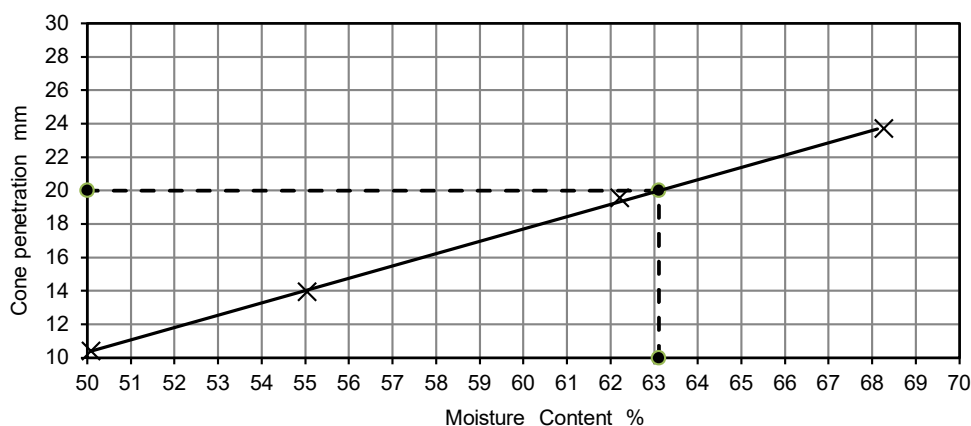
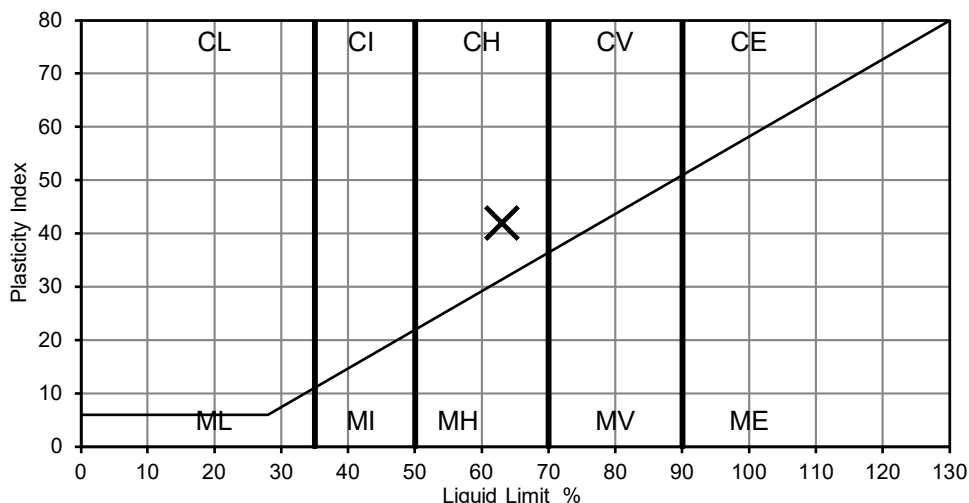
Project Name:			BY Kentish Town						Project Number:	
Client Name:			The Big Yellow Construction Company Ltd						GL24466	
Location	Depth m	Sample Ref	Moisture Content %	Liquid Limit %	Plastic Limit %	Plasticity Index	Percentage passing 425µm %	Classification	Sample Description	
BH02	0.80	D3	30	63	21	42	87	CH	MADE GROUND (Dark grey slightly gravelly CLAY. Gravel is of flint and brick fragments)	
TP01	2.40-2.60	B4	30	73	23	50	96	CV	Brown CLAY.	
WS01	0.40	D2	25	65	20	45	73	CH	MADE GROUND (Brown and dark brown slightly gravelly CLAY. Gravel is of flint and brick fragments)	
WS02	1.00	D4	33	59	20	39	78	CH	MADE GROUND (Grey brown mottled grey slightly gravelly slightly sandy CLAY. Gravel is of brick fragments)	
WS02	2.80	D8	34	75	23	52	96	CV	Brown mottled occasional grey slightly gravelly CLAY. Gravel is of flint	
<p>Notes:</p> <p>1) This summary sheet is provided for convenience and in no way replaces individual test result sheets which shall, without exception, be regarded as the definitive result. Please refer to the individual test result sheets for the respective methods used.</p> <p>2) Unless we are notified to the contrary, samples will be disposed after a period of one month from this date.</p> <p>3) This report should not be reproduced except in full without the written approval of the laboratory.</p> <p>4) Only those results indicated in this report are UKAS accredited and any opinion or interpretations expressed are outside the scope of UKAS accreditation.</p>										
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# LIQUID LIMIT, PLASTIC LIMIT, PLASTICITY INDEX, & LIQUIDITY INDEX

BS 1377 : Part 2 : 1990, clause 4.3 and 5

Project Name:	BY Kentish Town	Project Number:	GL24466
Client Name:	The Big Yellow Construction Company Ltd	Sample Location:	BH02
Sample Description:	MADE GROUND (Dark grey slightly gravelly CLAY. Gravel is of flint and brick fragments)	Sample Depth (m)	0.80
		Sample Reference	D3



Preparation: Material was washed and oven dried at below 50°C

Results: As Received Moisture Content: (BS1377 : Part 2 : Clause 3 : 1990) 30 %  
 Percentage Passing 425µm sieve: 87 %  
 Liquid Limit: 63 %  
 Plastic Limit: 21 %  
 Plasticity Index: 42  
 Liquidity Index: 0.21  
 Modified Plasticity Index: (NHBC Standards Chapter 4.2) 37

## Notes:

- 1) Modified Plasticity Index: (NHBC Standards Chapter 4.2) not covered by UKAS accreditation.
- 2) Unless we are notified to the contrary, samples will be disposed after a period of one month from this date.
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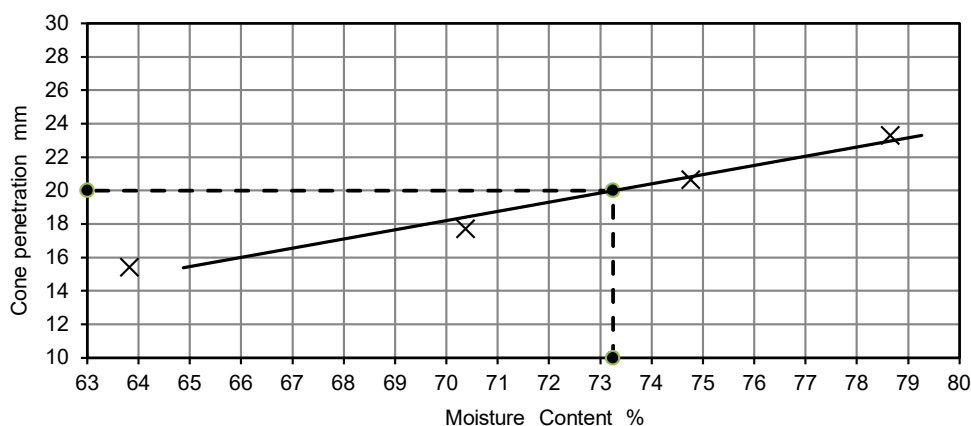
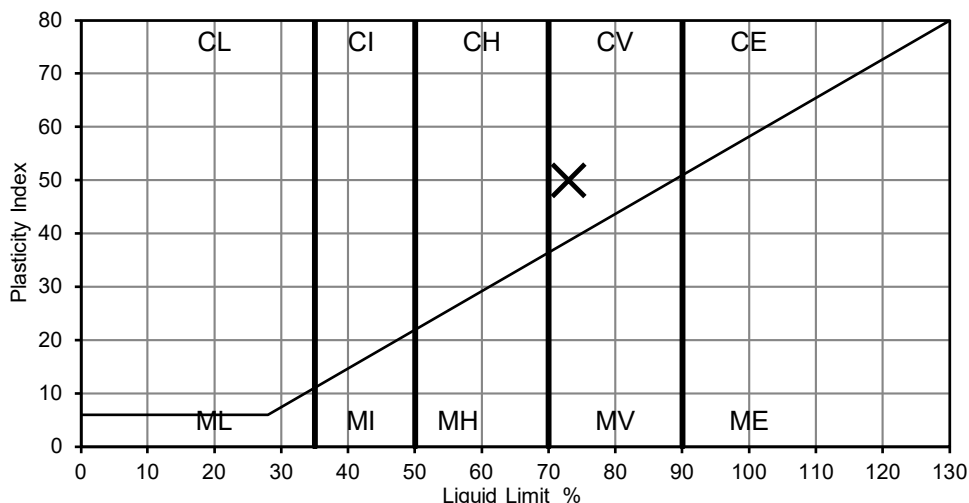


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# LIQUID LIMIT, PLASTIC LIMIT, PLASTICITY INDEX, & LIQUIDITY INDEX

BS 1377 : Part 2 : 1990, clause 4.3 and 5

Project Name:	BY Kentish Town	Project Number:	GL24466
Client Name:	The Big Yellow Construction Company Ltd	Sample Location:	TP01
Sample Description:	Brown CLAY.	Sample Depth (m)	2.40
		Sample Reference	B4



Preparation: Material was washed and oven dried at below 50°C

Results:

As Received Moisture Content: (BS1377 : Part 2 : Clause 3 : 1990)	30 %
Percentage Passing 425µm sieve:	96 %
Liquid Limit:	73 %
Plastic Limit:	23 %
Plasticity Index:	50
Liquidity Index:	0.14
Modified Plasticity Index: (NHBC Standards Chapter 4.2)	48

## Notes:

- 1) Modified Plasticity Index: (NHBC Standards Chapter 4.2) not covered by UKAS accreditation.
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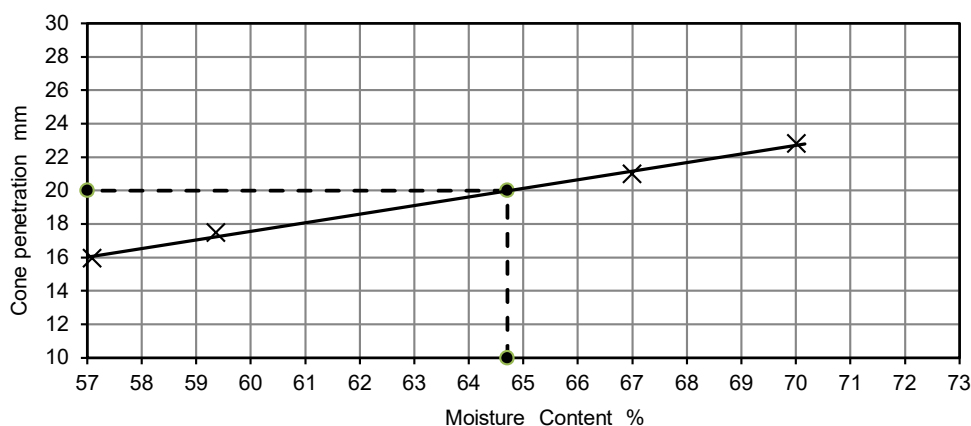
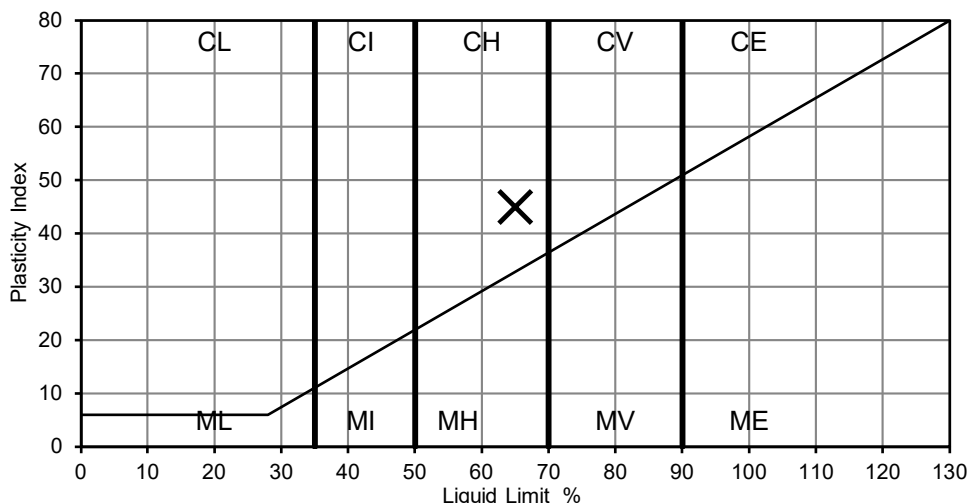


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# LIQUID LIMIT, PLASTIC LIMIT, PLASTICITY INDEX, & LIQUIDITY INDEX

BS 1377 : Part 2 : 1990, clause 4.3 and 5

Project Name:	BY Kentish Town	Project Number:	GL24466
Client Name:	The Big Yellow Construction Company Ltd	Sample Location:	WS01
Sample Description:	MADE GROUND (Brown and dark brown slightly gravelly CLAY. Gravel is of flint and brick fragments)	Sample Depth (m)	0.40
		Sample Reference	D2



Preparation: Material was washed and oven dried at below 50°C

Results: As Received Moisture Content: (BS1377 : Part 2 : Clause 3 : 1990) 25 %  
 Percentage Passing 425µm sieve: 73 %  
 Liquid Limit: 65 %  
 Plastic Limit: 20 %  
 Plasticity Index: 45  
 Liquidity Index: 0.11  
 Modified Plasticity Index: (NHBC Standards Chapter 4.2) 33

## Notes:

- 1) Modified Plasticity Index: (NHBC Standards Chapter 4.2) not covered by UKAS accreditation.
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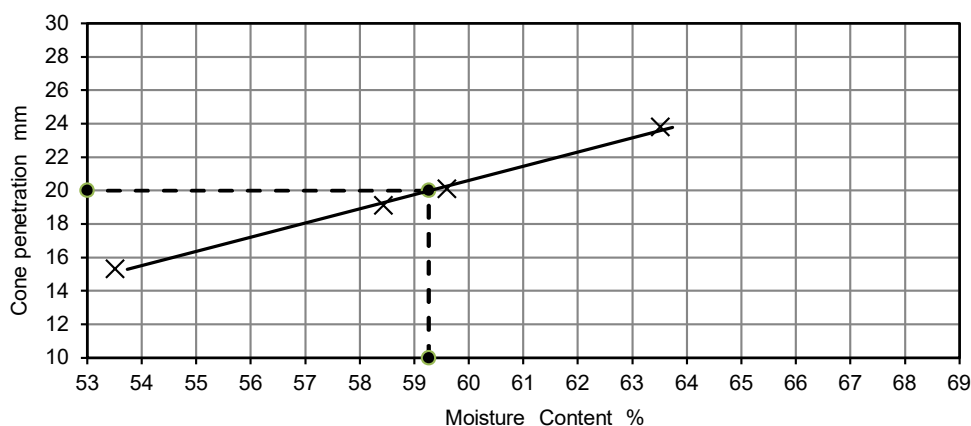
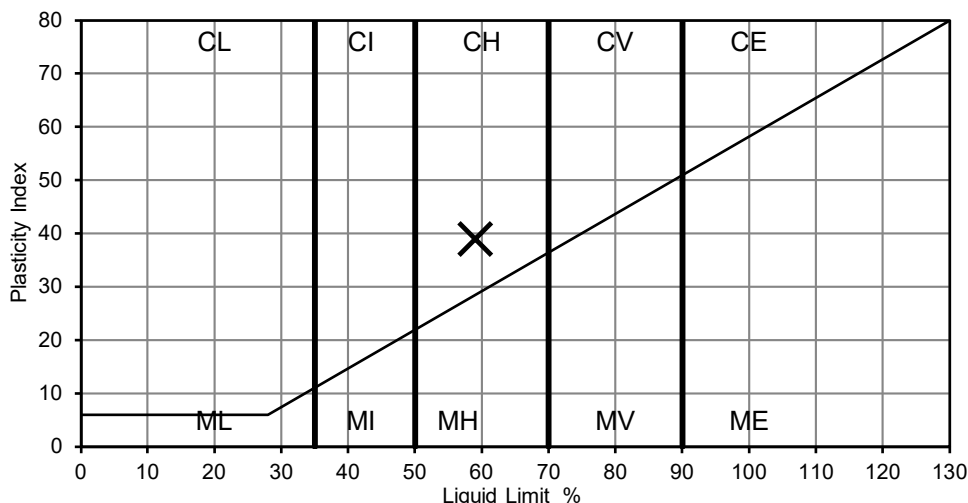


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# LIQUID LIMIT, PLASTIC LIMIT, PLASTICITY INDEX, & LIQUIDITY INDEX

BS 1377 : Part 2 : 1990, clause 4.3 and 5

Project Name:	BY Kentish Town	Project Number:	GL24466
Client Name:	The Big Yellow Construction Company Ltd	Sample Location:	WS02
Sample Description:	MADE GROUND (Grey brown mottled grey slightly gravelly slightly sandy CLAY. Gravel is of brick fragments)	Sample Depth (m)	1.00
		Sample Reference	D4



Preparation: Material was washed and oven dried at below 50°C

Results:

As Received Moisture Content: (BS1377 : Part 2 : Clause 3 : 1990)	33 %
Percentage Passing 425µm sieve:	78 %
Liquid Limit:	59 %
Plastic Limit:	20 %
Plasticity Index:	39
Liquidity Index:	0.33
Modified Plasticity Index: (NHBC Standards Chapter 4.2)	30

## Notes:

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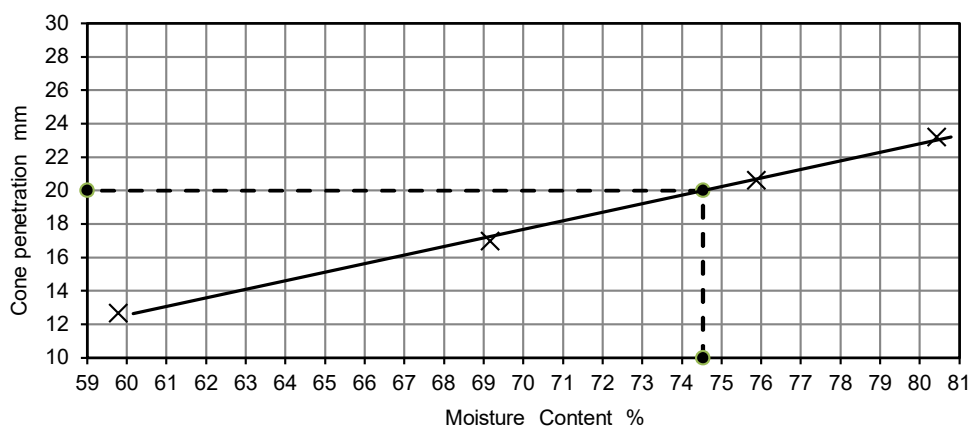
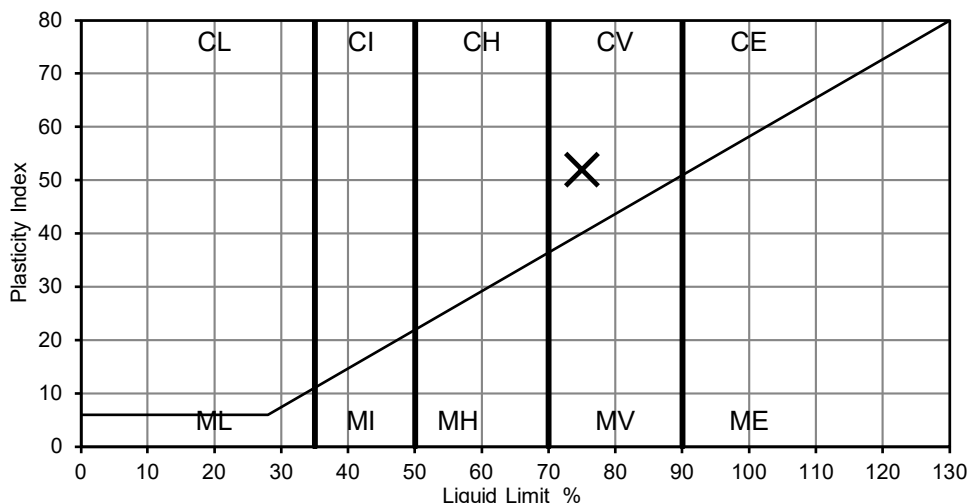


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# LIQUID LIMIT, PLASTIC LIMIT, PLASTICITY INDEX, & LIQUIDITY INDEX

BS 1377 : Part 2 : 1990, clause 4.3 and 5

Project Name:	BY Kentish Town	Project Number:	GL24466
Client Name:	The Big Yellow Construction Company Ltd	Sample Location:	WS02
Sample Description:	Brown mottled occasional grey slightly gravelly CLAY. Gravel is of flint	Sample Depth (m)	2.80
		Sample Reference	D8



Preparation: Material was washed and oven dried at below 50°C

Results:

As Received Moisture Content: (BS1377 : Part 2 : Clause 3 : 1990)	34 %
Percentage Passing 425µm sieve:	96 %
Liquid Limit:	75 %
Plastic Limit:	23 %
Plasticity Index:	52
Liquidity Index:	0.21
Modified Plasticity Index: (NHBC Standards Chapter 4.2)	50

## Notes:

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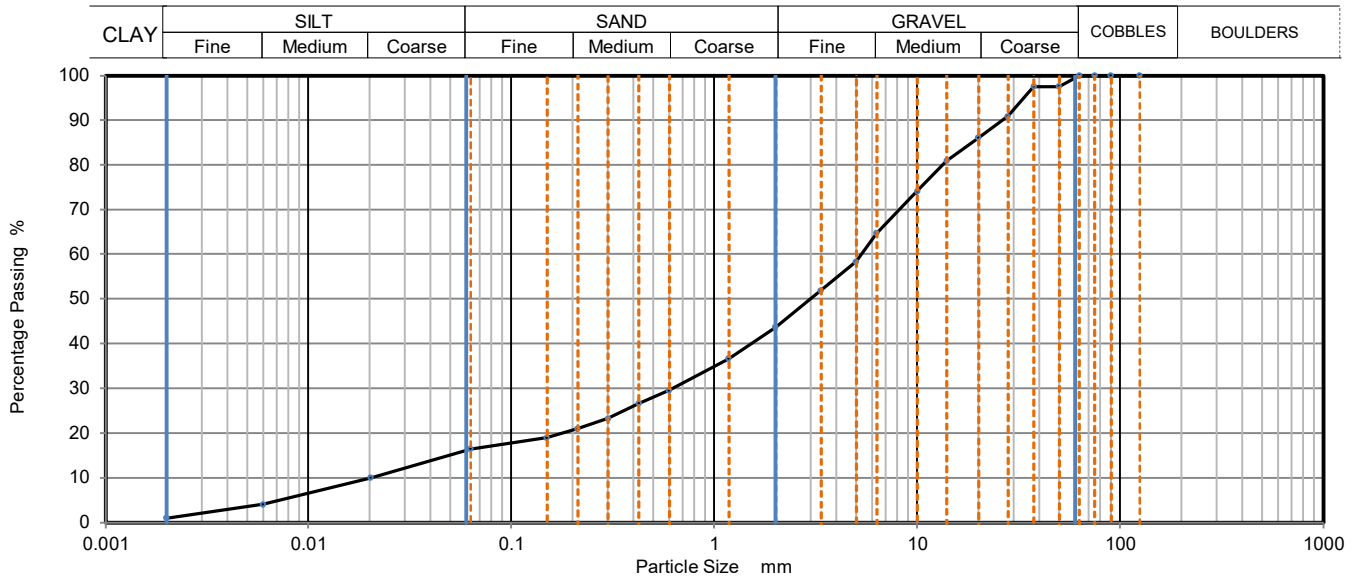


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# DETERMINATION OF PARTICLE SIZE DISTRIBUTION

BS1377:Part 2:1990, clauses 9.2 and 9.4

Project Name:	BY Kentish Town	Project Number:	GL24466-01
Client Name:	The Big Yellow Construction Company Ltd	Sample Location:	BH01
Sample Description:	MADE GROUND (Dark grey and black slightly clayey silty very sandy GRAVEL. Gravel is of flint, brick, concrete and plastic fragments)	Sample Depth (m)	0.60
		Sample Reference	B1



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.0200	10
90	100	0.0060	4
75	100	0.0020	1
63	100		
50	98		
37.5	98		
28	91		
20	86		
14	81		
10	74		
6.3	65		
5	58		
3.35	52		
2	44		
1.18	37		
0.6	30		
0.425	27	Particle density (assumed)	
0.3	23	2.65 Mg/m <sup>3</sup>	
0.212	21		
0.15	19		
0.063	16		

Sample Proportions	% dry mass
Very coarse	0
Gravel	56
Sand	27
Silt	16
Clay	1

Grading Analysis		
D100	mm	
D60	mm	5.310
D30	mm	0.631
D10	mm	0.019
Uniformity Coefficient		280
Curvature Coefficient		4

## Notes:

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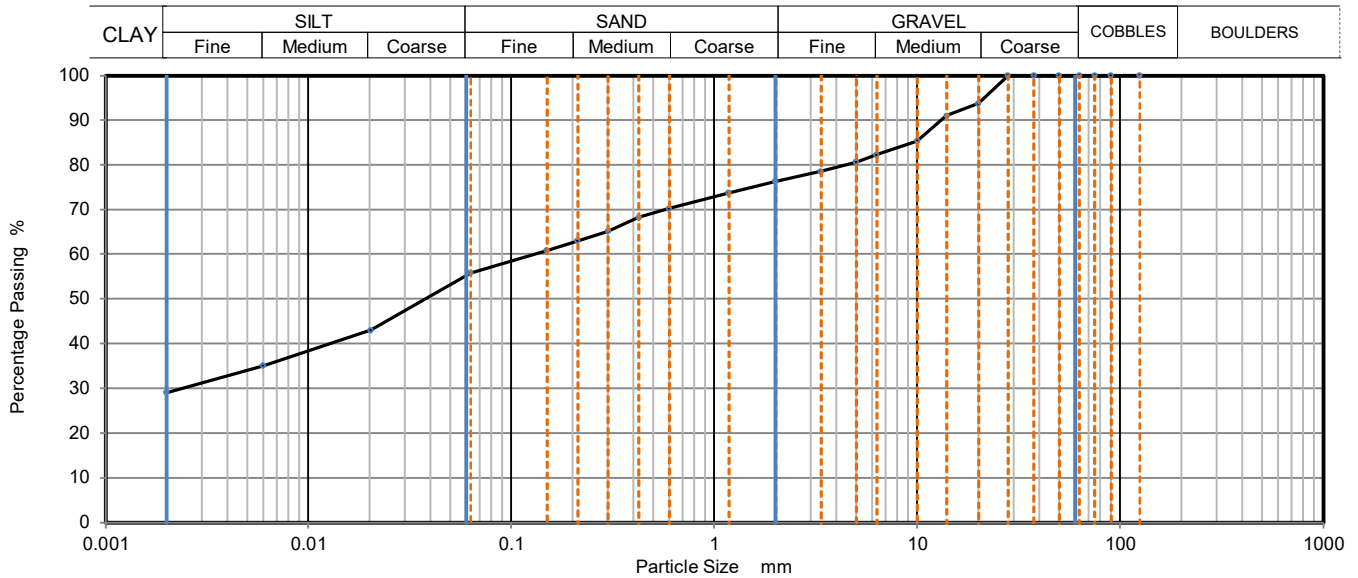
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# DETERMINATION OF PARTICLE SIZE DISTRIBUTION

BS1377:Part 2:1990, clauses 9.2 and 9.4

Project Name:	BY Kentish Town	Project Number:	GL24466-01
Client Name:	The Big Yellow Construction Company Ltd	Sample Location:	BH01
Sample Description:	MADE GROUND (Dark grey brown and brown slightly gravelly slightly sandy silty CLAY. Gravel is of flint and brick fragments)	Sample Depth (m)	3.50
		Sample Reference	B4



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.0200	43
90	100	0.0060	35
75	100	0.0020	29
63	100		
50	100		
37.5	100		
28	100		
20	94		
14	91		
10	85		
6.3	82		
5	81		
3.35	79		
2	76		
1.18	74		
0.6	70		
0.425	68	Particle density (assumed)	
0.3	65	2.65 Mg/m <sup>3</sup>	
0.212	63		
0.15	61		
0.063	56		

Sample Proportions	% dry mass
Very coarse	0
Gravel	24
Sand	21
Silt	27
Clay	29

Grading Analysis		
D100	mm	
D60	mm	0.131
D30	mm	0.002
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

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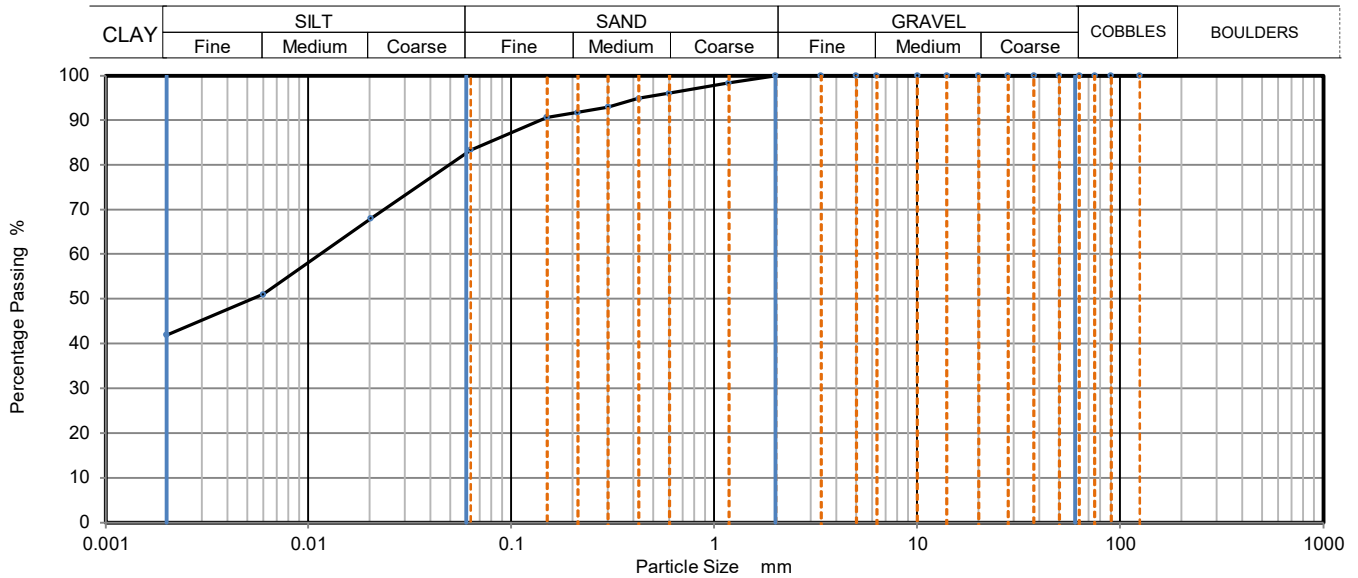


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# DETERMINATION OF PARTICLE SIZE DISTRIBUTION

BS1377:Part 2:1990, clauses 9.2 and 9.4

Project Name:	BY Kentish Town	Project Number:	GL24466-01
Client Name:	The Big Yellow Construction Company Ltd	Sample Location:	BH02
Sample Description:	Grey and grey brown slightly sandy silty CLAY	Sample Depth (m)	1.50
		Sample Reference	B2



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.0200	68
90	100	0.0060	51
75	100	0.0020	42
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	98		
0.6	96		
0.425	95	Particle density (assumed)	
0.3	93	2.65 Mg/m <sup>3</sup>	
0.212	92		
0.15	91		
0.063	83		

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	17
Silt	41
Clay	42

Grading Analysis		
D100	mm	0.011
D60	mm	
D30	mm	
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

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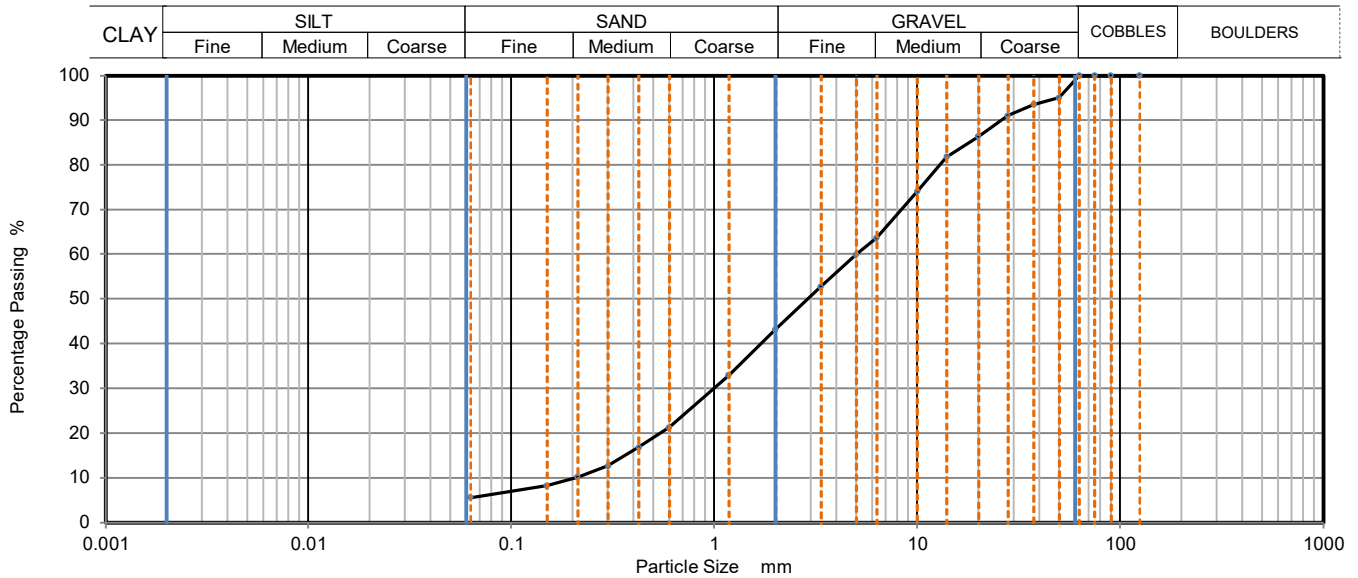


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# DETERMINATION OF PARTICLE SIZE DISTRIBUTION

BS1377:Part 2:1990, clause 9.2

Project Name:	BY Kentish Town	Project Number:	GL24466-01
Client Name:	The Big Yellow Construction Company Ltd	Sample Location:	BH03
Sample Description:	MADE GROUND (Black silty very sandy GRAVEL. Gravel is of brick and concrete fragments)	Sample Depth (m)	0.60
		Sample Reference	B1



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	95		
37.5	94		
28	91		
20	86		
14	82		
10	74		
6.3	64		
5	60		
3.35	53		
2	43		
1.18	33		
0.6	21		
0.425	17		
0.3	13		
0.212	10		
0.15	8		
0.063	6		

Sample Proportions	% dry mass
Very coarse	0
Gravel	57
Sand	38
Fines <0.063mm	6

Grading Analysis		
D100	mm	
D60	mm	5.020
D30	mm	0.997
D10	mm	0.208
Uniformity Coefficient		24
Curvature Coefficient		0.95

## Notes:

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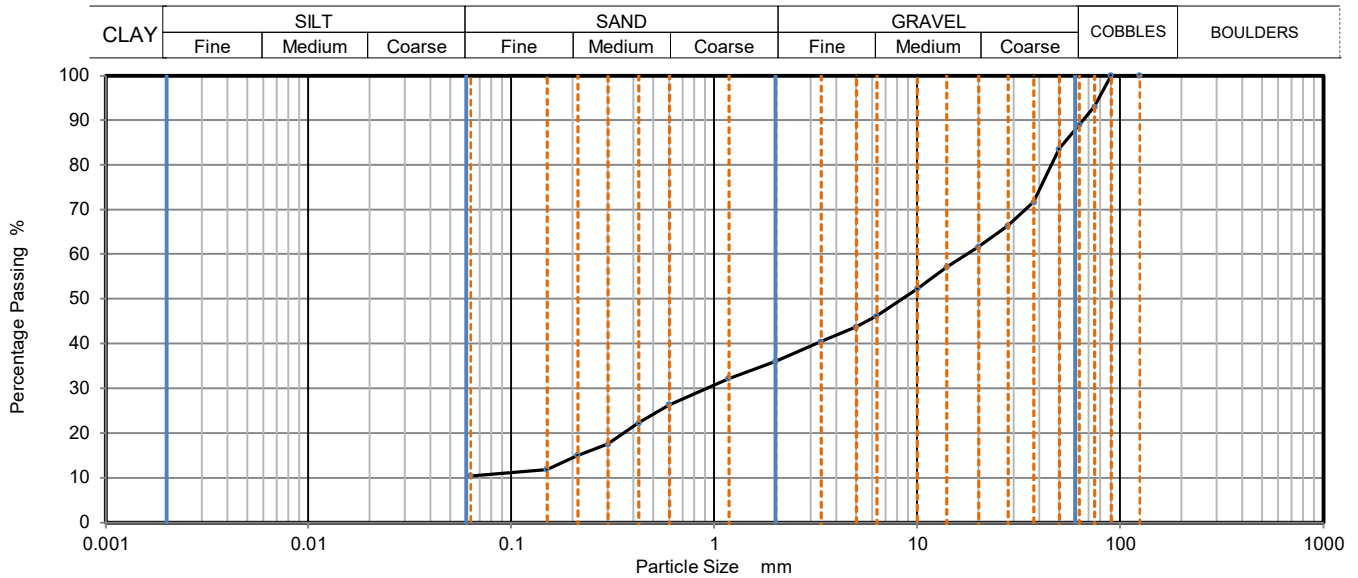


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# DETERMINATION OF PARTICLE SIZE DISTRIBUTION

BS1377:Part 2:1990, clause 9.2

Project Name:	BY Kentish Town	Project Number:	GL24466-01
Client Name:	The Big Yellow Construction Company Ltd	Sample Location:	TP02
Sample Description:	MADE GROUND (Dark grey brown silty very sandy GRAVEL with medium cobble content. Cobbles are of concrete. Gravel is of flint, brick, concrete, glass, metal and asphalt fragments)	Sample Depth (m)	0.60
		Sample Reference	B1



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	93		
63	89		
50	84		
37.5	72		
28	66		
20	62		
14	57		
10	52		
6.3	46		
5	44		
3.35	40		
2	36		
1.18	32		
0.6	26		
0.425	22		
0.3	18		
0.212	15		
0.15	12		
0.063	10		

Sample Proportions	% dry mass
Very coarse	11
Gravel	53
Sand	26
Fines <0.063mm	10

Grading Analysis		
D100	mm	
D60	mm	17.600
D30	mm	0.915
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

## Notes:

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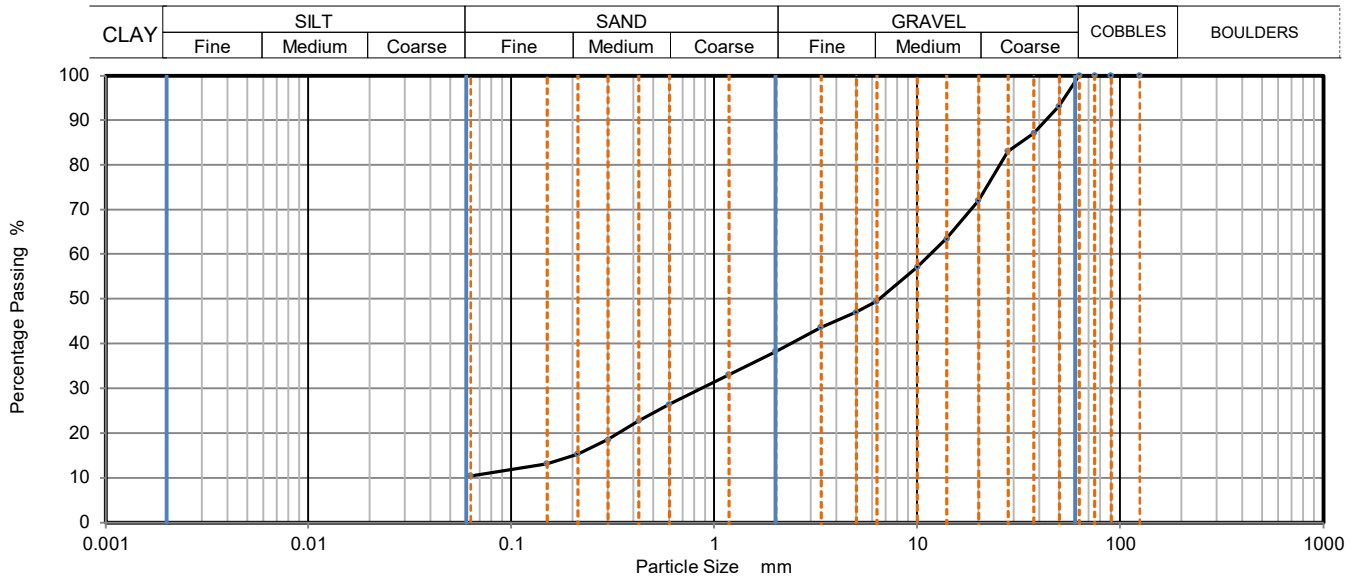


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# DETERMINATION OF PARTICLE SIZE DISTRIBUTION

BS1377:Part 2:1990, clause 9.2

Project Name:	BY Kentish Town	Project Number:	GL24466-01
Client Name:	The Big Yellow Construction Company Ltd	Sample Location:	WS03
Sample Description:	MADE GROUND (Grey slightly clayey silty very sandy GRAVEL. Gravel is of flint, brick, concrete and asphalt fragments)	Sample Depth (m)	0.20
		Sample Reference	B1



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	93		
37.5	87		
28	83		
20	72		
14	64		
10	57		
6.3	49		
5	47		
3.35	44		
2	38		
1.18	33		
0.6	26		
0.425	23		
0.3	19		
0.212	15		
0.15	13		
0.063	11		

Sample Proportions	% dry mass
Very coarse	0
Gravel	62
Sand	28
Fines <0.063mm	11

Grading Analysis		
D100	mm	
D60	mm	11.600
D30	mm	0.867
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

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Insufficient sample to test in full accordance with BS 1377

# DETERMINATION OF UNDRAINED SHEAR STRENGTH - DEFINITIVE

BS1377 : Part 7 : 1990, Clause 8, Single Specimen

Project Name:	BY Kentish Town	Project Number:	GL24466-01
Client Name:	The Big Yellow Construction Company Ltd	Sample Location:	BH01
Sample Description:	High strength brown mottled light grey CLAY.	Sample Depth (m)	5.00
		Sample Reference	UT2

Test Number  
Length  
Diameter  
Bulk Density  
Moisture Content  
Dry Density

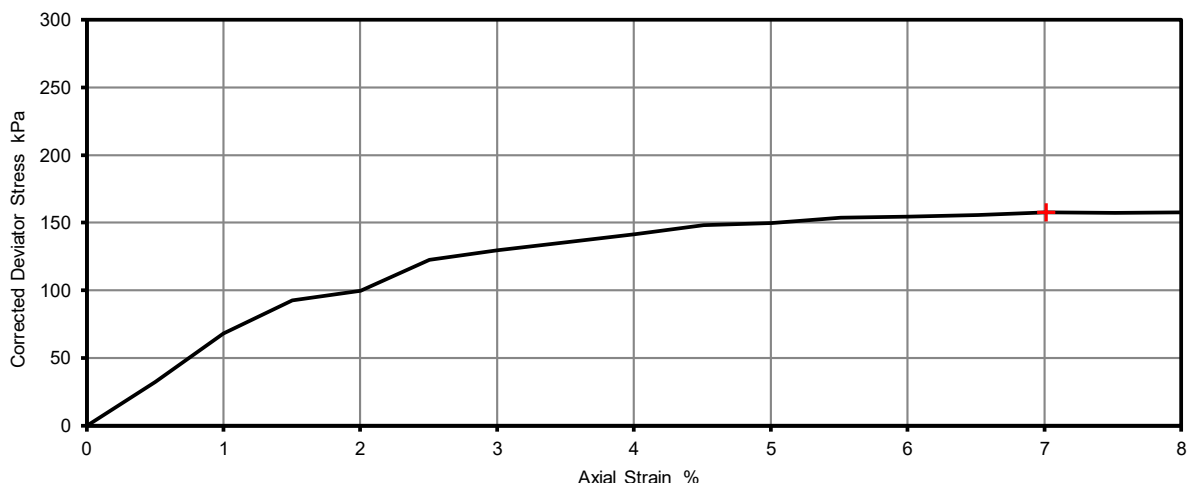
1	
199.6	mm
101.0	mm
1.95	Mg/m3
30.1	%
1.50	Mg/m3

Rate of Strain  
Cell Pressure  
At failure

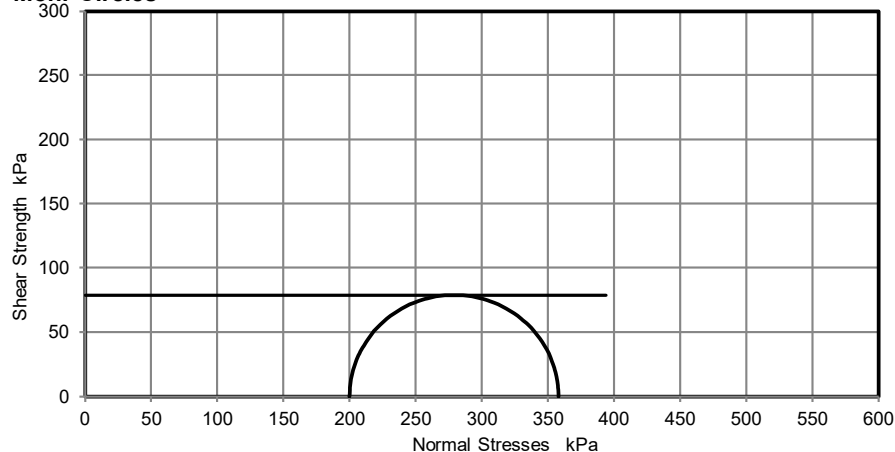
1.3	%/min
200	kPa
7.0	%
158	kPa
79	kPa $\frac{1}{2}(\sigma_1 - \sigma_3)$ f
Compound	

Axial Strain  
Deviator Stress,  $(\sigma_1 - \sigma_3)$  f  
Undrained Shear Strength, cu  
Mode of Failure

Deviator Stress v Axial Strain



Mohr Circles



Deviator stress corrected for area change and membrane effects

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# DETERMINATION OF UNDRAINED SHEAR STRENGTH - DEFINITIVE

BS1377 : Part 7 : 1990, Clause 8, Single Specimen

Project Name:	BY Kentish Town	Project Number:	GL24466-01
Client Name:	The Big Yellow Construction Company Ltd	Sample Location:	BH01
Sample Description:	High strength brown mottled grey CLAY.	Sample Depth (m)	7.50
		Sample Reference	UT3

Test Number  
Length  
Diameter  
Bulk Density  
Moisture Content  
Dry Density

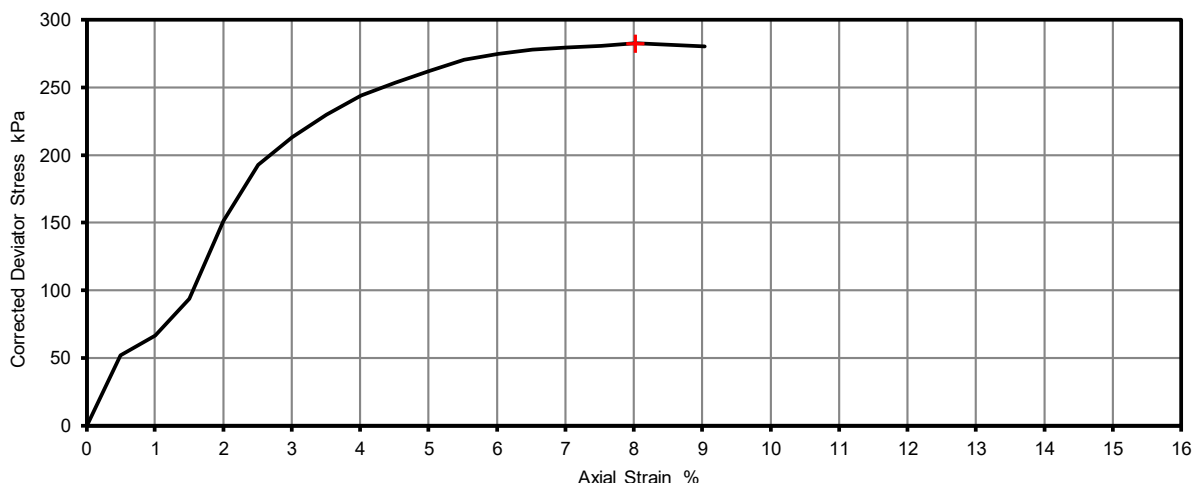
Rate of Strain  
Cell Pressure  
At failure

Axial Strain  
Deviator Stress,  $(\sigma_1 - \sigma_3) f$   
Undrained Shear Strength,  $c_u$   
Mode of Failure

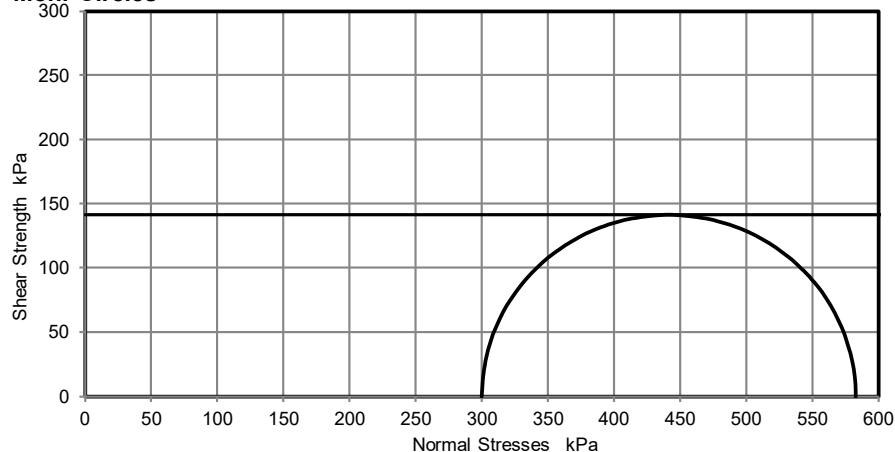
1	
199.4	mm
101.0	mm
1.96	Mg/m <sup>3</sup>
27.5	%
1.54	Mg/m <sup>3</sup>

1.3	%/min
300	kPa
8.0	%
283	kPa
141	kPa $\frac{1}{2}(\sigma_1 - \sigma_3) f$
Compound	

Deviator Stress v Axial Strain



Mohr Circles



Deviator stress corrected for area change and membrane effects

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# DETERMINATION OF UNDRAINED SHEAR STRENGTH - DEFINITIVE

BS1377 : Part 7 : 1990, Clause 8, Single Specimen

Project Name:	BY Kentish Town	Project Number:	GL24466-01
Client Name:	The Big Yellow Construction Company Ltd	Sample Location:	BH01
Sample Description:	Very high strength brown mottled grey CLAY with selenite crystals.	Sample Depth (m)	10.50
		Sample Reference	UT4

Test Number  
Length  
Diameter  
Bulk Density  
Moisture Content  
Dry Density

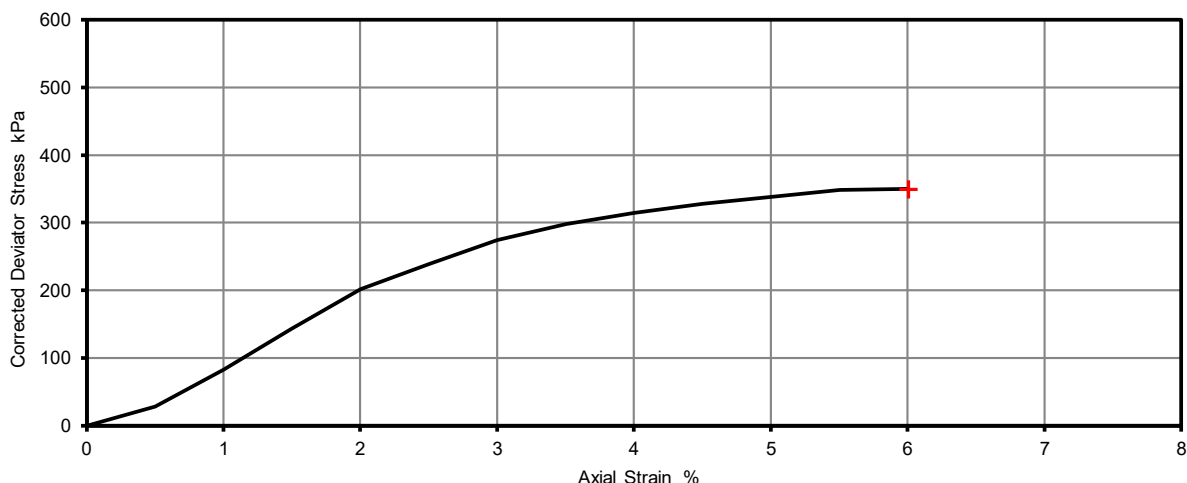
1	
199.8	mm
100.3	mm
1.98	Mg/m3
27.0	%
1.56	Mg/m3

Rate of Strain  
Cell Pressure  
At failure

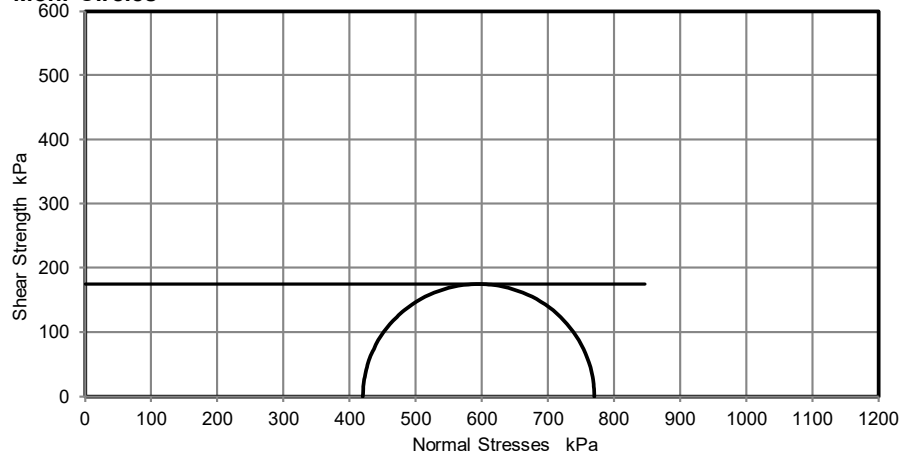
1.3	%/min
420	kPa
6.0	%
350	kPa
175	kPa $\frac{1}{2}(\sigma_1 - \sigma_3)$ f
Brittle	

Axial Strain  
Deviator Stress,  $(\sigma_1 - \sigma_3)$  f  
Undrained Shear Strength, cu  
Mode of Failure

Deviator Stress v Axial Strain



Mohr Circles



Deviator stress corrected for area change and membrane effects

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# DETERMINATION OF UNDRAINED SHEAR STRENGTH - DEFINITIVE

BS1377 : Part 7 : 1990, Clause 8, Single Specimen

Project Name:	BY Kentish Town	Project Number:	GL24466-01
Client Name:	The Big Yellow Construction Company Ltd	Sample Location:	BH01
Sample Description:	High strength dark grey slightly gravelly CLAY. Gravel is of pyrite.	Sample Depth (m)	16.50
		Sample Reference	UT6

Test Number  
Length  
Diameter  
Bulk Density  
Moisture Content  
Dry Density

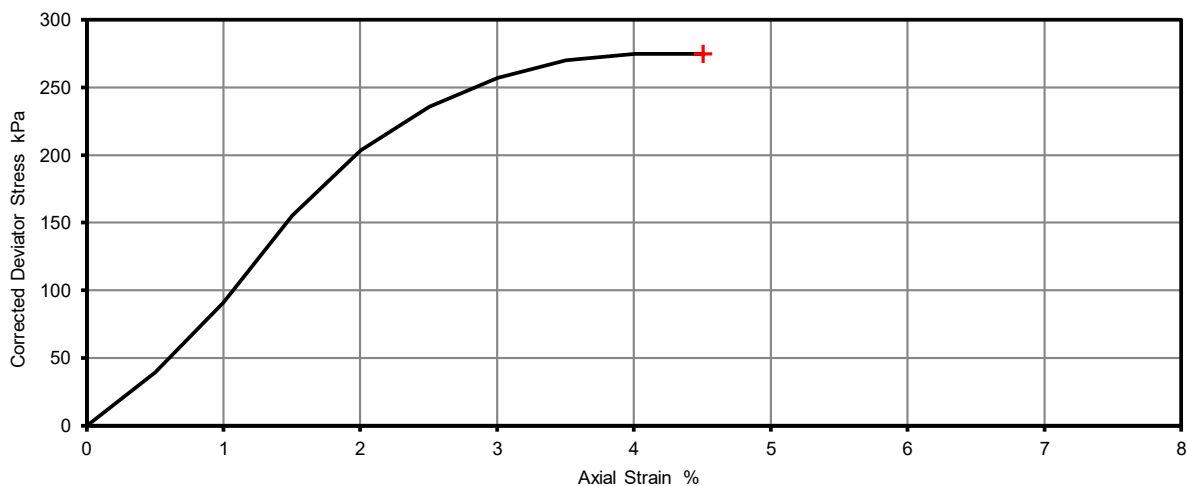
Rate of Strain  
Cell Pressure  
At failure

Axial Strain  
Deviator Stress, ( $\sigma_1 - \sigma_3$ ) f  
Undrained Shear Strength, cu  
Mode of Failure

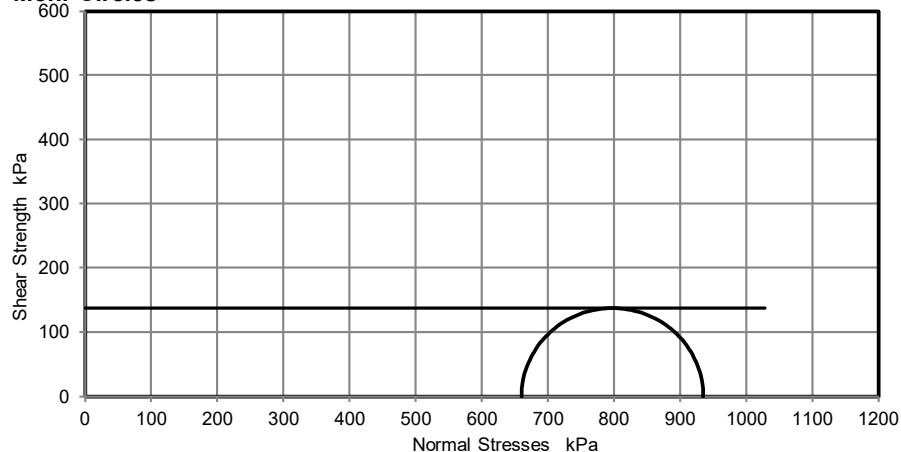
1	
199.6	mm
101.6	mm
1.95	Mg/m3
26.6	%
1.54	Mg/m3

1.3	%/min
660	kPa
4.5	%
275	kPa
137	kPa $\frac{1}{2}(\sigma_1 - \sigma_3)$ f
Brittle	

**Deviator Stress v Axial Strain**



**Mohr Circles**



Deviator stress corrected for area change and membrane effects

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# DETERMINATION OF UNDRAINED SHEAR STRENGTH - DEFINITIVE

BS1377 : Part 7 : 1990, Clause 8, Single Specimen

Project Name:	BY Kentish Town	Project Number:	GL24466-01
Client Name:	The Big Yellow Construction Company Ltd	Sample Location:	BH01
Sample Description:	High strength dark grey CLAY.	Sample Depth (m)	19.50
		Sample Reference	UT7

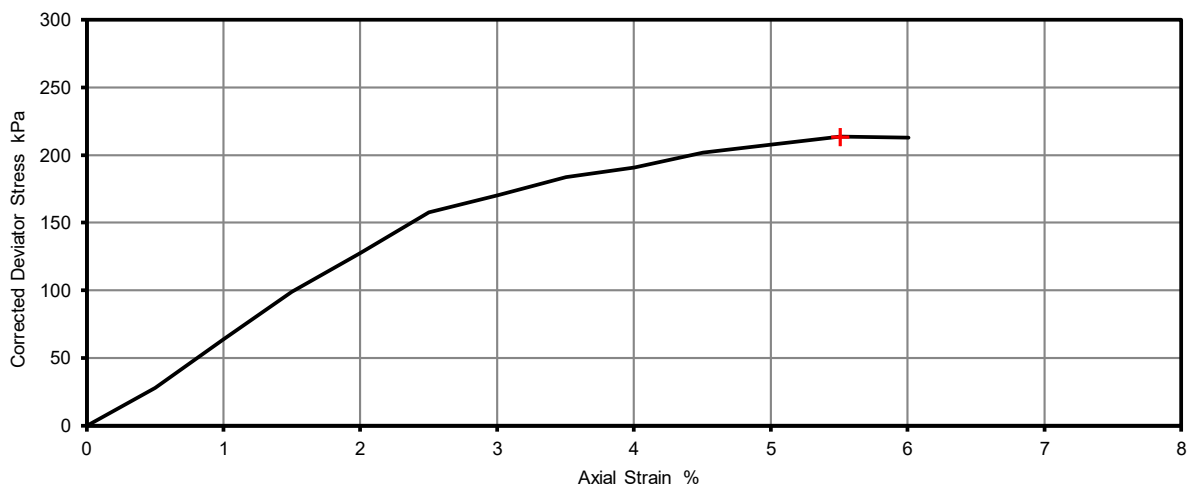
Test Number  
Length  
Diameter  
Bulk Density  
Moisture Content  
Dry Density

Rate of Strain  
Cell Pressure  
At failure

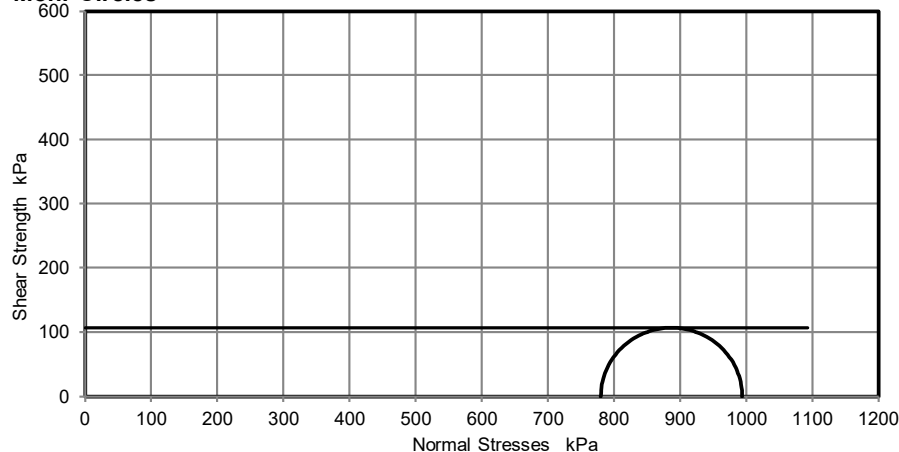
Axial Strain  
Deviator Stress,  $(\sigma_1 - \sigma_3) f$   
Undrained Shear Strength,  $c_u$   
Mode of Failure

1	
199.8	mm
102.6	mm
1.97	Mg/m <sup>3</sup>
26.9	%
1.55	Mg/m <sup>3</sup>
1.3	%/min
780	kPa
5.5	%
214	kPa
107	kPa $\frac{1}{2}(\sigma_1 - \sigma_3) f$
Brittle	

Deviator Stress v Axial Strain



Mohr Circles



Deviator stress corrected for area change and membrane effects

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# DETERMINATION OF UNDRAINED SHEAR STRENGTH - DEFINITIVE

BS1377 : Part 7 : 1990, Clause 8, Single Specimen

Project Name:	BY Kentish Town	Project Number:	GL24466-01
Client Name:	The Big Yellow Construction Company Ltd	Sample Location:	BH02
Sample Description:	Medium strength brown slightly gravelly CLAY. Gravel is of claystone.	Sample Depth (m)	3.50
		Sample Reference	UT1

Test Number  
Length  
Diameter  
Bulk Density  
Moisture Content  
Dry Density

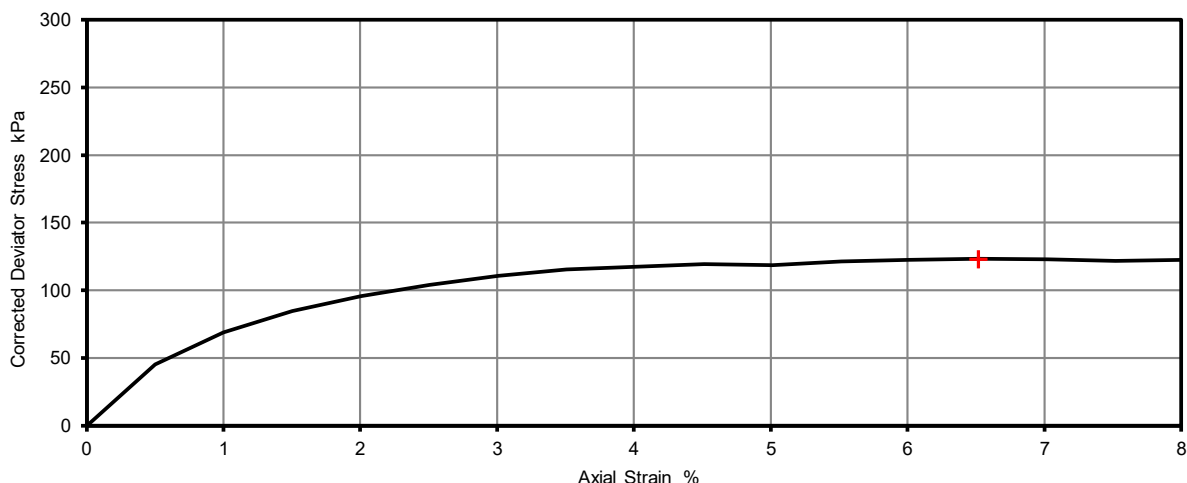
1	
199.4	mm
99.0	mm
2.02	Mg/m3
26.9	%
1.59	Mg/m3

Rate of Strain  
Cell Pressure  
At failure

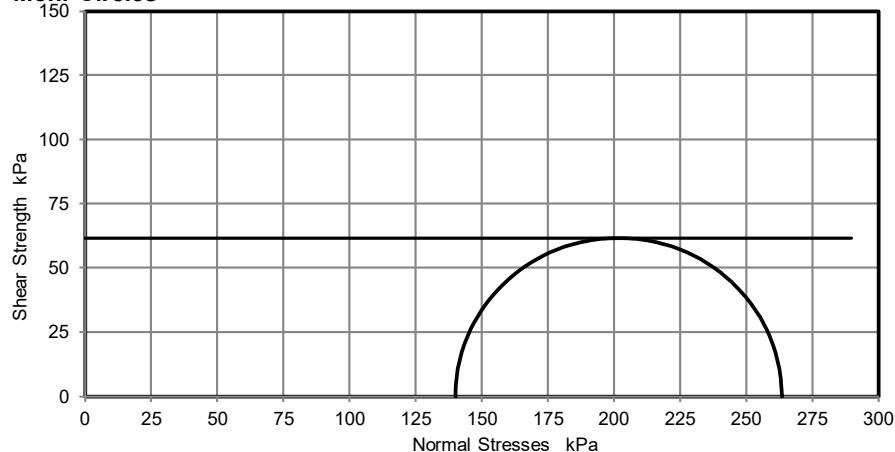
1.0	%/min
140	kPa
6.5	%
123	kPa
62	kPa $\frac{1}{2}(\sigma_1 - \sigma_3)$ f
Compound	

Axial Strain  
Deviator Stress,  $(\sigma_1 - \sigma_3)$  f  
Undrained Shear Strength,  $c_u$   
Mode of Failure

Deviator Stress v Axial Strain



Mohr Circles



Deviator stress corrected for area change and membrane effects

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# DETERMINATION OF UNDRAINED SHEAR STRENGTH - DEFINITIVE

BS1377 : Part 7 : 1990, Clause 8, Single Specimen

Project Name:	BY Kentish Town	Project Number:	GL24466-01
Client Name:	The Big Yellow Construction Company Ltd	Sample Location:	BH02
Sample Description:	High strength brown mottled grey CLAY with selenite crystals.	Sample Depth (m)	6.00
		Sample Reference	UT2

Test Number  
Length  
Diameter  
Bulk Density  
Moisture Content  
Dry Density

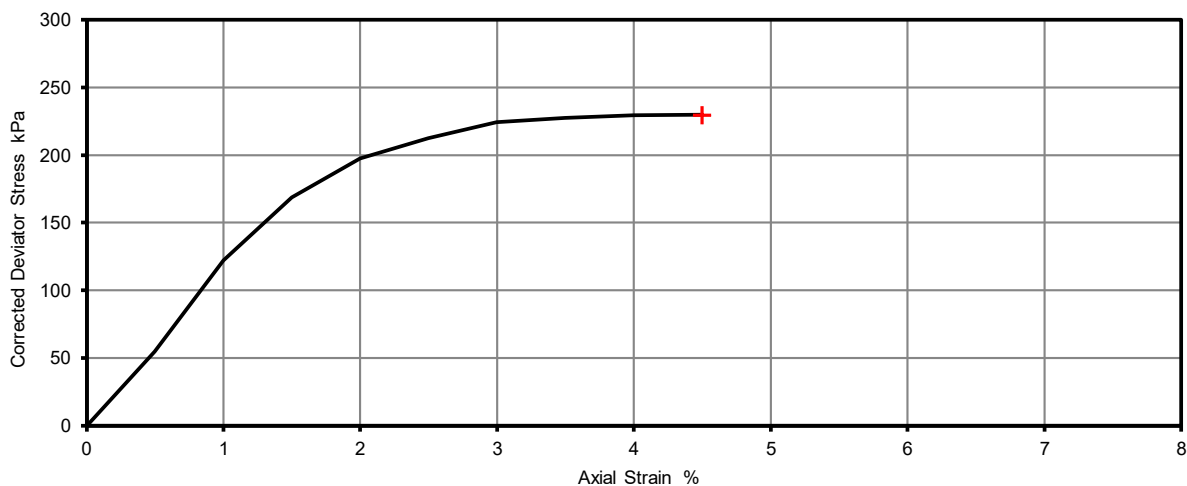
Rate of Strain  
Cell Pressure  
At failure

Axial Strain  
Deviator Stress,  $(\sigma_1 - \sigma_3) f$   
Undrained Shear Strength,  $c_u$   
Mode of Failure

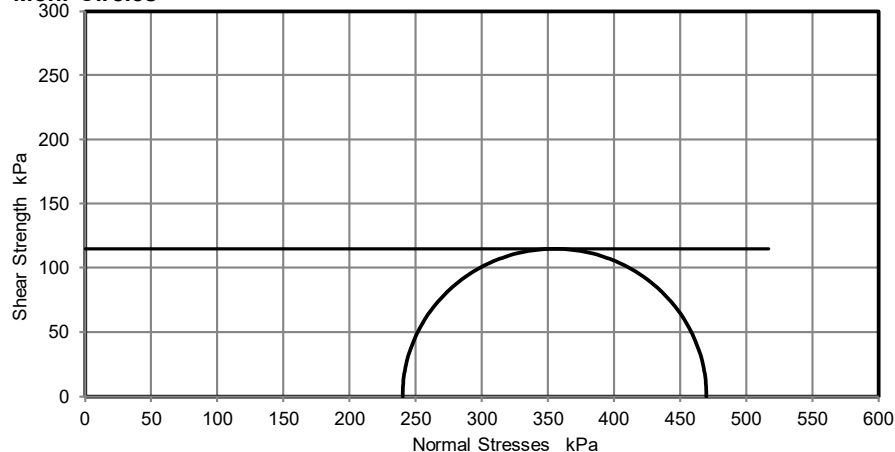
1	
200.1	mm
101.8	mm
1.96	Mg/m <sup>3</sup>
27.6	%
1.53	Mg/m <sup>3</sup>

1.2	%/min
240	kPa
4.5	%
230	kPa
115	kPa $\frac{1}{2}(\sigma_1 - \sigma_3) f$
Brittle	

**Deviator Stress v Axial Strain**



**Mohr Circles**



Deviator stress corrected for area change and membrane effects

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# DETERMINATION OF UNDRAINED SHEAR STRENGTH - DEFINITIVE

BS1377 : Part 7 : 1990, Clause 8, Single Specimen

Project Name:	BY Kentish Town	Project Number:	GL24466-01
Client Name:	The Big Yellow Construction Company Ltd	Sample Location:	BH02
Sample Description:	High strength brown mottled grey slightly sandy CLAY with selenite crystals.	Sample Depth (m)	9.00
		Sample Reference	UT3

Test Number  
Length  
Diameter  
Bulk Density  
Moisture Content  
Dry Density

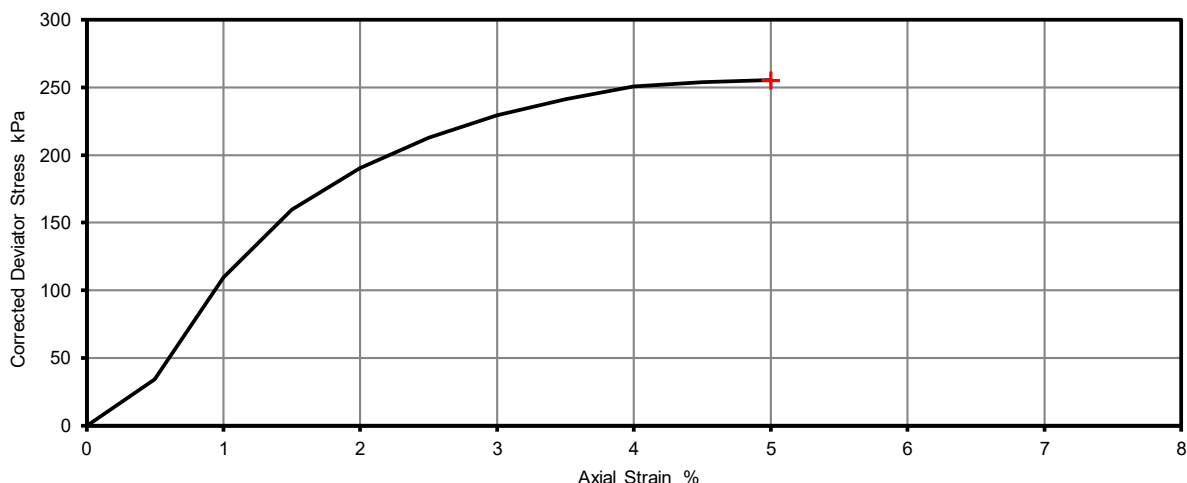
Rate of Strain  
Cell Pressure  
At failure

Axial Strain  
Deviator Stress,  $(\sigma_1 - \sigma_3)$  f  
Undrained Shear Strength,  $c_u$   
Mode of Failure

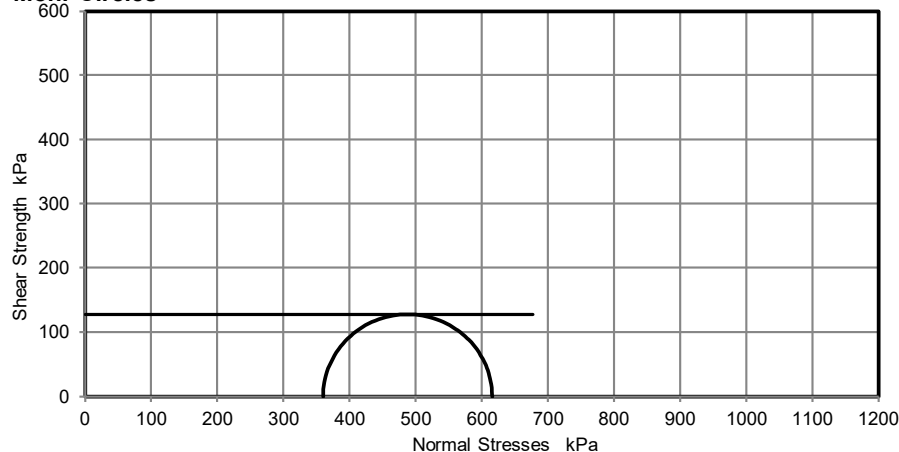
1	
199.9	mm
103.5	mm
1.97	Mg/m <sup>3</sup>
25.2	%
1.57	Mg/m <sup>3</sup>

1.0	%/min
360	kPa
5.0	%
256	kPa
128	kPa $\frac{1}{2}(\sigma_1 - \sigma_3)$ f
Compound	

Deviator Stress v Axial Strain



Mohr Circles



Deviator stress corrected for area change and membrane effects

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# DETERMINATION OF UNDRAINED SHEAR STRENGTH - DEFINITIVE

BS1377 : Part 7 : 1990, Clause 8, Single Specimen

Project Name:	BY Kentish Town	Project Number:	GL24466-01
Client Name:	The Big Yellow Construction Company Ltd	Sample Location:	BH02
Sample Description:	Very high strength dark brown mottled orange brown CLAY with selenite crystals.	Sample Depth (m)	12.00
		Sample Reference	UT4

Test Number  
Length  
Diameter  
Bulk Density  
Moisture Content  
Dry Density

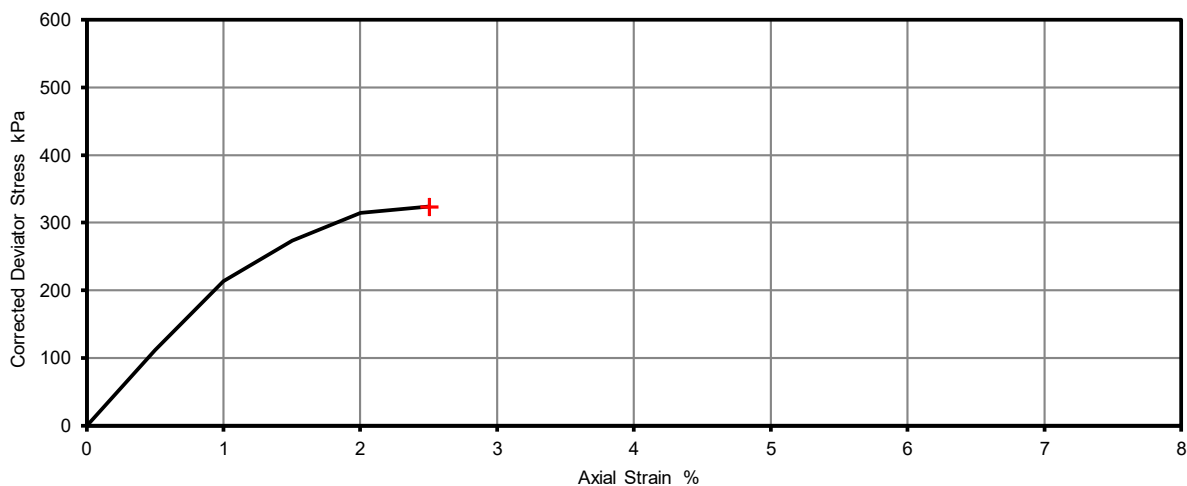
Rate of Strain  
Cell Pressure  
At failure

Axial Strain  
Deviator Stress,  $(\sigma_1 - \sigma_3) f$   
Undrained Shear Strength,  $c_u$   
Mode of Failure

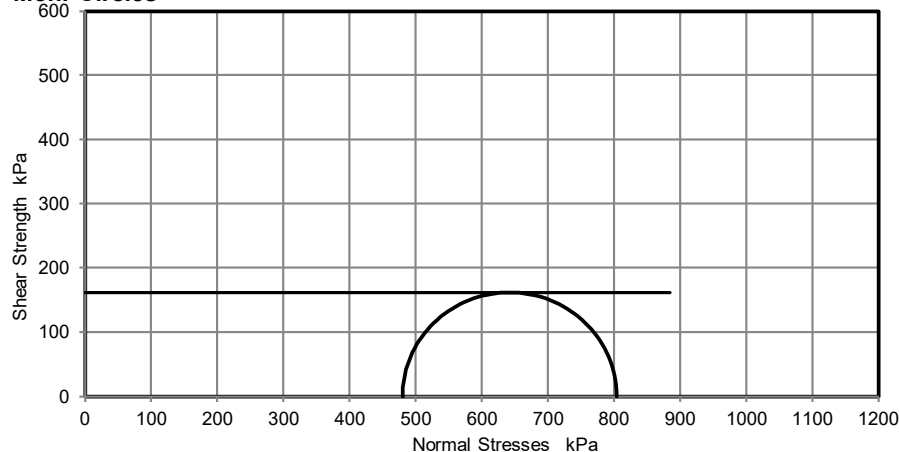
1	
199.6	mm
99.6	mm
1.99	Mg/m <sup>3</sup>
25.5	%
1.59	Mg/m <sup>3</sup>

1.0	%/min
480	kPa
2.5	%
324	kPa
162	kPa $\frac{1}{2}(\sigma_1 - \sigma_3) f$
Brittle	

Deviator Stress v Axial Strain



Mohr Circles



Deviator stress corrected for area change and membrane effects

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# DETERMINATION OF UNDRAINED SHEAR STRENGTH - DEFINITIVE

BS1377 : Part 7 : 1990, Clause 8, Single Specimen

Project Name:	BY Kentish Town	Project Number:	GL24466-01
Client Name:	The Big Yellow Construction Company Ltd	Sample Location:	BH02
Sample Description:	Very high strength dark grey CLAY.	Sample Depth (m)	15.00
		Sample Reference	UT5

Test Number  
Length  
Diameter  
Bulk Density  
Moisture Content  
Dry Density

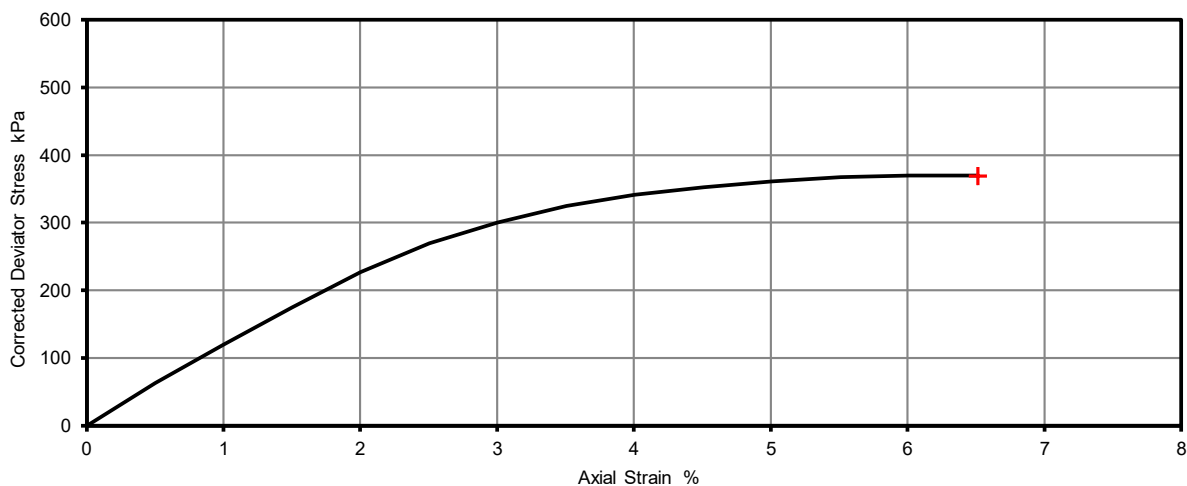
Rate of Strain  
Cell Pressure  
At failure

Axial Strain  
Deviator Stress,  $(\sigma_1 - \sigma_3)$  f  
Undrained Shear Strength,  $c_u$   
Mode of Failure

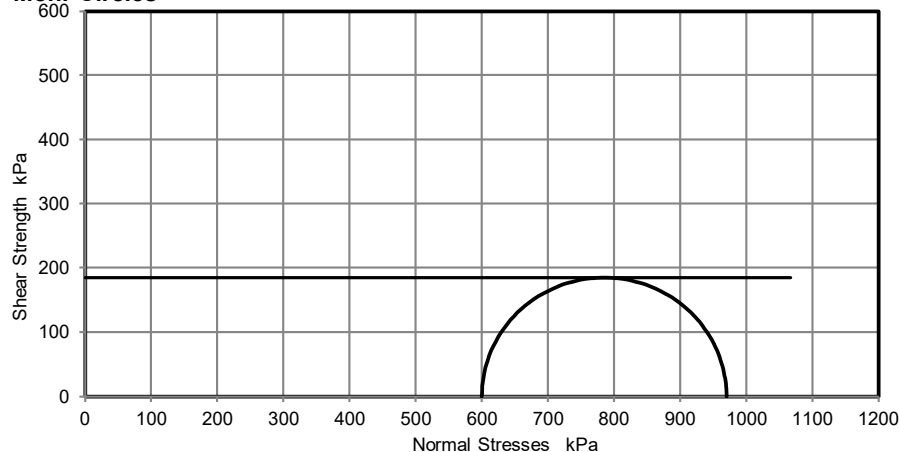
1	
199.6	mm
101.9	mm
1.99	Mg/m <sup>3</sup>
24.5	%
1.59	Mg/m <sup>3</sup>

1.0	%/min
600	kPa
6.5	%
370	kPa
185	kPa $\frac{1}{2}(\sigma_1 - \sigma_3)$ f
Compound	

Deviator Stress v Axial Strain



Mohr Circles



Deviator stress corrected for area change and membrane effects

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# DETERMINATION OF UNDRAINED SHEAR STRENGTH - DEFINITIVE

BS1377 : Part 7 : 1990, Clause 8, Single Specimen

Project Name:	BY Kentish Town	Project Number:	GL24466-01
Client Name:	The Big Yellow Construction Company Ltd	Sample Location:	BH03
Sample Description:	Medium strength brown mottled grey slightly gravelly CLAY. Gravel is of siltstone.	Sample Depth (m)	2.50
		Sample Reference	UT1

Test Number  
Length  
Diameter  
Bulk Density  
Moisture Content  
Dry Density

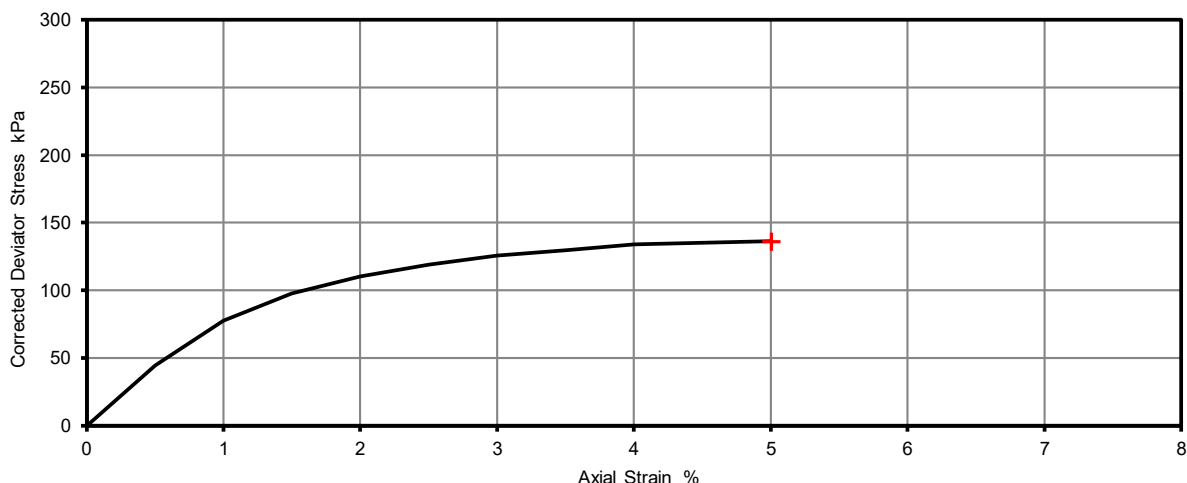
Rate of Strain  
Cell Pressure  
At failure

Axial Strain  
Deviator Stress,  $(\sigma_1 - \sigma_3) f$   
Undrained Shear Strength,  $c_u$   
Mode of Failure

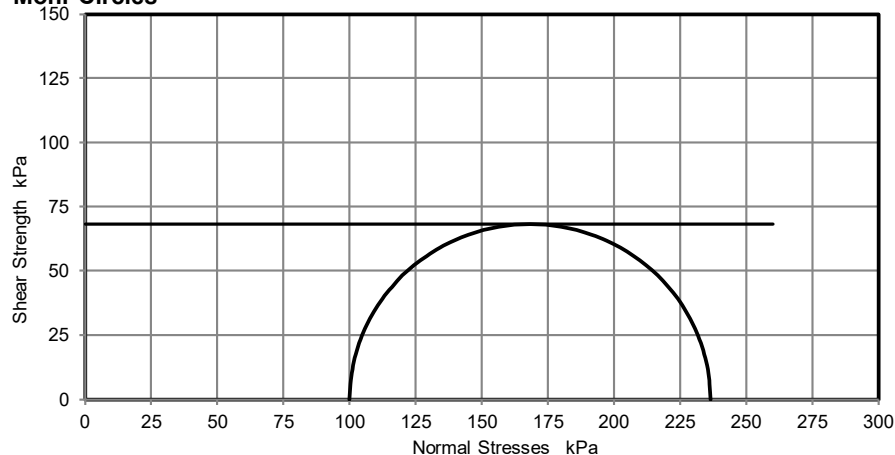
1	
199.8	mm
102.1	mm
1.96	Mg/m <sup>3</sup>
28.0	%
1.53	Mg/m <sup>3</sup>

1.0	%/min
100	kPa
5.0	%
136	kPa
68	kPa $\frac{1}{2}(\sigma_1 - \sigma_3) f$
Brittle	

**Deviator Stress v Axial Strain**



**Mohr Circles**



Deviator stress corrected for area change and membrane effects

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# DETERMINATION OF UNDRAINED SHEAR STRENGTH - DEFINITIVE

BS1377 : Part 7 : 1990, Clause 8, Single Specimen

Project Name:	BY Kentish Town	Project Number:	GL24466-01
Client Name:	The Big Yellow Construction Company Ltd	Sample Location:	BH03
Sample Description:	High strength brown mottled grey CLAY.	Sample Depth (m)	4.50
		Sample Reference	UT2

Test Number  
Length  
Diameter  
Bulk Density  
Moisture Content  
Dry Density

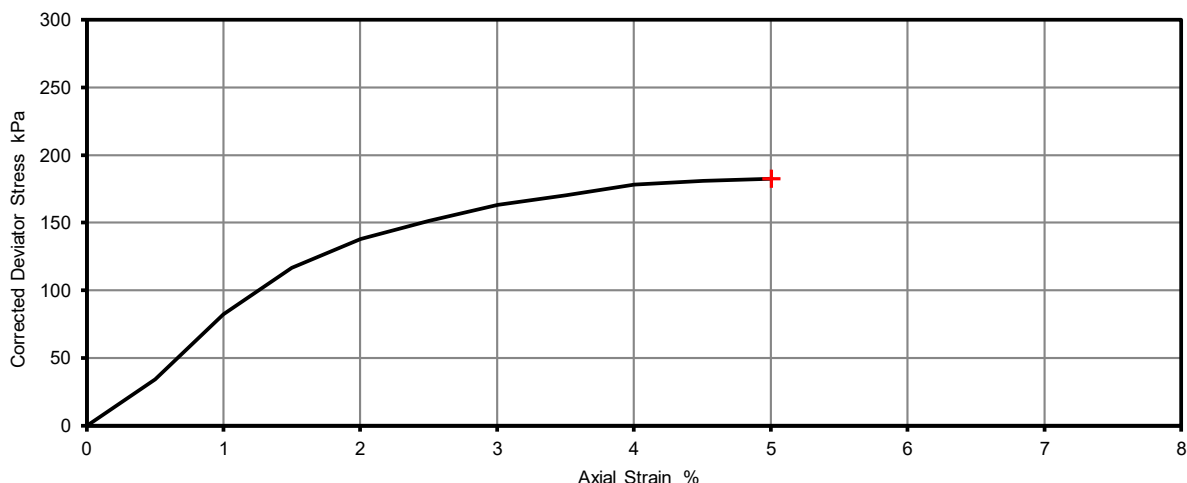
Rate of Strain  
Cell Pressure  
At failure

Axial Strain  
Deviator Stress,  $(\sigma_1 - \sigma_3) f$   
Undrained Shear Strength,  $c_u$   
Mode of Failure

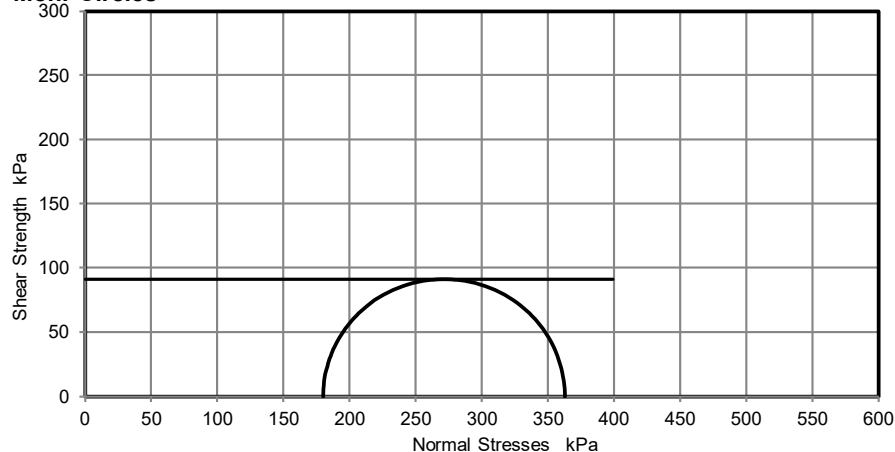
1
199.8
mm
102.0
mm
1.92
Mg/m <sup>3</sup>
29.3
%
1.48
Mg/m <sup>3</sup>

1.0
%/min
180
kPa
5.0
%
183
kPa
91
kPa $\frac{1}{2}(\sigma_1 - \sigma_3) f$
Brittle

Deviator Stress v Axial Strain



Mohr Circles



Deviator stress corrected for area change and membrane effects

Mohr circles and their interpretation is not covered by BS1377.  
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Remarks	Approved	Date	Sheet No.:
	MW M. Willson Laboratory Manager	20/09/2021	1 of 1

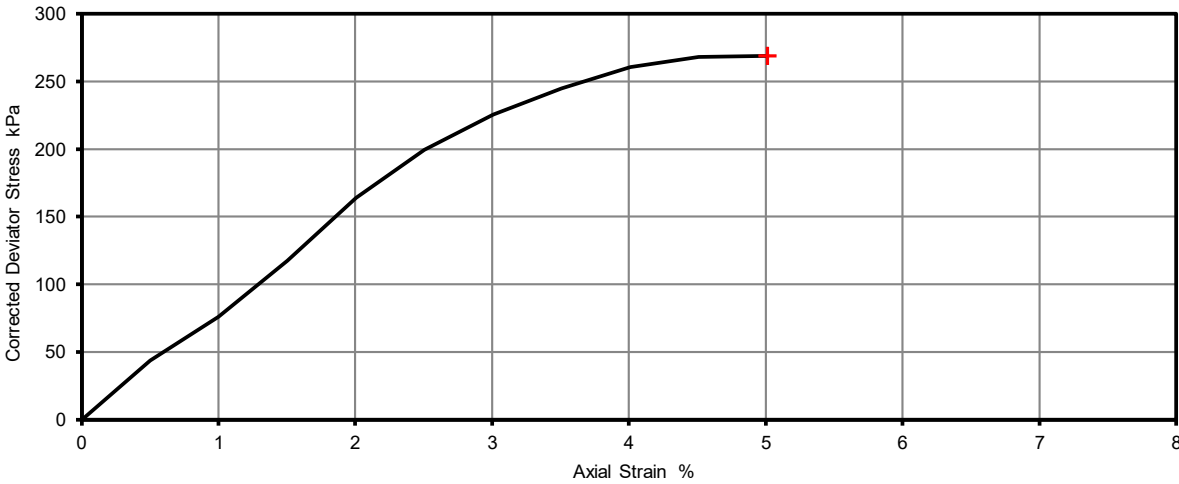
	<b>DETERMINATION OF UNDRAINED SHEAR STRENGTH - DEFINITIVE</b> BS1377 : Part 7 : 1990, Clause 8, Single Specimen		
Project Name:	<b>BY Kentish Town</b>	Project Number:	<b>GL24466-01</b>
Client Name:	<b>The Big Yellow Construction Company Ltd</b>	Sample Location:	BH03
Sample Description:	High strength brown CLAY with selenite crystals.	Sample Depth (m)	7.50
		Sample Reference	UT3

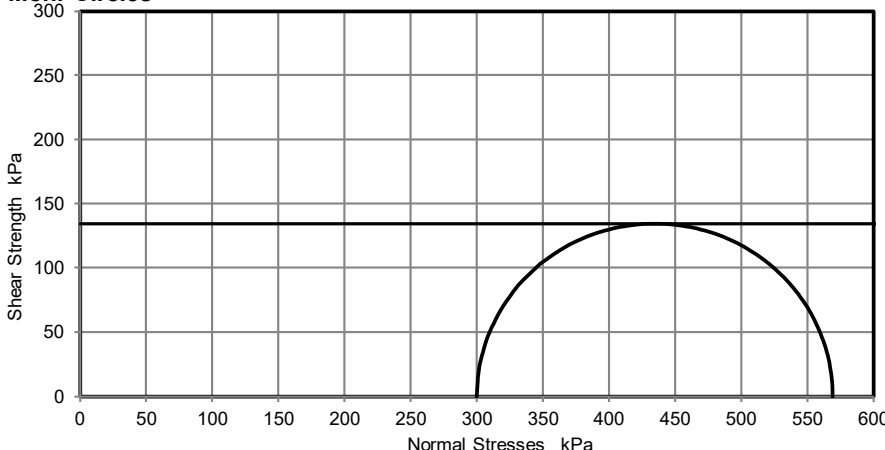
Test Number Length Diameter Bulk Density Moisture Content Dry Density	<table border="1" style="margin: auto;"> <tr><td>1</td></tr> <tr><td>199.5</td></tr> <tr><td>102.0</td></tr> <tr><td>1.96</td></tr> <tr><td>26.7</td></tr> <tr><td>1.54</td></tr> </table>	1	199.5	102.0	1.96	26.7	1.54	mm mm Mg/m3 % Mg/m3
1								
199.5								
102.0								
1.96								
26.7								
1.54								
Rate of Strain Cell Pressure At failure	<table border="1" style="margin: auto;"> <tr><td>1.0</td></tr> <tr><td>300</td></tr> <tr><td>5.0</td></tr> <tr><td>269</td></tr> <tr><td>135</td></tr> <tr><td>Brittle</td></tr> </table>	1.0	300	5.0	269	135	Brittle	%/min kPa % kPa kPa $\frac{1}{2}(\sigma_1 - \sigma_3) f$
1.0								
300								
5.0								
269								
135								
Brittle								
Axial Strain Deviator Stress, $(\sigma_1 - \sigma_3) f$ Undrained Shear Strength, $c_u$ Mode of Failure								

**Deviator Stress v Axial Strain**

**Mohr Circles**




Deviator stress corrected for area change and membrane effects

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Remarks	Approved	Date	Sheet No.:
	MW M. Willson Laboratory Manager	20/09/2021	1 of 1

# DETERMINATION OF UNDRAINED SHEAR STRENGTH - DEFINITIVE

BS1377 : Part 7 : 1990, Clause 8, Single Specimen

Project Name:	BY Kentish Town	Project Number:	GL24466-01
Client Name:	The Big Yellow Construction Company Ltd	Sample Location:	BH03
Sample Description:	Very high strength dark grey mottled orange brown CLAY with selenite crystals.	Sample Depth (m)	10.50
		Sample Reference	UT4

Test Number  
Length  
Diameter  
Bulk Density  
Moisture Content  
Dry Density

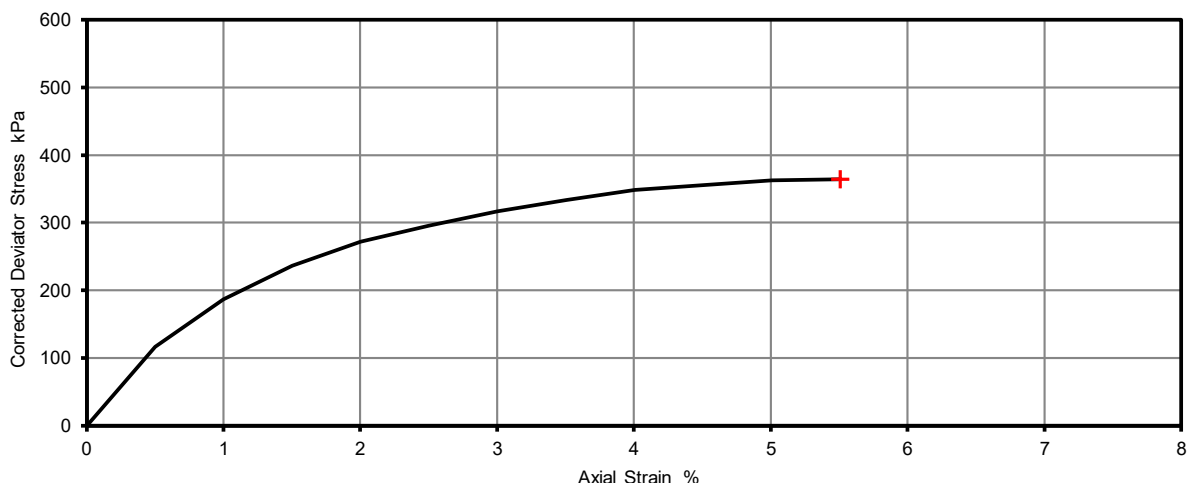
1	
199.7	mm
101.7	mm
1.97	Mg/m3
25.6	%
1.56	Mg/m3

Rate of Strain  
Cell Pressure  
At failure

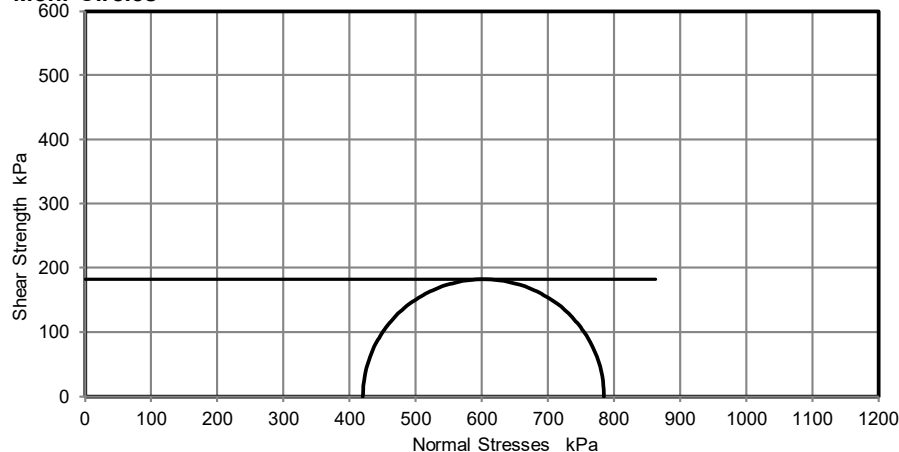
1.0	%/min
420	kPa
5.5	%
365	kPa
182	kPa $\frac{1}{2}(\sigma_1 - \sigma_3)$ f
Brittle	

Axial Strain  
Deviator Stress,  $(\sigma_1 - \sigma_3)$  f  
Undrained Shear Strength, cu  
Mode of Failure

Deviator Stress v Axial Strain



Mohr Circles



Deviator stress corrected for area change and membrane effects

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Remarks	Approved	Date	Sheet No.:
	MW M. Willson Laboratory Manager	20/09/2021	1 of 1

# DETERMINATION OF UNDRAINED SHEAR STRENGTH - DEFINITIVE

BS1377 : Part 7 : 1990, Clause 8, Single Specimen

Project Name:	BY Kentish Town	Project Number:	GL24466-01
Client Name:	The Big Yellow Construction Company Ltd	Sample Location:	BH03
Sample Description:	Very high strength dark grey CLAY.	Sample Depth (m)	13.50
		Sample Reference	UT5

Test Number  
Length  
Diameter  
Bulk Density  
Moisture Content  
Dry Density

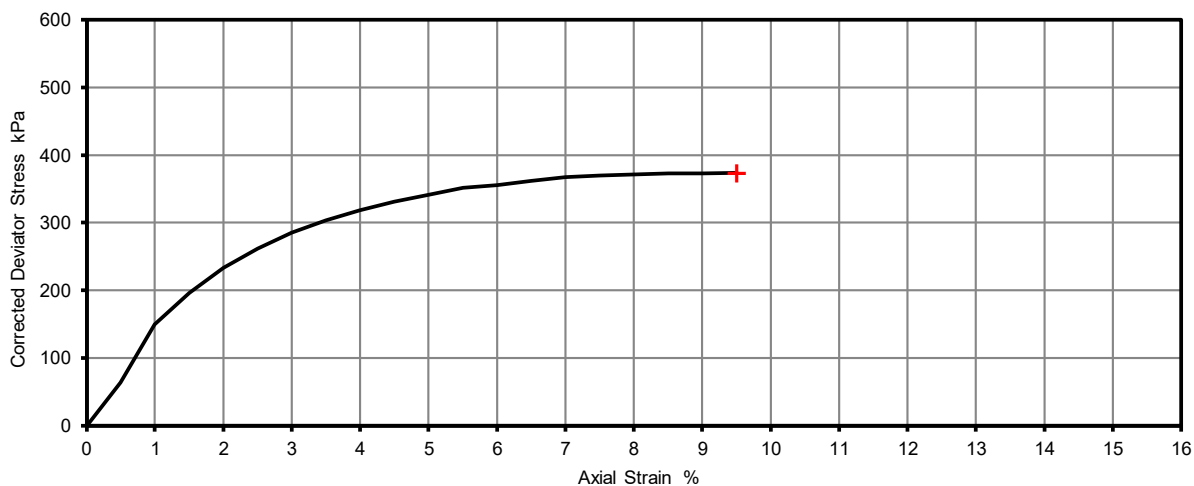
Rate of Strain  
Cell Pressure  
At failure

Axial Strain  
Deviator Stress,  $(\sigma_1 - \sigma_3)$  f  
Undrained Shear Strength,  $c_u$   
Mode of Failure

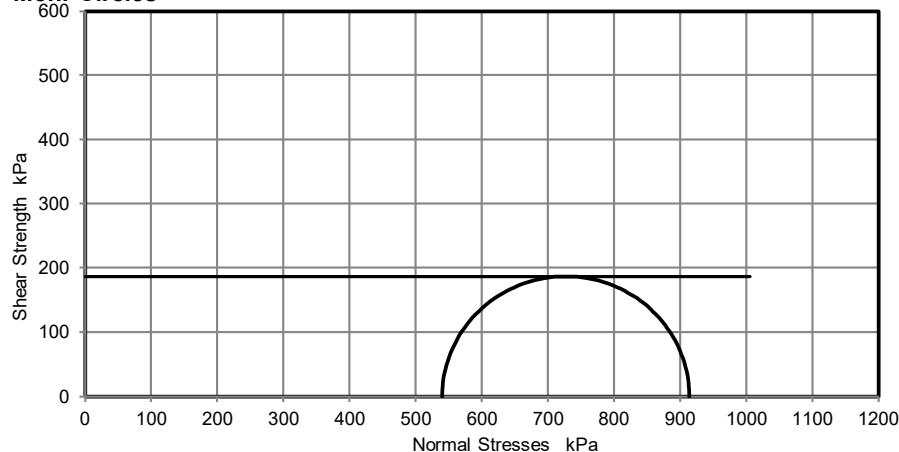
1	
199.9	mm
102.5	mm
2.00	Mg/m <sup>3</sup>
26.1	%
1.59	Mg/m <sup>3</sup>

1.0	%/min
540	kPa
9.5	%
374	kPa
187	kPa $\frac{1}{2}(\sigma_1 - \sigma_3)$ f
Compound	

Deviator Stress v Axial Strain



Mohr Circles



Deviator stress corrected for area change and membrane effects

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Remarks	Approved	Date	Sheet No.:
	MW M. Willson Laboratory Manager	20/09/2021	1 of 1

# DETERMINATION OF UNDRAINED SHEAR STRENGTH - DEFINITIVE

BS1377 : Part 7 : 1990, Clause 8, Single Specimen

Project Name:	BY Kentish Town	Project Number:	GL24466-01
Client Name:	The Big Yellow Construction Company Ltd	Sample Location:	BH03
Sample Description:	Very high strength dark grey CLAY.	Sample Depth (m)	16.50
		Sample Reference	UT6

Test Number  
Length  
Diameter  
Bulk Density  
Moisture Content  
Dry Density

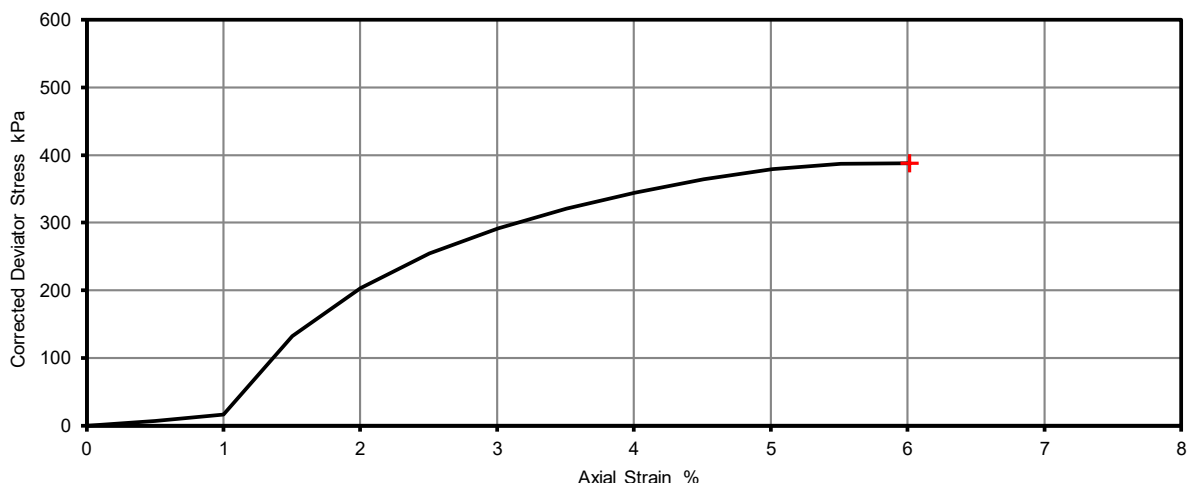
Rate of Strain  
Cell Pressure  
At failure

Axial Strain  
Deviator Stress,  $(\sigma_1 - \sigma_3)$  f  
Undrained Shear Strength,  $c_u$   
Mode of Failure

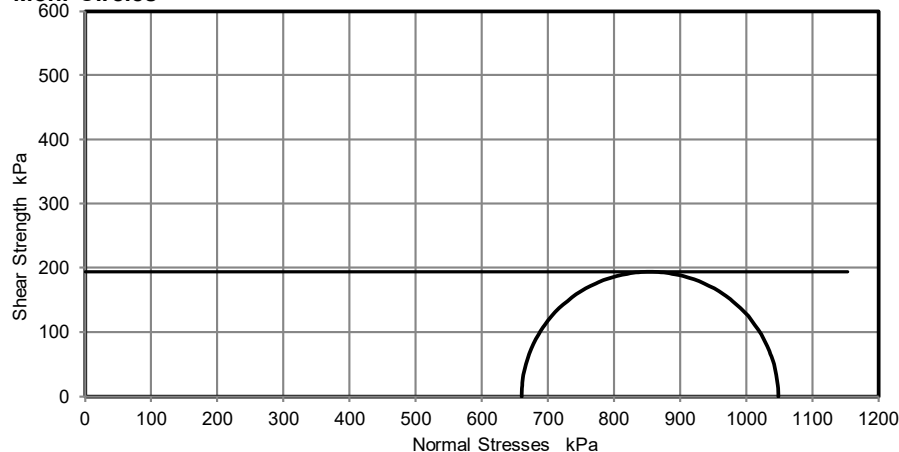
1	
199.5	mm
101.9	mm
1.99	Mg/m <sup>3</sup>
24.8	%
1.59	Mg/m <sup>3</sup>

1.0	%/min
660	kPa
6.0	%
388	kPa
194	kPa $\frac{1}{2}(\sigma_1 - \sigma_3)$ f
Brittle	

Deviator Stress v Axial Strain



Mohr Circles



Deviator stress corrected for area change and membrane effects

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Remarks	Approved	Date	Sheet No.:
	MW M. Willson Laboratory Manager	20/09/2021	1 of 1

# DETERMINATION OF UNDRAINED SHEAR STRENGTH - DEFINITIVE

BS1377 : Part 7 : 1990, Clause 8, Single Specimen

Project Name:	BY Kentish Town	Project Number:	GL24466-01
Client Name:	The Big Yellow Construction Company Ltd	Sample Location:	BH03
Sample Description:	Very high strength dark grey CLAY.	Sample Depth (m)	19.50
		Sample Reference	UT7

Test Number  
Length  
Diameter  
Bulk Density  
Moisture Content  
Dry Density

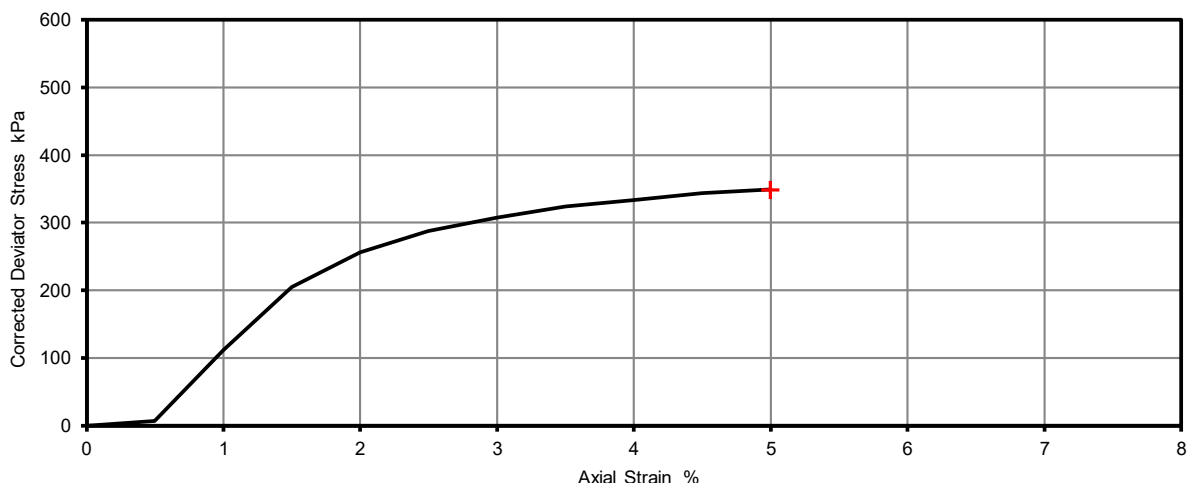
Rate of Strain  
Cell Pressure  
At failure

Axial Strain  
Deviator Stress,  $(\sigma_1 - \sigma_3) f$   
Undrained Shear Strength,  $c_u$   
Mode of Failure

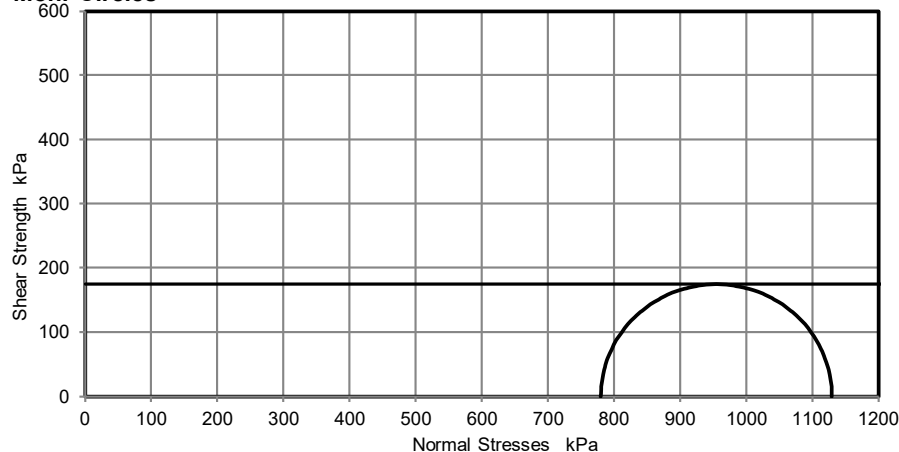
1	
200.0	mm
102.1	mm
1.96	Mg/m <sup>3</sup>
25.7	%
1.56	Mg/m <sup>3</sup>

1.0	%/min
780	kPa
5.0	%
349	kPa
175	kPa $\frac{1}{2}(\sigma_1 - \sigma_3) f$
Brittle	

Deviator Stress v Axial Strain



Mohr Circles



Deviator stress corrected for area change and membrane effects

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Remarks	Approved	Date	Sheet No.:
	MW M. Willson Laboratory Manager	20/09/2021	1 of 1

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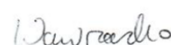
**e:** reception@i2analytical.com

## **Analytical Report Number : 21-98090**

Replaces Analytical Report Number: 21-98090, issue no. 1  
Client references/information amended.

<b>Project / Site name:</b>	B Y Kentish Town	<b>Samples received on:</b>	09/09/2021
<b>Your job number:</b>	GL24466	<b>Samples instructed on/ Analysis started on:</b>	09/09/2021
<b>Your order number:</b>	PO 37611 GB	<b>Analysis completed by:</b>	23/09/2021
<b>Report Issue Number:</b>	2	<b>Report issued on:</b>	23/09/2021
<b>Samples Analysed:</b>	31 soil samples		

**Signed:**



Joanna Wawrzeczko  
Technical Reviewer (Reporting Team)  
**For & on behalf of i2 Analytical Ltd.**

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting  
leachates - 2 weeks from reporting  
waters - 2 weeks from reporting  
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.  
Application of uncertainty of measurement would provide a range within which the true result lies.  
An estimate of measurement uncertainty can be provided on request.

**Analytical Report Number: 21-98090**  
**Project / Site name: B Y Kentish Town**  
**Your Order No: PO 37611 GB**

Lab Sample Number				2003531	2003532	2003533	2003534	2003535
Sample Reference				BH01	BH01	BH01	BH01	BH01
Sample Number				D1	B3	D3	D5	D7
Depth (m)				0.50-0.50	2.50-2.95	5.50-5.50	8.00-8.00	11.00-1.00
Date Sampled				25/08/2021	25/08/2021	25/08/2021	25/08/2021	25/08/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	17	17	19	16	18
Total mass of sample received	kg	0.001	NONE	2.0	0.30	0.50	0.50	1.5

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.6	7.8	8.7	8.0	8.1
Total Sulphate as SO <sub>4</sub>	%	0.005	MCERTS	0.124	-	-	-	-
Water Soluble Sulphate (Soil Equivalent)	g/kg	0.0025	MCERTS	0.68	2.3	0.32	5.1	5.2
Water Soluble Sulphate as SO <sub>4</sub> 16hr extraction (2:1)	mg/kg	2.5	MCERTS	680	2300	320	5100	5200
Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.34	1.2	0.16	2.6	2.6
Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	341	-	-	-	-
Total Sulphur	%	0.005	MCERTS	0.094	-	-	-	-

U/S = Unsuitable Sample    I/S = Insufficient Sample



**Analytical Report Number: 21-98090**  
**Project / Site name: B Y Kentish Town**  
**Your Order No: PO 37611 GB**

Lab Sample Number				2003536	2003537	2003538	2003539	2003540
Sample Reference				BH01	BH01	BH01	BH02	BH02
Sample Number				D8	D11	D15	B1	D7
Depth (m)				12.00-12.45	17.00-17.00	23.00-23.00	0.90-1.20	6.45-6.55
Date Sampled				25/08/2021	25/08/2021	25/08/2021	25/08/2021	25/08/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	17	18	17	17	18
Total mass of sample received	kg	0.001	NONE	1.5	0.30	0.30	0.30	0.40

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.4	9.0	9.0	8.6	8.4
Total Sulphate as SO <sub>4</sub>	%	0.005	MCERTS	-	-	-	0.067	-
Water Soluble Sulphate (Soil Equivalent)	g/kg	0.0025	MCERTS	5.3	1.6	1.1	0.36	1.8
Water Soluble Sulphate as SO <sub>4</sub> 16hr extraction (2:1)	mg/kg	2.5	MCERTS	5300	1600	1100	360	1800
Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	2.6	0.82	0.57	0.18	0.90
Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	-	-	-	181	-
Total Sulphur	%	0.005	MCERTS	-	-	-	0.041	-

U/S = Unsuitable Sample I/S = Insufficient Sample

**Analytical Report Number: 21-98090**  
**Project / Site name: B Y Kentish Town**  
**Your Order No: PO 37611 GB**

Lab Sample Number				2003541	2003542	2003543	2003544	2003545
Sample Reference				BH02	BH02	BH03	BH03	BH03
Sample Number				D11	UT5	D1	D5	D11
Depth (m)				12.50-12.50	15.00-15.45	0.50-0.50	2.50-2.50	5.50-5.50
Date Sampled				25/08/2021	25/08/2021	25/08/2021	25/08/2021	25/08/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	17	16	13	17	18
Total mass of sample received	kg	0.001	NONE	1.5	0.30	2.0	0.30	1.5

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.2	8.5	9.3	8.4	7.5
Total Sulphate as SO <sub>4</sub>	%	0.005	MCERTS	-	-	-	0.051	-
Water Soluble Sulphate (Soil Equivalent)	g/kg	0.0025	MCERTS	2.5	2.0	0.34	0.34	4.7
Water Soluble Sulphate as SO <sub>4</sub> 16hr extraction (2:1)	mg/kg	2.5	MCERTS	2500	2000	340	340	4700
Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	1.2	1.0	0.17	0.17	2.4
Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	-	-	-	171	-
Total Sulphur	%	0.005	MCERTS	-	-	-	0.024	-

U/S = Unsuitable Sample I/S = Insufficient Sample

**Analytical Report Number: 21-98090**  
**Project / Site name: B Y Kentish Town**  
**Your Order No: PO 37611 GB**

Lab Sample Number				2003546	2003547	2003548	2003549	2003550
Sample Reference				BH03	BH03	BH03	BH03	BH03
Sample Number				D17	D20	D26	D31	D35
Depth (m)				8.50	10.00	13.00	18.00	24.00-24.45
Date Sampled				25/08/2021	25/08/2021	25/08/2021	25/08/2021	25/08/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	18	17	17	17	18
Total mass of sample received	kg	0.001	NONE	1.5	1.5	1.5	1.0	0.80

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.8	7.6	8.2	8.6	8.7
Total Sulphate as SO <sub>4</sub>	%	0.005	MCERTS	-	-	-	-	-
Water Soluble Sulphate (Soil Equivalent)	g/kg	0.0025	MCERTS	3.8	2.5	2.2	1.6	1.4
Water Soluble Sulphate as SO <sub>4</sub> 16hr extraction (2:1)	mg/kg	2.5	MCERTS	3800	2500	2200	1600	1400
Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	1.9	1.2	1.1	0.82	0.71
Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	-	-	-	-	-
Total Sulphur	%	0.005	MCERTS	-	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number: 21-98090  
 Project / Site name: B Y Kentish Town  
 Your Order No: PO 37611 GB

Lab Sample Number				2003551	2003552	2003553	2003554	2003555
Sample Reference				DCP05	TP01	TP01	TP02	WS01
Sample Number				D3	B3	B4	B1	D3
Depth (m)				0.80-0.80	1.60-1.80	2.40-2.60	0.60-0.80	0.70-0.70
Date Sampled				25/08/2021	25/08/2021	25/08/2021	25/08/2021	25/08/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	22	14	20	9.5	16
Total mass of sample received	kg	0.001	NONE	1.0	0.70	0.50	0.70	0.70

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.5	10.0	8.4	9.4	8.5
Total Sulphate as SO <sub>4</sub>	%	0.005	MCERTS	-	-	0.080	-	-
Water Soluble Sulphate (Soil Equivalent)	g/kg	0.0025	MCERTS	0.14	0.58	0.55	1.3	0.094
Water Soluble Sulphate as SO <sub>4</sub> 16hr extraction (2:1)	mg/kg	2.5	MCERTS	140	580	550	1300	94
Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.069	0.29	0.27	0.64	0.047
Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	-	-	275	-	-
Total Sulphur	%	0.005	MCERTS	-	-	0.032	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample

**Analytical Report Number: 21-98090**  
**Project / Site name: B Y Kentish Town**  
**Your Order No: PO 37611 GB**

Lab Sample Number				2003556	2003557	2003558	2003559	2003560
Sample Reference				WS01	WS01	WS02	WS02	WS02
Sample Number				D6	D10	D4	D5	D7
Depth (m)				2.00-2.00	4.50-4.50	1.00-1.00	1.50-1.50	2.30-2.30
Date Sampled				25/08/2021	25/08/2021	25/08/2021	25/08/2021	25/08/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	18	19	14	20	20
Total mass of sample received	kg	0.001	NONE	0.30	0.30	0.40	1.0	1.0

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.9	8.4	8.6	8.8	7.8
Total Sulphate as SO <sub>4</sub>	%	0.005	MCERTS	0.189	-	0.056	-	0.109
Water Soluble Sulphate (Soil Equivalent)	g/kg	0.0025	MCERTS	1.6	0.31	0.21	0.19	1.1
Water Soluble Sulphate as SO <sub>4</sub> 16hr extraction (2:1)	mg/kg	2.5	MCERTS	1600	310	210	190	1100
Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.81	0.16	0.10	0.096	0.57
Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	811	-	105	-	568
Total Sulphur	%	0.005	MCERTS	0.067	-	0.021	-	0.148

U/S = Unsuitable Sample    I/S = Insufficient Sample

**Analytical Report Number: 21-98090**  
**Project / Site name: B Y Kentish Town**  
**Your Order No: PO 37611 GB**

<b>Lab Sample Number</b>				2003561
<b>Sample Reference</b>				WS03
<b>Sample Number</b>				D1
<b>Depth (m)</b>				0.25-0.25
<b>Date Sampled</b>				25/08/2021
<b>Time Taken</b>				None Supplied
<b>Analytical Parameter (Soil Analysis)</b>	<b>Units</b>	<b>Limit of detection</b>	<b>Accreditation Status</b>	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	8.8
Total mass of sample received	kg	0.001	NONE	1.0

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	10.6
Total Sulphate as SO <sub>4</sub>	%	0.005	MCERTS	0.533
Water Soluble Sulphate (Soil Equivalent)	g/kg	0.0025	MCERTS	0.62
Water Soluble Sulphate as SO <sub>4</sub> 16hr extraction (2:1)	mg/kg	2.5	MCERTS	620
Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.31
Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	312
Total Sulphur	%	0.005	MCERTS	0.179

U/S = Unsuitable Sample    I/S = Insufficient Sample

**Analytical Report Number : 21-98090**  
**Project / Site name: B Y Kentish Town**

\* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2003531	BH01	D1	0.50-0.50	Brown clay and loam with gravel.
2003532	BH01	B3	2.50-2.95	Brown clay and loam with gravel.
2003533	BH01	D3	5.50-5.50	Brown clay.
2003534	BH01	D5	8.00-8.00	Brown clay.
2003535	BH01	D7	11.00-1.00	Brown clay.
2003536	BH01	D8	12.00-12.45	Brown clay.
2003537	BH01	D11	17.00-17.00	Brown clay.
2003538	BH01	D15	23.00-23.00	Brown clay.
2003539	BH02	B1	0.90-1.20	Brown clay with gravel.
2003540	BH02	D7	6.45-6.55	Brown clay.
2003541	BH02	D11	12.50-12.50	Brown clay.
2003542	BH02	UT5	15.00-15.45	Brown clay.
2003543	BH03	D1	0.50-0.50	Brown loam and gravel.
2003544	BH03	D5	2.50-2.50	Brown clay.
2003545	BH03	D11	5.50-5.50	Brown clay.
2003546	BH03	D17	8.5	Brown clay.
2003547	BH03	D20	10	Brown clay.
2003548	BH03	D26	13	Brown clay.
2003549	BH03	D31	18	Brown clay.
2003550	BH03	D35	24.00-24.45	Brown clay.
2003551	DCP05	D3	0.80-0.80	Brown clay and loam with gravel.
2003552	TP01	B3	1.60-1.80	Brown clay and loam with gravel and brick.
2003553	TP01	B4	2.40-2.60	Brown clay with gravel.
2003554	TP02	B1	0.60-0.80	Brown loam and clay with gravel and vegetation.
2003555	WS01	D3	0.70-0.70	Brown clay and loam with gravel and vegetation.
2003556	WS01	D6	2.00-2.00	Brown clay with gravel and vegetation.
2003557	WS01	D10	4.50-4.50	Brown clay.
2003558	WS02	D4	1.00-1.00	Brown clay and sand with gravel.
2003559	WS02	D5	1.50-1.50	Brown clay and sand with gravel.
2003560	WS02	D7	2.30-2.30	Brown clay and sand with gravel.
2003561	WS03	D1	0.25-0.25	Brown loam and sand with gravel.

**Analytical Report Number : 21-98090**  
**Project / Site name: B Y Kentish Town**

**Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)**

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphate in soil as %	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total Sulphur in soil as %	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS

**For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.**

**For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.**

**Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.**

**Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.**



## **APPENDIX E**

### **ENVIRONMENTAL LABORATORY TESTING**

**GL**  
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Water Ways Business Centre  
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South Ordinance Way  
Enfield  
EN3 6JJ

**t:** 02075379233

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i2 Analytical Ltd.  
7 Woodshots Meadow,  
Croxley Green  
Business Park,  
Watford,  
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## **Analytical Report Number : 21-92702**

Replaces Analytical Report Number: 21-92702, issue no. 1  
Additional analysis undertaken.

<b>Project / Site name:</b>	BY Kentish Town	<b>Samples received on:</b>	12/08/2021
<b>Your job number:</b>	GL24466	<b>Samples instructed on/ Analysis started on:</b>	13/08/2021
<b>Your order number:</b>		<b>Analysis completed by:</b>	06/09/2021
<b>Report Issue Number:</b>	2	<b>Report issued on:</b>	06/09/2021
<b>Samples Analysed:</b>	7 soil samples		

**Signed:** *Karolina Marek*

Karolina Marek  
PL Head of Reporting Team  
**For & on behalf of i2 Analytical Ltd.**

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting  
leachates - 2 weeks from reporting  
waters - 2 weeks from reporting  
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.  
Application of uncertainty of measurement would provide a range within which the true result lies.  
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 21-92702  
Project / Site name: BY Kentish Town

Lab Sample Number	1971183	1971184	1971185	1971186	1971187
Sample Reference	BH02	BH02	WS01	WS02	WS02
Sample Number	1	2	1	1	3
Depth (m)	0.30-0.30	0.60-0.60	0.20-0.20	0.30-0.30	0.80-0.80
Date Sampled	11/08/2021	11/08/2021	11/08/2021	11/08/2021	11/08/2021
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	9.0	17
Total mass of sample received	kg	0.001	NONE	1.2	1.2

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	Chrysotile	-
Asbestos in Soil	Type	N/A	ISO 17025	-	Not-detected	Not-detected	Detected	-
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	0.084	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	0.084	-

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	-	8.5	8.1	8.4	-
Total Cyanide	mg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	-
Total Sulphate as SO4	mg/kg	50	MCERTS	-	1300	750	4300	-
Sulphide	mg/kg	1	MCERTS	-	32	< 1.0	66	-
Total Organic Carbon (TOC)	%	0.1	MCERTS	1.0	-	2.5	-	2.1

#### Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	-
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#### Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	< 0.05	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	< 0.05	-
Acenaphthene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	0.80	-
Fluorene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	0.51	-
Phenanthrene	mg/kg	0.05	MCERTS	-	0.63	0.76	2.5	-
Anthracene	mg/kg	0.05	MCERTS	-	< 0.05	0.71	0.72	-
Fluoranthene	mg/kg	0.05	MCERTS	-	0.88	0.79	4.1	-
Pyrene	mg/kg	0.05	MCERTS	-	0.80	0.62	3.7	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	0.42	0.29	2.1	-
Chrysene	mg/kg	0.05	MCERTS	-	0.40	0.35	1.9	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	0.56	0.48	2.6	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	0.25	0.14	1.1	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	0.43	0.32	1.9	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	1.0	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	0.32	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	1.2	-

#### Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	-	4.37	4.46	24.2	-
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Analytical Report Number: 21-92702  
Project / Site name: BY Kentish Town

Lab Sample Number	1971183	1971184	1971185	1971186	1971187
Sample Reference	BH02	BH02	WS01	WS02	WS02
Sample Number	1	2	1	1	3
Depth (m)	0.30-0.30	0.60-0.60	0.20-0.20	0.30-0.30	0.80-0.80
Date Sampled	11/08/2021	11/08/2021	11/08/2021	11/08/2021	11/08/2021
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		

#### Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	14	13	28	-
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	-	1.4	0.96	1.4	-
Boron (water soluble)	mg/kg	0.2	MCERTS	-	3.9	2.5	7.5	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	< 0.2	0.6	1.6	-
Chromium (hexavalent)	mg/kg	4	MCERTS	-	< 4.0	< 4.0	< 4.0	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	48	28	37	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	70	35	240	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	180	71	500	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	< 0.3	< 0.3	< 0.3	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	33	21	52	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	-
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	-	78	41	68	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	110	110	470	-

#### Petroleum Hydrocarbons

TPH Texas (C6 - C8)	mg/kg	0.1	ISO 17025	-	< 0.1	< 0.1	< 0.1	-
TPH Texas (C8 - C10)	mg/kg	10	MCERTS	-	< 10	< 10	< 10	-
TPH Texas (C10 - C12)	mg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	-
TPH Texas (C12 - C16)	mg/kg	4	MCERTS	-	4.1	< 4.0	20	-
TPH Texas (C16 - C21)	mg/kg	10	MCERTS	-	28	< 10	110	-
TPH Texas (C21 - C40)	mg/kg	10	MCERTS	-	130	14	660	-
TPH Texas (C6 - C40)	mg/kg	10	NONE	-	160	14	790	-

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number: 21-92702  
Project / Site name: BY Kentish Town

Lab Sample Number				1971188	1971189
Sample Reference				WS03	WS03
Sample Number				2	3
Depth (m)				0.50-0.50	1.00-1.00
Date Sampled				11/08/2021	11/08/2021
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	7.7	8.0
Total mass of sample received	kg	0.001	NONE	1.2	1.2

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-
Asbestos in Soil	Type	N/A	ISO 17025	-	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	-	9.6
Total Cyanide	mg/kg	1	MCERTS	-	< 1.0
Total Sulphate as SO <sub>4</sub>	mg/kg	50	MCERTS	-	2200
Sulphide	mg/kg	1	MCERTS	-	40
Total Organic Carbon (TOC)	%	0.1	MCERTS	1.4	-

#### Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	-	< 1.0
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#### Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	-	0.98
Acenaphthylene	mg/kg	0.05	MCERTS	-	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	-	4.2
Fluorene	mg/kg	0.05	MCERTS	-	2.5
Phenanthrene	mg/kg	0.05	MCERTS	-	25
Anthracene	mg/kg	0.05	MCERTS	-	1.6
Fluoranthene	mg/kg	0.05	MCERTS	-	34
Pyrene	mg/kg	0.05	MCERTS	-	29
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	15
Chrysene	mg/kg	0.05	MCERTS	-	11
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	13
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	6.1
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	10
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	4.6
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	1.4
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	5.2

#### Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	-	163
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Analytical Report Number: 21-92702  
Project / Site name: BY Kentish Town

Lab Sample Number				1971188	1971189
Sample Reference				WS03	WS03
Sample Number				2	3
Depth (m)				0.50-0.50	1.00-1.00
Date Sampled				11/08/2021	11/08/2021
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		
<b>Heavy Metals / Metalloids</b>					
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	31
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	-	3.0
Boron (water soluble)	mg/kg	0.2	MCERTS	-	3.1
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	1.1
Chromium (hexavalent)	mg/kg	4	MCERTS	-	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	32
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	310
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	320
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	58
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	-	62
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	320

#### Petroleum Hydrocarbons

TPH Texas (C6 - C8)	mg/kg	0.1	ISO 17025	-	< 0.1
TPH Texas (C8 - C10)	mg/kg	10	MCERTS	-	< 10
TPH Texas (C10 - C12)	mg/kg	1	MCERTS	-	3.4
TPH Texas (C12 - C16)	mg/kg	4	MCERTS	-	13
TPH Texas (C16 - C21)	mg/kg	10	MCERTS	-	51
TPH Texas (C21 - C40)	mg/kg	10	MCERTS	-	290
TPH Texas (C6 - C40)	mg/kg	10	NONE	-	360

U/S = Unsuitable Sample I/S = Insufficient Sample



**Analytical Report Number:** 21-92702  
**Project / Site name:** BY Kentish Town  
**Your Order No:**

## Certificate of Analysis - Asbestos Quantification

### Methods:

#### Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

#### Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
1971186	WS02	0.30-0.30	131	Loose Fibrous Debris	Chrysotile	0.084	0.084

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

**Analytical Report Number : 21-92702**  
**Project / Site name: BY Kentish Town**

\* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
1971183	BH02	1	0.30-0.30	Brown clay and sand with gravel.
1971184	BH02	2	0.60-0.60	Grey clay and sand with gravel.
1971185	WS01	1	0.20-0.20	Brown loam and clay with vegetation and gravel
1971186	WS02	1	0.30-0.30	Brown clay and sand with rubble and gravel
1971187	WS02	3	0.80-0.80	Brown loam and gravel.
1971188	WS03	2	0.50-0.50	Brown loam and gravel.
1971189	WS03	3	1.00-1.00	Brown loam and gravel.



**Analytical Report Number : 21-92702**  
**Project / Site name: BY Kentish Town**

**Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)**

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazine followed by colorimetry.	In-house method	L080-PL	W	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO <sub>4</sub> in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
TPH Texas (Soil)	Determination of dichloromethane/hexane extractable hydrocarbons in soil by GC-MS.	In-house method	L064-PL	D	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025

**For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.**

**For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.**

**Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.**



Analytical Report Number : 21-92702  
Project / Site name: BY Kentish Town

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
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Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

**GL**

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## **Analytical Report Number : 21-92708**

**Project / Site name:** BY Kentish Town

**Samples received on:** 12/08/2021

**Your job number:** GL24466

**Samples instructed on/  
Analysis started on:** 12/08/2021

**Your order number:**

**Analysis completed by:** 19/08/2021

**Report Issue Number:** 1

**Report issued on:** 19/08/2021

**Samples Analysed:** 3 10:1 WAC Samples

**Signed:**



Joanna Wawrzeczko  
Technical Reviewer (Reporting Team)  
**For & on behalf of i2 Analytical Ltd.**

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting  
leachates - 2 weeks from reporting  
waters - 2 weeks from reporting  
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.  
Application of uncertainty of measurement would provide a range within which the true result lies.  
An estimate of measurement uncertainty can be provided on request.

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Waste Acceptance Criteria Analytical Results							
Report No:	21-92708						
				Client: HARRIGROUP			
Location	BY Kentish Town						
Lab Reference (Sample Number)	1971197 / 1971198			Landfill Waste Acceptance Criteria			
				Limits			
Sampling Date	11/08/2021			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill	
Sample ID	BH02 2						
Depth (m)	0.60-0.60						
Solid Waste Analysis							
TOC (%)**	1.1				3%	5%	6%
Loss on Ignition (%) **	4.9				--	--	10%
BTEX (µg/kg) **	< 10				6000	--	--
Sum of PCBs (mg/kg) **	0.019				1	--	--
Mineral Oil (mg/kg)	150				500	--	--
Total PAH (WAC-17) (mg/kg)	7.24				100	--	--
pH (units)**	8.4				--	>6	--
Acid Neutralisation Capacity (mol / kg)	7.1				--	To be evaluated	To be evaluated
Eluate Analysis							
	10:1			10:1	Limit values for compliance leaching test		
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)		
Arsenic *	0.0048			0.0376	0.5	2	25
Barium *	0.0303			0.237	20	100	300
Cadmium *	< 0.0001			< 0.0008	0.04	1	5
Chromium *	0.0009			0.0068	0.5	10	70
Copper *	0.013			0.10	2	50	100
Mercury *	< 0.0005			< 0.0050	0.01	0.2	2
Molybdenum *	0.0198			0.155	0.5	10	30
Nickel *	0.0055			0.043	0.4	10	40
Lead *	0.0033			0.026	0.5	10	50
Antimony *	0.0074			0.058	0.06	0.7	5
Selenium *	< 0.0040			< 0.040	0.1	0.5	7
Zinc *	0.0068			0.053	4	50	200
Chloride *	20			160	800	15000	25000
Fluoride	1.4			11	10	150	500
Sulphate *	63			490	1000	20000	50000
TDS*	130			990	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-	-
DOC	17.5			137	500	800	1000
Leach Test Information							
Stone Content (%)	< 0.1						
Sample Mass (kg)	1.2						
Dry Matter (%)	83						
Moisture (%)	17						
Results are expressed on a dry weight basis, after correction for moisture content where applicable.							
Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation				** = UKAS accredited (liquid eluate analysis only)			
				** = MCERTS accredited			
Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3.							
This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.							

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Waste Acceptance Criteria Analytical Results							
Report No:	21-92708						
					Client: HARRIGROUP		
Location	BY Kentish Town						
Lab Reference (Sample Number)	1971199 / 1971200				Landfill Waste Acceptance Criteria		
					Limits		
Sampling Date	11/08/2021				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID	WS02 1						
Depth (m)	0.30-0.30						
Solid Waste Analysis							
TOC (%)**	2.4				3%	5%	6%
Loss on Ignition (%) **	7.1				--	--	10%
BTEX (µg/kg) **	< 10				6000	--	--
Sum of PCBs (mg/kg) **	0.095				1	--	--
Mineral Oil (mg/kg)	520				500	--	--
Total PAH (WAC-17) (mg/kg)	27.4				100	--	--
pH (units)**	8.0				--	>6	--
Acid Neutralisation Capacity (mol / kg)	9.1				--	To be evaluated	To be evaluated
Eluate Analysis							
	10:1			10:1	Limit values for compliance leaching test		
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)		
Arsenic *	0.0011			0.0104	0.5	2	25
Barium *	0.0672			0.620	20	100	300
Cadmium *	< 0.0001			< 0.0008	0.04	1	5
Chromium *	0.0007			0.0066	0.5	10	70
Copper *	0.0061			0.057	2	50	100
Mercury *	< 0.0005			< 0.0050	0.01	0.2	2
Molybdenum *	0.0130			0.120	0.5	10	30
Nickel *	0.0031			0.029	0.4	10	40
Lead *	0.0020			0.018	0.5	10	50
Antimony *	0.031			0.29	0.06	0.7	5
Selenium *	< 0.0040			< 0.040	0.1	0.5	7
Zinc *	0.0073			0.067	4	50	200
Chloride *	11			98	800	15000	25000
Fluoride	0.40			3.7	10	150	500
Sulphate *	120			1100	1000	20000	50000
TDS*	180			1600	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-	-
DOC	6.03			55.6	500	800	1000
Leach Test Information							
Stone Content (%)	< 0.1						
Sample Mass (kg)	1.2						
Dry Matter (%)	89						
Moisture (%)	11						
Results are expressed on a dry weight basis, after correction for moisture content where applicable.					* = UKAS accredited (liquid eluate analysis only)		
Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation					** = MCERTS accredited		
Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3.							
This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.							

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Waste Acceptance Criteria Analytical Results							
Report No:	21-92708						
				Client: HARRIGROUP			
Location	BY Kentish Town						
Lab Reference (Sample Number)	1971201 / 1971202			Landfill Waste Acceptance Criteria			
				Limits			
Sampling Date	11/08/2021			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill	
Sample ID	WS03 3						
Depth (m)	1.00-1.00						
Solid Waste Analysis							
TOC (%)**	3.4			3%	5%	6%	
Loss on Ignition (%) **	9.8			--	--	10%	
BTEX (µg/kg) **	< 10			6000	--	--	
Sum of PCBs (mg/kg) **	< 0.007			1	--	--	
Mineral Oil (mg/kg)	88			500	--	--	
Total PAH (WAC-17) (mg/kg)	129			100	--	--	
pH (units)**	8.4			--	>6	--	
Acid Neutralisation Capacity (mol / kg)	9.6			--	To be evaluated	To be evaluated	
Eluate Analysis				Limit values for compliance leaching test			
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	10:1		10:1	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)			
	mg/l		mg/kg				
Arsenic *	0.0043		0.0354	0.5	2	25	
Barium *	0.0278		0.229	20	100	300	
Cadmium *	< 0.0001		< 0.0008	0.04	1	5	
Chromium *	0.0033		0.027	0.5	10	70	
Copper *	0.0080		0.066	2	50	100	
Mercury *	< 0.0005		< 0.0050	0.01	0.2	2	
Molybdenum *	0.0033		0.0268	0.5	10	30	
Nickel *	0.0031		0.025	0.4	10	40	
Lead *	0.0061		0.050	0.5	10	50	
Antimony *	< 0.0017		< 0.017	0.06	0.7	5	
Selenium *	< 0.0040		< 0.040	0.1	0.5	7	
Zinc *	0.0056		0.046	4	50	200	
Chloride *	2.3		19	800	15000	25000	
Fluoride	1.4		12	10	150	500	
Sulphate *	18		150	1000	20000	50000	
TDS*	78		640	4000	60000	100000	
Phenol Index (Monohydric Phenols) *	< 0.010		< 0.10	1	-	-	
DOC	7.59		62.3	500	800	1000	
Leach Test Information							
Stone Content (%)	< 0.1						
Sample Mass (kg)	1.2						
Dry Matter (%)	92						
Moisture (%)	8.0						
Results are expressed on a dry weight basis, after correction for moisture content where applicable.				* = UKAS accredited (liquid eluate analysis only)			
Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation				** = MCERTS accredited			
Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3.							
This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.							

**Analytical Report Number : 21-92708**

**Project / Site name: BY Kentish Town**

\* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
1971197	BH02	2	0.60-0.60	Grey clay and sand with gravel.
1971199	WS02	1	0.30-0.30	Brown clay and sand with rubble and gravel
1971201	WS03	3	1.00-1.00	Brown loam and gravel.

**Analytical Report Number : 21-92708**  
**Project / Site name: BY Kentish Town**

**Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)**

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
BS EN 12457-2 (10:1) Leachate Prep	10:1 (as recieved, moisture adjusted) end over end extraction with water for 24 hours. Eluate filtered prior to analysis.	In-house method based on BSEN12457-2.	L043-PL	W	NONE
Acid neutralisation capacity of soil	Determination of acid neutralisation capacity by addition of acid or alkali followed by electronic probe.	In-house method based on Guidance an Sampling and Testing of Wastes to Meet Landfill Waste Acceptance""	L046-PL	W	NONE
Loss on ignition of soil @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace.	In house method.	L047-PL	D	MCERTS
Mineral Oil (Soil) C10 - C40	Determination of mineral oil fraction extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L076-PL	D	NONE
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated WAC-17 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270. MCERTS accredited except Coronene.	L064-PL	D	NONE
PCB's By GC-MS in soil	Determination of PCB by extraction with acetone and hexane followed by GC-MS.	In-house method based on USEPA 8082	L027-PL	D	MCERTS
pH at 20oC in soil	Determination of pH in soil by addition of water followed by electrometric measurement.	In house method.	L005-PL	W	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
BTEX in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
Total BTEX in soil (Poland)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073-PL	W	MCERTS
Metals in leachate by ICP-OES	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil""	L039-PL	W	ISO 17025
Chloride 10:1 WAC	Determination of Chloride colorimetrically by discrete analyser.	In house based on MEWAM Method ISBN 0117516260.	L082-PL	W	ISO 17025
Fluoride 10:1 WAC	Determination of fluoride in leachate by 1:1ratio with a buffer solution followed by Ion Selective Electrode.	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination"	L033B-PL	W	ISO 17025
Sulphate 10:1 WAC	Determination of sulphate in leachate by ICP-OES	In-house method based on MEWAM 1986 Methods for the Determination of Metals in Soil""	L039-PL	W	ISO 17025
Total dissolved solids 10:1 WAC	Determination of total dissolved solids in water by EC probe using a factor of 0.6.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025



**Analytical Report Number : 21-92708**  
**Project / Site name: BY Kentish Town**

**Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)**

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Monohydric phenols 10:1 WAC	Determination of phenols in leachate by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025
Dissolved organic carbon 10:1 WAC	Determination of dissolved inorganic carbon in leachate by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	NONE

**For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.**

**For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.**

**Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.**

**Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.**



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## **Analytical Report Number : 21-93023**

<b>Project / Site name:</b>	BY Kentish Town	<b>Samples received on:</b>	12/08/2021
<b>Your job number:</b>	GL24466	<b>Samples instructed on/ Analysis started on:</b>	16/08/2021
<b>Your order number:</b>		<b>Analysis completed by:</b>	23/08/2021
<b>Report Issue Number:</b>	1	<b>Report issued on:</b>	23/08/2021
<b>Samples Analysed:</b>	3 soil samples		

**Signed:**

Joanna Wawrzeczko  
Technical Reviewer (Reporting Team)  
**For & on behalf of i2 Analytical Ltd.**

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting  
leachates - 2 weeks from reporting  
waters - 2 weeks from reporting  
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.  
Application of uncertainty of measurement would provide a range within which the true result lies.  
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 21-93023  
Project / Site name: BY Kentish Town

Lab Sample Number				1973038	1973039	1973040
Sample Reference				BH03	SSS01	SSS02
Sample Number				1	1	1
Depth (m)				0.45-0.45	0.20-0.20	0.20-0.20
Date Sampled				12/08/2021	12/08/2021	12/08/2021
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status			
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	12	16	17
Total mass of sample received	kg	0.001	NONE	1.0	1.2	1.2

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected
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#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	9.3	8.2	6.9
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Total Sulphate as SO <sub>4</sub>	mg/kg	50	MCERTS	2200	650	590
Sulphide	mg/kg	1	MCERTS	37	< 1.0	< 1.0
Total Organic Carbon (TOC)	%	0.1	MCERTS	3.4	1.6	1.7

#### Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
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#### Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.45	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	0.32	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	0.27	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	0.66	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	4.4	0.33	< 0.05
Anthracene	mg/kg	0.05	MCERTS	1.2	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	5.2	0.70	< 0.05
Pyrene	mg/kg	0.05	MCERTS	4.7	0.64	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	3.4	0.51	< 0.05
Chrysene	mg/kg	0.05	MCERTS	3.0	0.44	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	3.4	0.57	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	1.4	0.21	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	3.0	0.62	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	1.6	0.28	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.47	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	1.7	0.45	< 0.05

#### Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	35.2	4.75	< 0.80
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Analytical Report Number: 21-93023  
Project / Site name: BY Kentish Town

Lab Sample Number				1973038	1973039	1973040
Sample Reference				BH03	SSS01	SSS02
Sample Number				1	1	1
Depth (m)				0.45-0.45	0.20-0.20	0.20-0.20
Date Sampled				12/08/2021	12/08/2021	12/08/2021
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status			

#### Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	15	15	16
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	1.7	1.0	1.1
Boron (water soluble)	mg/kg	0.2	MCERTS	0.7	1.2	0.7
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.5	0.7	0.6
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	19	34	28
Copper (aqua regia extractable)	mg/kg	1	MCERTS	180	70	26
Lead (aqua regia extractable)	mg/kg	1	MCERTS	260	130	74
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	25	26	22
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	36	49	46
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	150	140	91

#### Petroleum Hydrocarbons

TPH Texas (C6 - C8)	mg/kg	0.1	ISO 17025	< 0.1	< 0.1	< 0.1
TPH Texas (C8 - C10)	mg/kg	10	MCERTS	< 10	< 10	< 10
TPH Texas (C10 - C12)	mg/kg	1	MCERTS	2.8	< 1.0	< 1.0
TPH Texas (C12 - C16)	mg/kg	4	MCERTS	13	< 4.0	< 4.0
TPH Texas (C16 - C21)	mg/kg	10	MCERTS	47	< 10	< 10
TPH Texas (C21 - C40)	mg/kg	10	MCERTS	310	< 10	< 10
TPH Texas (C6 - C40)	mg/kg	10	NONE	370	< 10	< 10

U/S = Unsuitable Sample I/S = Insufficient Sample

**Analytical Report Number : 21-93023**

**Project / Site name: BY Kentish Town**

\* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
1973038	BH03	1	0.45-0.45	Brown loam and sand with gravel.
1973039	SSS01	1	0.20-0.20	Brown loam and clay with gravel and vegetation.
1973040	SSS02	1	0.20-0.20	Brown loam and clay with gravel and vegetation.

**Analytical Report Number : 21-93023**

**Project / Site name: BY Kentish Town**

**Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)**

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazine followed by colorimetry.	In-house method	L080-PL	W	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO <sub>4</sub> in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
TPH Texas (Soil)	Determination of dichloromethane/hexane extractable hydrocarbons in soil by GC-MS.	In-house method	L064-PL	D	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS

**For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.**

**For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.**

**Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.**

**Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.**

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## **Analytical Report Number : 21-93449**

<b>Project / Site name:</b>	BY Kentish Town	<b>Samples received on:</b>	17/08/2021
<b>Your job number:</b>	GL24466	<b>Samples instructed on/ Analysis started on:</b>	17/08/2021
<b>Your order number:</b>	GL24466	<b>Analysis completed by:</b>	25/08/2021
<b>Report Issue Number:</b>	1	<b>Report issued on:</b>	25/08/2021
<b>Samples Analysed:</b>	2 soil samples		

**Signed:** *A. Czerwińska*

Agnieszka Czerwińska  
Technical Reviewer (Reporting Team)  
**For & on behalf of i2 Analytical Ltd.**

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting  
leachates - 2 weeks from reporting  
waters - 2 weeks from reporting  
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.  
Application of uncertainty of measurement would provide a range within which the true result lies.  
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 21-93449  
 Project / Site name: BY Kentish Town  
 Your Order No: GL24466

Lab Sample Number				1976193	1976194
Sample Reference				BH01	BH01
Sample Number				1	2
Depth (m)				0.50-0.50	1.00-1.00
Date Sampled				16/08/2021	16/08/2021
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	11	13
Total mass of sample received	kg	0.001	NONE	1.0	1.0

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	-
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#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	9.0	-
Total Cyanide	mg/kg	1	MCERTS	< 1.0	-
Total Sulphate as SO <sub>4</sub>	mg/kg	50	MCERTS	1400	-
Sulphide	mg/kg	1	MCERTS	9.8	-
Total Organic Carbon (TOC)	%	0.1	MCERTS	-	3.6

#### Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	-
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#### Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	-
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	-
Acenaphthene	mg/kg	0.05	MCERTS	1.7	-
Fluorene	mg/kg	0.05	MCERTS	1.6	-
Phenanthrene	mg/kg	0.05	MCERTS	8.1	-
Anthracene	mg/kg	0.05	MCERTS	1.7	-
Fluoranthene	mg/kg	0.05	MCERTS	9.8	-
Pyrene	mg/kg	0.05	MCERTS	9.1	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	4.7	-
Chrysene	mg/kg	0.05	MCERTS	3.1	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	4.0	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	1.8	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	3.5	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	1.6	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.53	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	2.0	-

#### Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	53.3	-
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**Analytical Report Number: 21-93449**  
**Project / Site name: BY Kentish Town**  
**Your Order No: GL24466**

<b>Lab Sample Number</b>				1976193	1976194
<b>Sample Reference</b>				BH01	BH01
<b>Sample Number</b>				1	2
<b>Depth (m)</b>				0.50-0.50	1.00-1.00
<b>Date Sampled</b>				16/08/2021	16/08/2021
<b>Time Taken</b>				None Supplied	None Supplied
<b>Analytical Parameter (Soil Analysis)</b>	<b>Units</b>	<b>Limit of detection</b>	<b>Accreditation Status</b>		

#### Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	24	-
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	2.4	-
Boron (water soluble)	mg/kg	0.2	MCERTS	3.9	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	1.5	-
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	38	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	310	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	620	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.9	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	40	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	-
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	68	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	510	-

#### Petroleum Hydrocarbons

TPH Texas (C6 - C8)	mg/kg	0.1	ISO 17025	I/S	-
TPH Texas (C8 - C10)	mg/kg	10	MCERTS	I/S	-
TPH Texas (C10 - C12)	mg/kg	1	MCERTS	10	-
TPH Texas (C12 - C16)	mg/kg	4	MCERTS	140	-
TPH Texas (C16 - C21)	mg/kg	10	MCERTS	380	-
TPH Texas (C21 - C40)	mg/kg	10	MCERTS	680	-
TPH Texas (C6 - C40)	mg/kg	10	NONE	1200	-

U/S = Unsuitable Sample    I/S = Insufficient Sample



**Analytical Report Number : 21-93449**  
**Project / Site name: BY Kentish Town**

\* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
1976193	BH01	1	0.50-0.50	Brown clay and loam with gravel and vegetation.
1976194	BH01	2	1.00-1.00	Brown loam and clay with gravel.

**Analytical Report Number : 21-93449**

**Project / Site name: BY Kentish Town**

**Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)**

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazine followed by colorimetry.	In-house method	L080-PL	W	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO <sub>4</sub> in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
TPH Texas (Soil)	Determination of dichloromethane/hexane extractable hydrocarbons in soil by GC-MS.	In-house method	L064-PL	D	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS

**For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.**

**For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.**

**Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.**

**Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.**

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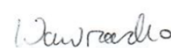
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## **Analytical Report Number : 21-93450**

<b>Project / Site name:</b>	BY Kentish Town	<b>Samples received on:</b>	17/08/2021
<b>Your job number:</b>	GL24466	<b>Samples instructed on/ Analysis started on:</b>	17/08/2021
<b>Your order number:</b>	GL24466	<b>Analysis completed by:</b>	24/08/2021
<b>Report Issue Number:</b>	1	<b>Report issued on:</b>	24/08/2021
<b>Samples Analysed:</b>	1 10:1 WAC Sample		



**Signed:**

Joanna Wawrzeczko  
Technical Reviewer (Reporting Team)  
**For & on behalf of i2 Analytical Ltd.**

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting  
leachates - 2 weeks from reporting  
waters - 2 weeks from reporting  
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.  
Application of uncertainty of measurement would provide a range within which the true result lies.  
An estimate of measurement uncertainty can be provided on request.

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Waste Acceptance Criteria Analytical Results								
Report No:		21-93450						
						Client: HARRIGROUP		
Location		BY Kentish Town						
Lab Reference (Sample Number)		1976195 / 1976196				Landfill Waste Acceptance Criteria		
						Limits		
Sampling Date		16/08/2021				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID		BH01 1						
Depth (m)		0.50-0.50						
Solid Waste Analysis								
TOC (%)**		3.9				3%	5%	6%
Loss on Ignition (%) **		11.6				--	--	10%
BTEX (µg/kg) **		< 10				6000	--	--
Sum of PCBs (mg/kg) **		0.045				1	--	--
Mineral Oil (mg/kg)		790				500	--	--
Total PAH (WAC-17) (mg/kg)		52.2				100	--	--
pH (units)**		8.6				--	>6	--
Acid Neutralisation Capacity (mol / kg)		5.7				--	To be evaluated	To be evaluated
Eluate Analysis		10:1			10:1	Limit values for compliance leaching test		
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)		mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)		
Arsenic *		< 0.0010			< 0.0100	0.5	2	25
Barium *		0.0190			0.158	20	100	300
Cadmium *		< 0.0001			< 0.0008	0.04	1	5
Chromium *		0.0033			0.028	0.5	10	70
Copper *		0.013			0.11	2	50	100
Mercury *		< 0.0005			< 0.0050	0.01	0.2	2
Molybdenum *		0.0026			0.0216	0.5	10	30
Nickel *		0.0040			0.033	0.4	10	40
Lead *		0.0070			0.058	0.5	10	50
Antimony *		0.011			0.089	0.06	0.7	5
Selenium *		< 0.0040			< 0.040	0.1	0.5	7
Zinc *		0.020			0.17	4	50	200
Chloride *		3.7			31	800	15000	25000
Fluoride		2.0			17	10	150	500
Sulphate *		15			120	1000	20000	50000
TDS*		80			670	4000	60000	100000
Phenol Index (Monohydric Phenols) *		< 0.010			< 0.10	1	-	-
DOC		8.79			73.1	500	800	1000
Leach Test Information								
Stone Content (%)		< 0.1						
Sample Mass (kg)		1.0						
Dry Matter (%)		89						
Moisture (%)		11						
Results are expressed on a dry weight basis, after correction for moisture content where applicable.						** = UKAS accredited (liquid eluate analysis only)		
Stated limits are for guidance only and I2 cannot be held responsible for any discrepancies with current legislation						** = MCFRTS accredited		

Results are expressed on a dry weight basis, after correction for moisture content where applicable.

\*= UKAS accredited (liquid eluate analysis only)

Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation

\*\* = MCERTS accredited

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3.  
This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.



**Analytical Report Number : 21-93450**  
**Project / Site name: BY Kentish Town**

\* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
1976195	BH01	1	0.50-0.50	Brown clay and loam with gravel and vegetation.

**Analytical Report Number : 21-93450**

**Project / Site name: BY Kentish Town**

**Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)**

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
BS EN 12457-2 (10:1) Leachate Prep	10:1 (as recieved, moisture adjusted) end over end extraction with water for 24 hours. Eluate filtered prior to analysis.	In-house method based on BSEN12457-2.	L043-PL	W	NONE
Acid neutralisation capacity of soil	Determination of acid neutralisation capacity by addition of acid or alkali followed by electronic probe.	In-house method based on Guidance an Sampling and Testing of Wastes to Meet Landfill Waste Acceptance""	L046-PL	W	NONE
Loss on ignition of soil @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace.	In house method.	L047-PL	D	MCERTS
Mineral Oil (Soil) C10 - C40	Determination of mineral oil fraction extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L076-PL	D	NONE
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated WAC-17 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270. MCERTS accredited except Coronene.	L064-PL	D	NONE
PCB's By GC-MS in soil	Determination of PCB by extraction with acetone and hexane followed by GC-MS.	In-house method based on USEPA 8082	L027-PL	D	MCERTS
pH at 20oC in soil	Determination of pH in soil by addition of water followed by electrometric measurement.	In house method.	L005-PL	W	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
BTEX in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
Total BTEX in soil (Poland)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073-PL	W	MCERTS
Metals in leachate by ICP-OES	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil""	L039-PL	W	ISO 17025
Chloride 10:1 WAC	Determination of Chloride colorimetrically by discrete analyser.	In house based on MEWAM Method ISBN 0117516260.	L082-PL	W	ISO 17025
Fluoride 10:1 WAC	Determination of fluoride in leachate by 1:1ratio with a buffer solution followed by Ion Selective Electrode.	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination"	L033B-PL	W	ISO 17025
Sulphate 10:1 WAC	Determination of sulphate in leachate by ICP-OES	In-house method based on MEWAM 1986 Methods for the Determination of Metals in Soil""	L039-PL	W	ISO 17025
Total dissolved solids 10:1 WAC	Determination of total dissolved solids in water by EC probe using a factor of 0.6.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025

**Analytical Report Number : 21-93450**  
**Project / Site name: BY Kentish Town**

**Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)**

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Monohydric phenols 10:1 WAC	Determination of phenols in leachate by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025
Dissolved organic carbon 10:1 WAC	Determination of dissolved inorganic carbon in leachate by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	NONE

**For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.**

**For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.**

**Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.**

**Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.**



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## **Analytical Report Number : 21-94362**

Replaces Analytical Report Number: 21-94362, issue no. 1  
Additional analysis undertaken.

<b>Project / Site name:</b>	BY Kentish Town	<b>Samples received on:</b>	20/08/2021
<b>Your job number:</b>	GL24466	<b>Samples instructed on/ Analysis started on:</b>	20/08/2021
<b>Your order number:</b>		<b>Analysis completed by:</b>	06/09/2021
<b>Report Issue Number:</b>	2	<b>Report issued on:</b>	06/09/2021
<b>Samples Analysed:</b>	2 soil samples		

**Signed:** 

Zina Abdul Razzak  
Senior Quality Specialist  
**For & on behalf of i2 Analytical Ltd.**

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting  
leachates - 2 weeks from reporting  
waters - 2 weeks from reporting  
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.  
Application of uncertainty of measurement would provide a range within which the true result lies.  
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 21-94362  
Project / Site name: BY Kentish Town

Lab Sample Number				1981199	1981200
Sample Reference				TP01	TP02
Sample Number				1	1
Depth (m)				0.60-0.60	0.50-0.50
Date Sampled				18/08/2021	18/08/2021
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		
Stone Content	%	0.1	NONE	< 0.1	-
Moisture Content	%	0.01	NONE	8.5	-
Total mass of sample received	kg	0.001	NONE	1.5	-

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Amosite	-
Asbestos in Soil	Type	N/A	ISO 17025	Detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	0.001	-
Asbestos Quantification Total	%	0.001	ISO 17025	0.001	-

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	11.4	-
Total Cyanide	mg/kg	1	MCERTS	< 1.0	-
Total Sulphate as SO <sub>4</sub>	mg/kg	50	MCERTS	3400	-
Sulphide	mg/kg	1	MCERTS	16	-
Total Organic Carbon (TOC)	%	0.1	MCERTS	1.5	-

#### Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	-
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#### Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.96	-
Acenaphthylene	mg/kg	0.05	MCERTS	0.08	-
Acenaphthene	mg/kg	0.05	MCERTS	0.87	-
Fluorene	mg/kg	0.05	MCERTS	0.77	-
Phenanthrene	mg/kg	0.05	MCERTS	7.4	-
Anthracene	mg/kg	0.05	MCERTS	1.8	-
Fluoranthene	mg/kg	0.05	MCERTS	8.0	-
Pyrene	mg/kg	0.05	MCERTS	7.0	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	2.8	-
Chrysene	mg/kg	0.05	MCERTS	2.2	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	2.7	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	1.3	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	2.6	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	1.5	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.45	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	1.7	-

#### Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	42.0	-
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#### Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	25	-
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	1.6	-
Boron (water soluble)	mg/kg	0.2	MCERTS	2.8	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	1.7	-
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	33	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	190	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	210	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	43	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	-
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	54	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	390	-

#### Petroleum Hydrocarbons

TPH Texas (C6 - C8)	mg/kg	0.1	ISO 17025	< 0.1	-
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Analytical Report Number: 21-94362  
Project / Site name: BY Kentish Town

Lab Sample Number				1981199	1981200
Sample Reference				TP01	TP02
Sample Number				1	1
Depth (m)				0.60-0.60	0.50-0.50
Date Sampled				18/08/2021	18/08/2021
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		
TPH Texas (C8 - C10)	mg/kg	10	MCERTS	< 10	-
TPH Texas (C10 - C12)	mg/kg	1	MCERTS	< 1.0	-
TPH Texas (C12 - C16)	mg/kg	4	MCERTS	5.1	-
TPH Texas (C16 - C21)	mg/kg	10	MCERTS	36	-
TPH Texas (C21 - C40)	mg/kg	10	MCERTS	120	-
TPH Texas (C6 - C40)	mg/kg	10	NONE	160	-

U/S = Unsuitable Sample I/S = Insufficient Sample

**Analytical Report Number:** 21-94362  
**Project / Site name:** BY Kentish Town  
**Your Order No:**

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## Certificate of Analysis - Asbestos Quantification

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### Methods:

#### Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

#### Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
1981199	TP01	0.60-0.60	155	Loose Fibres	Amosite	0.001	0.001

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.



**Analytical Report Number : 21-94362**  
**Project / Site name: BY Kentish Town**

\* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
1981199	TP01	1	0.60-0.60	Brown loam and clay with gravel and vegetation.

**Analytical Report Number : 21-94362**  
**Project / Site name: BY Kentish Town**

**Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)**

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO <sub>4</sub> in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
TPH Texas (Soil)	Determination of dichloromethane/hexane extractable hydrocarbons in soil by GC-MS.	In-house method	L064-PL	D	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025

**For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.**

**For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.**

**Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.**

**Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.**

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## **Analytical Report Number : 21-96460**

Replaces Analytical Report Number: 21-96460, issue no. 1  
Client sampling date amended.

<b>Project / Site name:</b>	Big Yellow, Kentish Town	<b>Samples received on:</b>	01/09/2021
<b>Your job number:</b>	GL24466	<b>Samples instructed on/ Analysis started on:</b>	01/09/2021
<b>Your order number:</b>		<b>Analysis completed by:</b>	08/09/2021
<b>Report Issue Number:</b>	2	<b>Report issued on:</b>	08/09/2021
<b>Samples Analysed:</b>	2 water samples		

**Signed:** *Karolina Marek*

Karolina Marek  
PL Head of Reporting Team  
**For & on behalf of i2 Analytical Ltd.**

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting  
leachates - 2 weeks from reporting  
waters - 2 weeks from reporting  
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.  
Application of uncertainty of measurement would provide a range within which the true result lies.  
An estimate of measurement uncertainty can be provided on request.



Analytical Report Number: 21-96460  
Project / Site name: Big Yellow, Kentish Town

Lab Sample Number				1993578	1993579
Sample Reference				BH01	WS01
Sample Number				None Supplied	None Supplied
Depth (m)				8.00	3.00
Date Sampled				31/08/2021	31/08/2021
Time Taken				None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status		

#### General Inorganics

pH	pH Units	N/A	ISO 17025	7.3	6.9
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	< 1.0	< 1.0
Free Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	< 1.0	< 1.0
Thiocyanate as SCN	µg/l	200	ISO 17025	250	250
Sulphate as SO <sub>4</sub>	mg/l	0.045	ISO 17025	1810	788
Total Sulphur	µg/l	15	NONE	600000	260000
Sulphide	µg/l	5	NONE	< 5.0	< 5.0

#### Phenols by HPLC

Catechol	µg/l	0.5	NONE	< 0.5	< 0.5
Resorcinol	µg/l	0.5	NONE	< 0.5	< 0.5
Ethylphenol & Dimethylphenol	µg/l	0.5	NONE	< 0.5	< 0.5
Cresols	µg/l	0.5	NONE	< 0.5	< 0.5
Naphthols	µg/l	0.5	NONE	< 0.5	< 0.5
Isopropylphenol	µg/l	0.5	NONE	< 0.5	< 0.5
Phenol	µg/l	0.5	NONE	< 0.5	< 0.5
Trimethylphenol	µg/l	0.5	NONE	< 0.5	< 0.5

#### Total Phenols

Total Phenols (HPLC)	µg/l	3.5	NONE	< 3.5	< 3.5
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#### Speciated PAHs

Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01

#### Total PAH

Total EPA-16 PAHs	µg/l	0.16	ISO 17025	< 0.16	< 0.16
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Analytical Report Number: 21-96460  
Project / Site name: Big Yellow, Kentish Town

Lab Sample Number				1993578	1993579
Sample Reference				BH01	WS01
Sample Number				None Supplied	None Supplied
Depth (m)				8.00	3.00
Date Sampled				31/08/2021	31/08/2021
Time Taken				None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status		

#### Heavy Metals / Metalloids

Boron (dissolved)	µg/l	10	ISO 17025	1000	270
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0

Arsenic (dissolved)	µg/l	0.15	ISO 17025	7.95	2.35
Cadmium (dissolved)	µg/l	0.02	ISO 17025	0.03	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	5.9	4.9
Copper (dissolved)	µg/l	0.5	ISO 17025	12	2.7
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	11	5.2
Selenium (dissolved)	µg/l	0.6	ISO 17025	38	0.9
Zinc (dissolved)	µg/l	0.5	ISO 17025	14	7.4

#### Petroleum Hydrocarbons

TPH1 (C10 - C40)	µg/l	10	NONE	< 10	< 10
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U/S = Unsuitable Sample I/S = Insufficient Sample



**Analytical Report Number : 21-96460**  
**Project / Site name: Big Yellow, Kentish Town**

**Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)**

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Boron in water	Determination of boron in water by acidification followed by ICP-OES. Accredited matrices: SW PW GW	In-house method based on MEWAM	L039-PL	W	ISO 17025
Phenols, speciated, in water, by HPLC	Determination of speciated phenols by HPLC.	In house method based on Blue Book Method.	L030-PL	W	NONE
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Speciated EPA-16 PAHs in water	Determination of PAH compounds in water by extraction in dichloromethane followed by GC-MS with the use of surrogate and internal standards. Accredited matrices: SW PW GW	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
Sulphide in water	Determination of sulphide in water by ion selective electrode.	In-house method	L029-PL	W	NONE
Thiocyanate in water	Determination of thiocyanate in water by discrete analyser (colorimetry). Accredited matrices SW, GW, PW.	In house method based on SMWW 4500-CN-M. Accredited matrices: SW, PW, GW.	L082-PL	W	ISO 17025
Sulphate in water	Determination of sulphate in water after filtration by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Total Sulphur in water	Determination of total sulphur in water by acidification followed by ICP-OES.	In-house method based on MEWAM 1986 Methods for the Determination of Metals in Soil""	L039-PL	W	NONE
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	NONE
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025
Free cyanide (low level) in water	Determination of free cyanide by distillation followed by colorimetry. Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025

**For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.**

**For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.**

**Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.**

**Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.**

Harrison Group Ltd  
Unit 12 Waterways Business Centre  
Navigation Drive  
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EN3 6JJ



<b>Attention :</b>	James Blyth
<b>Date :</b>	1st October, 2021
<b>Your reference :</b>	GL24466
<b>Our reference :</b>	Test Report 21/14890 Batch 1
<b>Location :</b>	Big Yellow, Kentish Town
<b>Date samples received :</b>	24th September, 2021
<b>Status :</b>	Final report
<b>Issue :</b>	1

Three samples were received for analysis on 24th September, 2021 of which two were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied.

All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

**Authorised By:**



**Simon Gomery BSc**

Project Manager

Please include all sections of this report if it is reproduced

## Element Materials Technology

**Client Name:** Harrison Group Ltd  
**Reference:** GL24466  
**Location:** Big Yellow, Kentish Town  
**Contact:** James Blyth  
**EMT Job No:** 21/14890

Report : Gas

[illegible]

## Element Materials Technology

**Client Name:** Harrison Group Ltd  
**Reference:** GL24466  
**Location:** Big Yellow, Kentish Town  
**Contact:** James Blyth

**Sample Date:** 22 Sep 2021  
**Date of Receipt:** 24 Sep 2021  
**Date Analysed:** 1 Oct 2021

**Sample ID:** GAS01-BH01  
**Depth:**  
**EMT Job No:** 21/14890  
**EMT Sample No:** 1  
**Matrix:** Air  
**Method:** TM68 VOCs in gases (GC-MS)

**Canister Serial number:** V 1169 0.55

**Sample Train Serial number:** ST-99

### Q\* - Qualifiers

**B** Indicates analyte found in associated method blank  
**++** Indicates value exceeds calibration range

### Key

**MDL** Method Detection Limit  
**RL** Reporting Limit  
**#** ISO 17025 (UKAS) accredited

Cas No	Molecular Weight	Compound	Q*	RESULT ppbv	RESULT ug/m <sup>3</sup>	RL ppbv	MDL ppbv	RL ug/m <sup>3</sup>	MDL ug/m <sup>3</sup>
75-45-6	86.77	Chlorodifluoromethane (HCFC-22)		<2	<7	<2	<2	<7	<7
75-71-8	120.91	Dichlorodifluoromethane (F-12)		5.1	25.2	<2.5	<2.5	<12.4	<12.4
74-87-3	50.49	Chloromethane		<1.5	<3.1	<1.5	<1.5	<3.1	<3.1
76-14-2	170.92	1,2-Dichlorotetrafluoroethane (F-114)		<1.5	<10.5	<1.5	<1.5	<10.5	<10.5
115-11-7	56.12	Isobutene		<1.5	<3.4	<1.5	<1.5	<3.4	<3.4
106-99-0	54.09	1,3-Butadiene		<1.5	<3.3	<1.5	<1.5	<3.3	<3.3
74-83-9	94.95	# Bromomethane		<1.5	<5.8	<1.5	<1.5	<5.8	<5.8
75-00-3	64.52	# Chloroethane		<1.5	<4	<1.5	<1.5	<4	<4
64-17-5	46.07	Ethanol		<100	<188.4	<100	<100	<188.4	<188.4
75-05-8	41.05	Acetonitrile		<1.5	<2.5	<1.5	<1.5	<2.5	<2.5
107-02-8	56.06	Acrolein		<2.5	<5.7	<2.5	<2.5	<5.7	<5.7
	58.08	Acetone + Propanal		50	119	<6	<6	<14	<14
75-69-4	137.36	# Trichlorofluoromethane (F-11)		9.3	52.2	<1.5	<1.5	<8.4	<8.4
67-63-0	60.09	2-Propanol		<6	<15	<6	<6	<15	<15
109-66-0	72.15	Pentane		<1.5	<4.4	<1.5	<1.5	<4.4	<4.4
78-79-5	68.12	Isoprene		<2	<6	<2	<2	<6	<6
74-88-4	141.94	Methyl Iodide		<1.5	<8.7	<1.5	<1.5	<8.7	<8.7
75-35-4	96.95	# 1,1-Dichloroethene (1,1 DCE)		<1.5	<5.9	<1.5	<1.5	<5.9	<5.9
75-09-2	84.94	# Methylene Chloride		<14.4	<50	<14.4	<14.4	<50	<50
76-13-1	187.37	# Trichlorotrifluoroethane		<1.5	<11.5	<1.5	<1.5	<11.5	<11.5
75-15-0	76.14	Carbon Disulfide		<1.5	<4.7	<1.5	<1.5	<4.7	<4.7
71-23-8	60.09	1-Propanol		<1.5	<3.7	<1.5	<1.5	<3.7	<3.7
78-85-3	70.09	Methylacrolein		<1.5	<4.3	<1.5	<1.5	<4.3	<4.3
75-34-3	98.97	# 1,1-Dichloroethane		<1.5	<6.1	<1.5	<1.5	<6.1	<6.1
287-92-3	70.14	Cyclopentane		<1.5	<4.3	<1.5	<1.5	<4.3	<4.3
78-94-4	70.09	Methyl Vinyl Ketone		<1.6	<4.6	<1.6	<1.6	<4.6	<4.6
1634-04-4	88.15	Methyl tertiary butyl ether		<1.5	<5.4	<1.5	<1.5	<5.4	<5.4
108-05-4	86.09	Vinyl Acetate		<1.5	<5.3	<1.5	<1.5	<5.3	<5.3
123-72-8	72.11	Butanal		<2	<6	<2	<2	<6	<6
78-93-3	72.1	2-Butanone (MEK)		<2	<6	<2	<2	<6	<6
156-59-2	96.94	# cis-1,2-Dichloroethene		4	16	<1	<1	<4	<4
110-54-3	86.17	Hexane		7.5	26.4	<1.5	<1.5	<5.3	<5.3
67-66-3	119.39	# Chloroform		2.2	10.7	<1.5	<1.5	<7.3	<7.3
107-06-2	98.96	# 1,2-Dichloroethane		<1.5	<6.1	<1.5	<1.5	<6.1	<6.1
71-55-6	133.42	# 1,1,1-Trichloroethane		1.6	8.7	<1.5	<1.5	<8.2	<8.2
71-36-3	74.12	1-Butanol		<3	<9	<3	<3	<9	<9
71-43-2	78.11	# Benzene		1.6	5.1	<1.5	<1.5	<4.8	<4.8
56-23-5	153.84	# Carbon Tetrachloride		<1.5	<9.4	<1.5	<1.5	<9.4	<9.4
110-82-7	84.16	Cyclohexane		<2	<7	<2	<2	<7	<7

## Element Materials Technology

**Client Name:** Harrison Group Ltd  
**Reference:** GL24466  
**Location:** Big Yellow, Kentish Town  
**Contact:** James Blyth

**Sample Date:** 22 Sep 2021  
**Date of Receipt:** 24 Sep 2021  
**Date Analysed:** 1 Oct 2021

**Sample ID:** GAS01-BH01  
**Depth:**  
**EMT Job No:** 21/14890  
**EMT Sample No:** 1  
**Matrix:** Air  
**Method:** TM68 VOCs in gases (GC-MS)

**Canister Serial number:** V 1169 0.55

**Sample Train Serial number:** ST-99

### Q\* - Qualifiers

**B** Indicates analyte found in associated method blank  
**++** Indicates value exceeds calibration range

### Key

**MDL** Method Detection Limit  
**RL** Reporting Limit  
**#** ISO 17025 (UKAS) accredited

Cas No	Molecular Weight	Compound	Q*	RESULT	RESULT	RL	MDL	RL	MDL
				ppbv	ug/m <sup>3</sup>	ppbv	ppbv	ug/m <sup>3</sup>	ug/m <sup>3</sup>
107-87-9	86.13	2-Pentanone		<1.5	<5.3	<1.5	<1.5	<5.3	<5.3
110-62-3	86.13	Pentanal		<1.5	<5.3	<1.5	<1.5	<5.3	<5.3
96-22-0	86.13	3-Pentanone		<1.5	<5.3	<1.5	<1.5	<5.3	<5.3
78-87-5	112.99	# 1,2-Dichloropropane		<1.5	<6.9	<1.5	<1.5	<6.9	<6.9
75-27-4	163.83	Bromodichloromethane		<1.5	<10.1	<1.5	<1.5	<10.1	<10.1
123-91-1	88.11	1,4-Dioxane		<2	<7	<2	<2	<7	<7
79-01-6	131.4	# Trichloroethene (TCE)	>>	2347.7	12616.6	<1.5	<1.5	<8.1	<8.1
10061-01-5	110.97	# cis-1,3-Dichloropropene		<1.5	<6.8	<1.5	<1.5	<6.8	<6.8
108-10-1	100.16	4-Methyl-2-pentanone		<1.5	<6.1	<1.5	<1.5	<6.1	<6.1
10061-02-6	110.97	# trans-1,3-Dichloropropene		<1.5	<6.8	<1.5	<1.5	<6.8	<6.8
79-00-5	133.4	# 1,1,2-Trichloroethane		<1.5	<8.2	<1.5	<1.5	<8.2	<8.2
108-88-3	92.13	# Toluene		8.7	32.8	<1.5	<1.5	<5.7	<5.7
589-38-8	100.16	3-Hexanone		<1.5	<6.1	<1.5	<1.5	<6.1	<6.1
591-78-6	100.16	2-Hexanone		<1.5	<6.1	<1.5	<1.5	<6.1	<6.1
66-25-1	100.16	Hexanal		<1.5	<6.1	<1.5	<1.5	<6.1	<6.1
106-93-4	187.86	# 1,2-Dibromoethane		<1.5	<11.5	<1.5	<1.5	<11.5	<11.5
127-18-4	165.85	# Tetrachloroethene (PCE)		<1.5	<10.2	<1.5	<1.5	<10.2	<10.2
108-90-7	112.56	# Chlorobenzene		<1.5	<6.9	<1.5	<1.5	<6.9	<6.9
100-41-4	106.16	# Ethylbenzene		<1.5	<6.5	<1.5	<1.5	<6.5	<6.5
179601-23-1	106.17	# m/p-Xylene		2.3	10	<1.5	<1.5	<6.5	<6.5
75-25-2	252.77	Bromoform		<1.5	<15.5	<1.5	<1.5	<15.5	<15.5
100-42-5	104.14	# Styrene		<1.5	<6.4	<1.5	<1.5	<6.4	<6.4
79-34-5	167.85	# 1,1,2,2-Tetrachloroethane		<1.5	<10.3	<1.5	<1.5	<10.3	<10.3
95-47-6	106.17	# o-Xylene		<1.5	<6.5	<1.5	<1.5	<6.5	<6.5
108-67-8	120.2	# 1,3,5-Trimethylbenzene		<1.5	<7.4	<1.5	<1.5	<7.4	<7.4
95-63-6	120.19	# 1,2,4-Trimethylbenzene		<1.5	<7.4	<1.5	<1.5	<7.4	<7.4
541-73-1	147.01	# 1,3-Dichlorobenzene		<1.5	<9	<1.5	<1.5	<9	<9
100-44-7	126.58	Benzyl Chloride		<1.5	<7.8	<1.5	<1.5	<7.8	<7.8
106-46-7	147.01	# 1,4-Dichlorobenzene		<1.5	<9	<1.5	<1.5	<9	<9
526-73-8	120.2	1,2,3-Trimethylbenzene		<1.5	<7.4	<1.5	<1.5	<7.4	<7.4
95-50-1	147	# 1,2-Dichlorobenzene		<1.5	<9	<1.5	<1.5	<9	<9
120-82-1	181.46	1,2,4-Trichlorobenzene		<1.5	<11.1	<1.5	<1.5	<11.1	<11.1
91-20-3	128.17	Naphthalene		0.54	2.8	<0.32	<0.32	<1.7	<1.7
		Sum of VOC TO15 compounds		2440.54	12925.5				
460-00-4		4-Bromofluorobenzene Surrogate Recovery		98%		0%	0%		
75-01-4	62.5	# Vinyl Chloride		<1.5	<3.8	<1.5	<1.5	<3.8	<3.8
	81	Aliphatic >C4-C6		21	70	<10	<10	<33	<33
	100	Aliphatic >C6-C8		90	368	<10	<10	<41	<41
	130	Aliphatic >C8-C10		44	234	<10	<10	<53	<53

Sample Date: 22 Sep 2021  
Date of Receipt: 24 Sep 2021  
Date Analysed: 1 Oct 2021

**Canister Serial number:** V 1169 0.55  
**Sample Train Serial number:** ST-99

**B** Indicates analyte found in associated method blank  
**++** Indicates value exceeds calibration range

<b>MDL</b>	Method Detection Limit
<b>RL</b>	Reporting Limit
<b>#</b>	ISO 17025 (UKAS) accredited

QF-PM 3.1.13 v6 Please include all sections of this report if it is reproduced 5 of 10

## Element Materials Technology

<b>Job number:</b>	21/14890
<b>Sample number:</b>	1
<b>Sample identity:</b>	GAS01-BH01
<b>Sample depth:</b>	
<b>Sample Type:</b>	Gas
<b>Units:</b>	ppbv

**Method:** VOC  
**Matrix:** Gas

**Note:** Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

[illegible]



**Client Name:** Harrison Group Ltd  
**Reference:** GL24466  
**Location:** Big Yellow, Kentish Town  
**Contact:** James Blyth

[illegible]

Please note that only samples that are deviating are mentioned in this report. If no samples are listed it is because none were deviating. Only analyses which are accredited are recorded as deviating if set criteria are not met.

# NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

EMT Job No.: 21/14890

## SOILS

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Limits of detection for analyses carried out on as received samples are not moisture content corrected. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Sufficient amount of sample must be received to carry out the testing specified. Where an insufficient amount of sample has been received the testing may not meet the requirements of our accredited methods, as such accreditation may be removed.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

The calculation of Pyrite content assumes that all oxidisable sulphides present in the sample are pyrite. This may not be the case. The calculation may be an overestimate when other sulphides such as Barite (Barium Sulphate) are present.

## WATERS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 accreditation applies to surface water and groundwater and usually one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

## DEVIATING SAMPLES

All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. The temperature of sample receipt is recorded on the confirmation schedules in order that the client can make an informed decision as to whether testing should still be undertaken.

## SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

## DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

## BLANKS

Where analytes have been found in the blank, the sample will be treated in accordance with our laboratory procedure for dealing with contaminated blanks.

## NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.

Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

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**REPORTS FROM THE SOUTH AFRICA LABORATORY**

Any method number not prefixed with SA has been undertaken in our UK laboratory unless reported as subcontracted.

**Measurement Uncertainty**

Measurement uncertainty defines the range of values that could reasonably be attributed to the measured quantity. This range of values has not been included within the reported results. Uncertainty expressed as a percentage can be provided upon request.

**ABBREVIATIONS and ACRONYMS USED**

#	ISO17025 (UKAS Ref No. 4225) accredited - UK.
SA	ISO17025 (SANAS Ref No.T0729) accredited - South Africa
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
>>	Results above calibration range, the result should be considered the minimum value. The actual result could be significantly higher.
*	Analysis subcontracted to an Element Materials Technology approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range

EMT Job No: 21/14890

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/S ANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM68	Modified TO-15 method. Volatile Organic Compounds (VOCs) sampled using Gas Canisters, BottleVacs or Tedlar bags and analysed using Entech GC-MS.	PM0	No preparation is required.				
TM68	Modified TO-15 method. Volatile Organic Compounds (VOCs) sampled using Gas Canisters, BottleVacs or Tedlar bags and analysed using Entech GC-MS.	PM0	No preparation is required.	Yes			
TM69	Analysis of gas samples by direct injection onto a Gas Chromatography (GC) column and analysed using a Flame Ionisation Detector (FID) or a Thermocouple Detector (TD)	PM0	No preparation is required.				

## **APPENDIX F**

### **RIG CERTIFICATES**

# SPT Hammer Energy Test Report

in accordance with BSEN ISO 22476-3:2005

**Southern Testing**  
**Unit 11**  
**Charlwood Road**  
**East Grinstead**  
**West Sussex**  
**RH19 2HU**

SPT Hammer Ref: DART312  
Test Date: 06/08/2020  
Report Date: 06/08/2020  
File Name: DART312.spt  
Test Operator: NPB

## Instrumented Rod Data

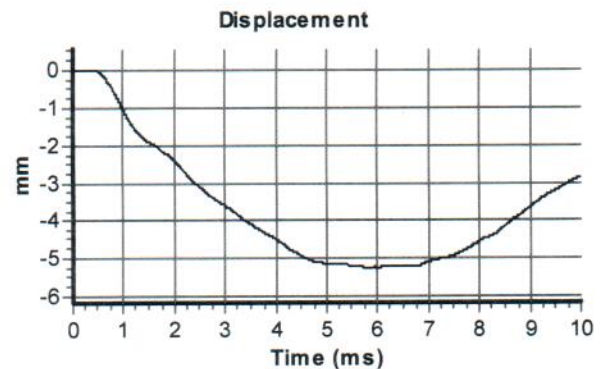
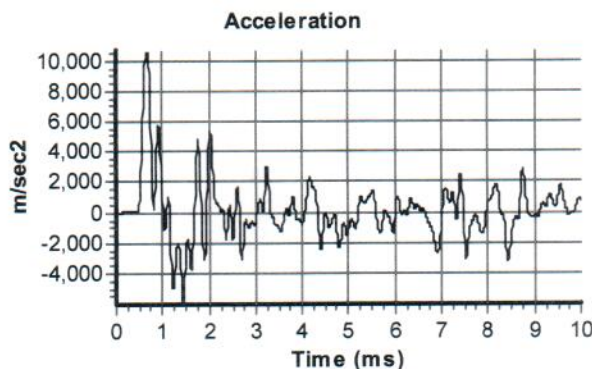
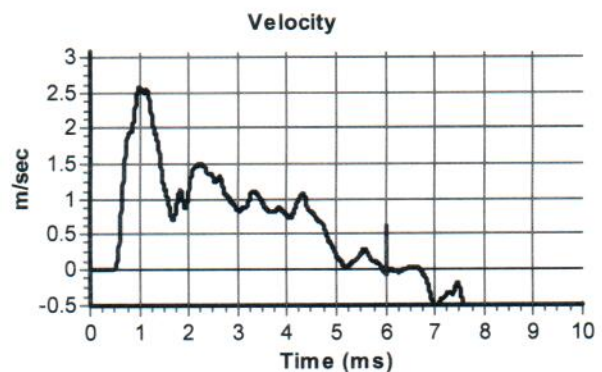
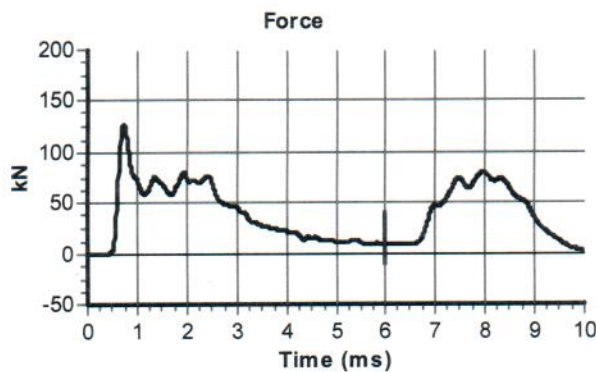
Diameter  $d_r$  (mm): 54  
Wall Thickness  $t_r$  (mm): 6.3  
Assumed Modulus  $E_a$  (GPa): 208  
Accelerometer No.1: 6458  
Accelerometer No.2: 9607

## SPT Hammer Information

Hammer Mass  $m$  (kg): 63.5  
Falling Height  $h$  (mm): 760  
SPT String Length  $L$  (m): 14.5

## Comments / Location

CHARLWOODS



## Calculations

Area of Rod A ( $\text{mm}^2$ ): 944  
Theoretical Energy  $E_{\text{theor}}$  (J): 473  
Measured Energy  $E_{\text{meas}}$  (J): 303

**Energy Ratio  $E_r$  (%):**

**64**

Signed: Lisa Baker *NPB*  
Title: Assistant Field Operations Manager

The recommended calibration interval is 12 months

# SPT Hammer Energy Test Report

in accordance with BSEN ISO 22476-3:2005

**Southern Testing**  
**Unit 11**  
**Charlwood Road**  
**East Grinstead**  
**West Sussex**  
**RH19 2HU**

SPT Hammer Ref: MOD.09  
Test Date: 16/07/2021  
Report Date: 16/07/2021  
File Name: MOD.09.spt  
Test Operator: GC

## Instrumented Rod Data

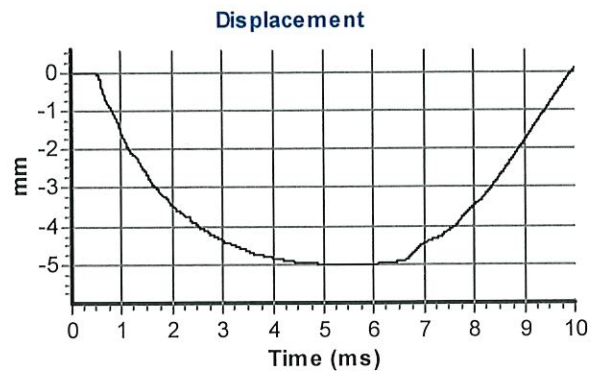
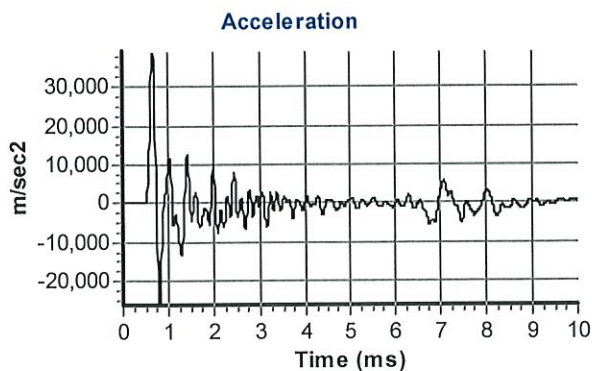
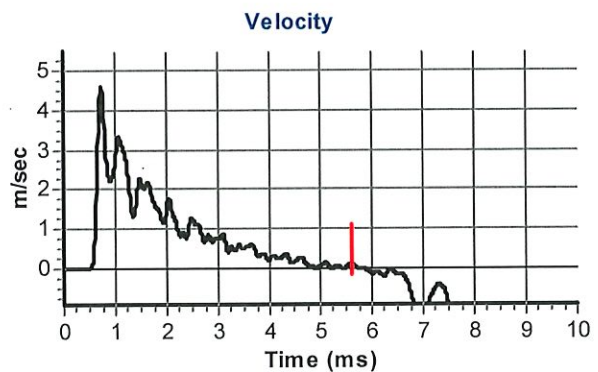
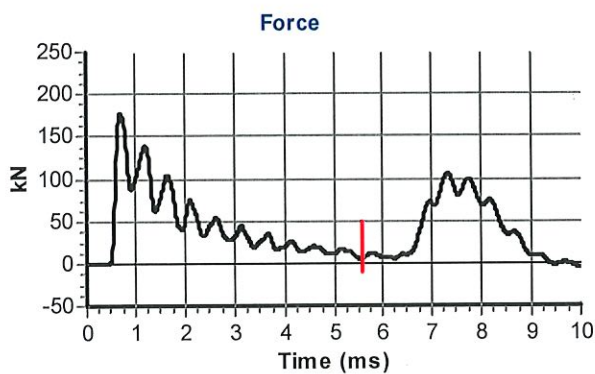
Diameter  $d_r$  (mm): 54  
Wall Thickness  $t_r$  (mm): 6.6  
Assumed Modulus  $E_a$  (GPa): 208  
Accelerometer No.1: 64786  
Accelerometer No.2: 64789

## SPT Hammer Information

Hammer Mass  $m$  (kg): 63.5  
Falling Height  $h$  (mm): 760  
SPT String Length  $L$  (m): 14.5

## Comments / Location

CHARLWOODS



## Calculations

Area of Rod A ( $\text{mm}^2$ ): 983  
Theoretical Energy  $E_{\text{theor}}$  (J): 473  
Measured Energy  $E_{\text{meas}}$  (J): 449

**Energy Ratio  $E_r$  (%):** **95**

Signed: G Crane  
Title: Field Tech

The recommended calibration interval is 12 months



SPT Hammer Ref: 01  
Test Date: 23/12/2020  
Report Date: 04/01/2021  
File Name: BM01.spt  
Test Operator: MC

## Instrumented Rod Data

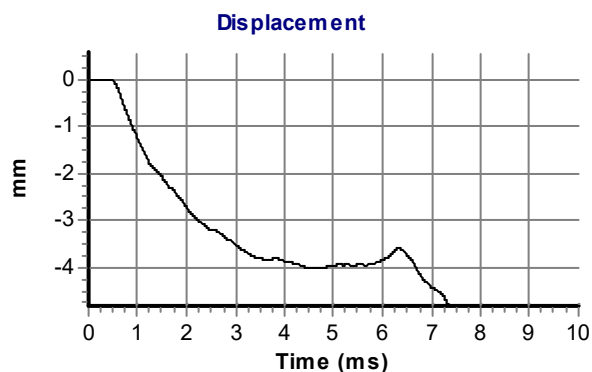
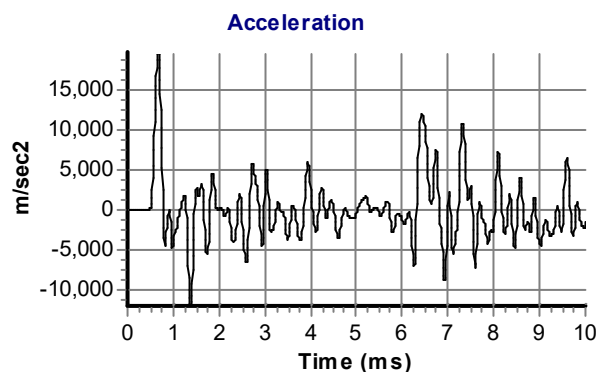
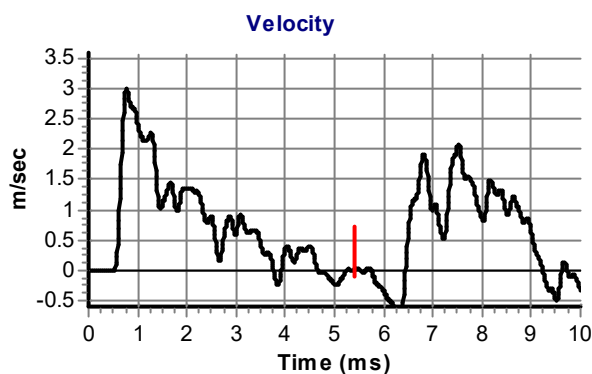
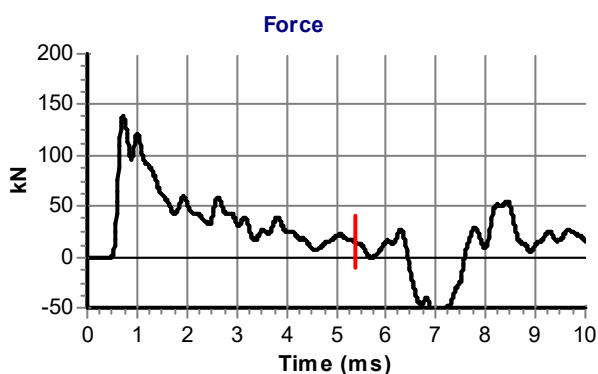
Diameter  $d_r$  (mm): 54  
Wall Thickness  $t_r$  (mm): 6.4  
Assumed Modulus  $E_a$  (GPa): 208  
Accelerometer No.1: 63177  
Accelerometer No.2: 63178

## SPT Hammer Information

Hammer Mass  $m$  (kg): 63.5  
Falling Height  $h$  (mm): 760  
SPT String Length  $L$  (m): 12.6

## Comments / Location

JMD YARD



## Calculations

Area of Rod A ( $\text{mm}^2$ ): 957  
Theoretical Energy  $E_{\text{theor}}$  (J): 473  
Measured Energy  $E_{\text{meas}}$  (J): 289

**Energy Ratio  $E_r$  (%)**

**61**



Signed: Richard Walter  
Title: Drilling Manager



SPT Hammer Ref: 09  
Test Date: 23/12/2020  
Report Date: 04/01/2021  
File Name: BM09.spt  
Test Operator: MC

## Instrumented Rod Data

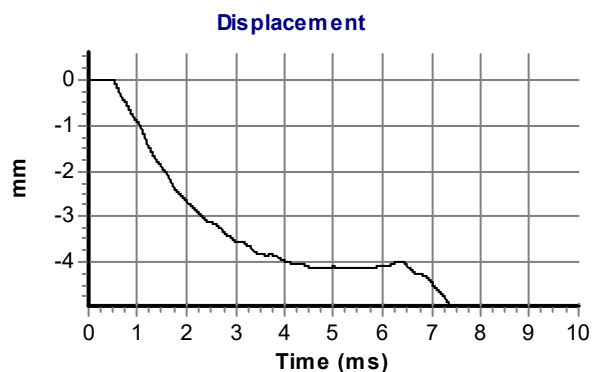
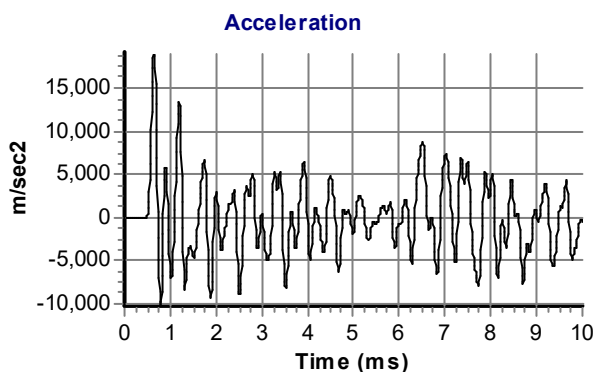
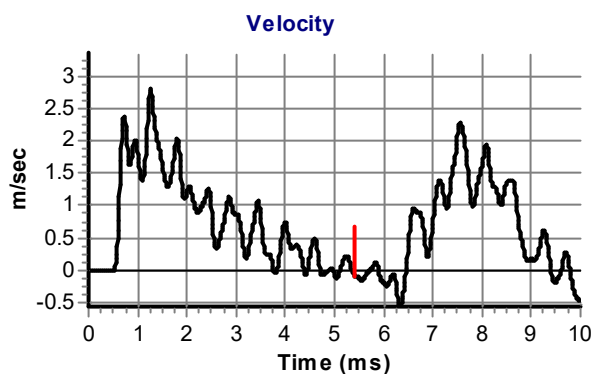
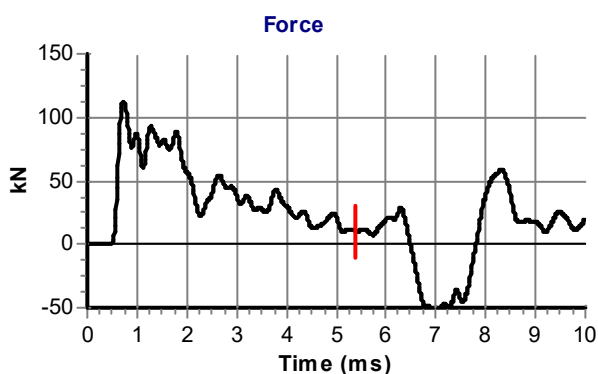
Diameter  $d_r$  (mm): 54  
Wall Thickness  $t_r$  (mm): 6.4  
Assumed Modulus  $E_a$  (GPa): 208  
Accelerometer No.1: 63177  
Accelerometer No.2: 63178

## SPT Hammer Information

Hammer Mass  $m$  (kg): 63.5  
Falling Height  $h$  (mm): 760  
SPT String Length  $L$  (m): 12.6

## Comments / Location

JMD YARD



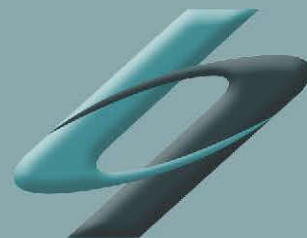
## Calculations

Area of Rod A ( $\text{mm}^2$ ): 957  
Theoretical Energy  $E_{\text{theor}}$  (J): 473  
Measured Energy  $E_{\text{meas}}$  (J): 282

**Energy Ratio  $E_r$  (%):** **60**



Signed: Richard Walter  
Title: Drilling Manager

**Norwich** (Registered Office)

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Colchester  
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## Appendix D: Hazardous Properties Assessment

## Waste Classification Report

HazWasteOnline™ classifies waste as either **hazardous** or **non-hazardous** based on its chemical composition, related legislation and the rules and data defined in the current UK or EU technical guidance (Appendix C) (note that HP 9 Infectious is not assessed). It is the responsibility of the classifier named below to:

- understand the origin of the waste
- select the correct List of Waste code(s)
- confirm that the list of determinands, results and sampling plan are fit for purpose
- select and justify the chosen metal species (Appendix B)
- correctly apply moisture correction and other available corrections
- add the meta data for their user-defined substances (Appendix A)
- check that the classification engine is suitable with respect to the national destination of the waste (Appendix C)



7FBVQ-IOOCP-KS3L0

To aid the reviewer, the laboratory results, assumptions and justifications managed by the classifier are highlighted in **pale yellow**.

## Job name

Big Yellow - Kentish Town

## Description/Comments

## Project

13675 - BY Kentish Town

## Site

## Classified by

Name: **Samantha Broughton** Company: **Campbell Reith Consulting Engineers**  
Date: **30 Sep 2021 14:11 GMT**  
Telephone:

HazWasteOnline™ provides a two day, hazardous waste classification course that covers the use of the software and both basic and advanced waste classification techniques. Certification has to be renewed every 3 years.

## HazWasteOnline™ Certification:

Course  
Hazardous Waste Classification

Date

## Job summary

#	Sample name	Depth [m]	Classification Result	Hazard properties	Page
1	BH01 (0.5)		Hazardous	HP 3(i), HP 7, HP 11	2
2	BH02 (0.6)		Non Hazardous		5
3	BH03 (0.45)		Non Hazardous		7
4	SSS01 (0.2)		Non Hazardous		9
5	SSS02 (0.2)		Non Hazardous		11
6	TP01 (0.6)		Non Hazardous		13
7	WS01 (0.2)		Non Hazardous		15
8	WS02 (0.3)		Non Hazardous		17
9	WS03 (1)		Non Hazardous		19

## Related documents

#	Name	Description
1	Example waste stream template for contaminated soils	waste stream template used to create this Job

## Report

Created by: Samantha Broughton

Created date: 30 Sep 2021 14:11 GMT

Appendices	Page
Appendix A: Classifier defined and non CLP determinands	21
Appendix B: Rationale for selection of metal species	22
Appendix C: Version	22

Classification of sample: BH01 (0.5)



Sample details

Sample name:	LoW Code:	
<b>BH01 (0.5)</b>	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:	17 05 03 * (Soil and stones containing hazardous substances)
<b>11%</b> (dry weight correction)		

Hazard properties

**HP 7: Carcinogenic** "waste which induces cancer or increases its incidence"

Hazard Statements hit:

**Carc. 1B; H350** "May cause cancer [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.108%)

**HP 11: Mutagenic** "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

**Muta. 1B; H340** "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.108%)

Hazard properties (substances considered hazardous until shown otherwise)

**HP 3(i): Flammable** "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Hazard Statements hit:

**Flam. Liq. 3; H226** "Flammable liquid and vapour."

Because of determinand:

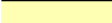




TPH (C6 to C40) petroleum group: (conc.: 0.108%)

Determinands

Moisture content: 11% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
1	arsenic { arsenic trioxide }				24	mg/kg	1.32	28.548	mg/kg	0.00285 %	✓	
	033-003-00-0	215-481-4	1327-53-3									
2	beryllium { beryllium oxide }				2.4	mg/kg	2.775	6.001	mg/kg	0.0006 %	✓	
	004-003-00-8	215-133-1	1304-56-9									
3	boron { diboron trioxide; boric oxide }				3.9	mg/kg	3.22	11.313	mg/kg	0.00113 %	✓	
	005-008-00-8	215-125-8	1303-86-2									
4	cadmium { cadmium oxide }				1.5	mg/kg	1.142	1.544	mg/kg	0.000154 %	✓	
	048-002-00-0	215-146-2	1306-19-0									

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
5	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }			1	<4	mg/kg	2.27	<9.08	mg/kg	<0.000908 %		<LOD
	024-017-00-8											
6	copper { dicopper oxide; copper (I) oxide }				310	mg/kg	1.126	314.437	mg/kg	0.0314 %	✓	
	029-002-00-X	215-270-7	1317-39-1									
7	lead { lead chromate }				620	mg/kg	1.56	871.248	mg/kg	0.0559 %	✓	
	082-004-00-2	231-846-0	7758-97-6									
8	mercury { mercury dichloride }				0.9	mg/kg	1.353	1.097	mg/kg	0.00011 %	✓	
	080-010-00-X	231-299-8	7487-94-7									
9	nickel { nickel chromate }				40	mg/kg	2.976	107.253	mg/kg	0.0107 %	✓	
	028-035-00-7	238-766-5	14721-18-7									
10	selenium { nickel selenate }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5									
11	zinc { zinc sulphate (hydrous) (mono-, hexa- and hepta hydrate); [1] zinc sulphate (anhydrous) [2] }				510	mg/kg	4.398	2020.669	mg/kg	0.202 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
12	TPH (C6 to C40) petroleum group				1200	mg/kg		1081.081	mg/kg	0.108 %	✓	
			TPH									
13	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
	006-007-00-5											
14	pH				9	pH		9	pH	9pH		
			PH									
15	naphthalene				1.4	mg/kg		1.261	mg/kg	0.000126 %	✓	
	601-052-00-2	202-049-5	91-20-3									
16	acenaphthylene				0.21	mg/kg		0.189	mg/kg	0.0000189 %	✓	
		205-917-1	208-96-8									
17	acenaphthene				2.1	mg/kg		1.892	mg/kg	0.000189 %	✓	
		201-469-6	83-32-9									
18	fluorene				1.6	mg/kg		1.441	mg/kg	0.000144 %	✓	
		201-695-5	86-73-7									
19	phenanthrene				8.1	mg/kg		7.297	mg/kg	0.00073 %	✓	
		201-581-5	85-01-8									
20	anthracene				1.7	mg/kg		1.532	mg/kg	0.000153 %	✓	
		204-371-1	120-12-7									
21	fluoranthene				9.8	mg/kg		8.829	mg/kg	0.000883 %	✓	
		205-912-4	206-44-0									
22	pyrene				9.1	mg/kg		8.198	mg/kg	0.00082 %	✓	
		204-927-3	129-00-0									
23	benzo[a]anthracene				4.7	mg/kg		4.234	mg/kg	0.000423 %	✓	
	601-033-00-9	200-280-6	56-55-3									
24	chrysene				3.1	mg/kg		2.793	mg/kg	0.000279 %	✓	
	601-048-00-0	205-923-4	218-01-9									
25	benzo[b]fluoranthene				4	mg/kg		3.604	mg/kg	0.00036 %	✓	
	601-034-00-4	205-911-9	205-99-2									
26	benzo[k]fluoranthene				1.8	mg/kg		1.622	mg/kg	0.000162 %	✓	
	601-036-00-5	205-916-6	207-08-9									
27	benzo[a]pyrene; benzo[def]chrysene				3.5	mg/kg		3.153	mg/kg	0.000315 %	✓	
	601-032-00-3	200-028-5	50-32-8									
28	indeno[123-cd]pyrene				1.7	mg/kg		1.532	mg/kg	0.000153 %	✓	
		205-893-2	193-39-5									
29	dibenz[a,h]anthracene				0.54	mg/kg		0.486	mg/kg	0.0000486 %	✓	
	601-041-00-2	200-181-8	53-70-3									
30	benzo[ghi]perylene				2	mg/kg		1.802	mg/kg	0.00018 %	✓	
		205-883-8	191-24-2									
Total:										0.419 %		

Key	
	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Hazardous result
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: BH02 (0.6)

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name:	LoW Code:
<b>BH02 (0.6)</b>	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
<b>17%</b>	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
(dry weight correction)	Entry:

Hazard properties

None identified

Determinands

Moisture content: 17% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
1	arsenic { arsenic trioxide }				14	mg/kg	1.32	15.799	mg/kg	0.00158 %	✓	
	033-003-00-0	215-481-4	1327-53-3									
2	beryllium { beryllium oxide }				1.4	mg/kg	2.775	3.321	mg/kg	0.000332 %	✓	
	004-003-00-8	215-133-1	1304-56-9									
3	boron { diboron trioxide; boric oxide }				3.9	mg/kg	3.22	10.733	mg/kg	0.00107 %	✓	
	005-008-00-8	215-125-8	1303-86-2									
4	cadmium { cadmium oxide }				<0.2	mg/kg	1.142	<0.228	mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0									
5	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<4	mg/kg	2.27	<9.08	mg/kg	<0.000908 %		<LOD
	024-017-00-8											
6	copper { dicopper oxide; copper (I) oxide }				70	mg/kg	1.126	67.361	mg/kg	0.00674 %	✓	
	029-002-00-X	215-270-7	1317-39-1									
7	lead { lead chromate }			1	180	mg/kg	1.56	239.972	mg/kg	0.0154 %	✓	
	082-004-00-2	231-846-0	7758-97-6									
8	mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
9	nickel { nickel chromate }				33	mg/kg	2.976	83.946	mg/kg	0.00839 %	✓	
	028-035-00-7	238-766-5	14721-18-7									
10	selenium { nickel selenate }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5									
11	zinc { zinc sulphate (hydrous) (mono-, hexa- and hepta hydrate); [1] zinc sulphate (anhydrous) [2] }				110	mg/kg	4.398	413.48	mg/kg	0.0413 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
12	TPH (C6 to C40) petroleum group				160	mg/kg		136.752	mg/kg	0.0137 %	✓	
			TPH									
13	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
	006-007-00-5											
14	pH				8.5	pH		8.5	pH	8.5 pH		
			PH									
15	naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3									



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
16	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
17	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
18	fluorene	201-695-5	86-73-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
19	phenanthrene	201-581-5	85-01-8		0.68 mg/kg		0.581 mg/kg	0.0000581 %	✓		
20	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
21	fluoranthene	205-912-4	206-44-0		1.2 mg/kg		1.026 mg/kg	0.000103 %	✓		
22	pyrene	204-927-3	129-00-0		1.1 mg/kg		0.94 mg/kg	0.000094 %	✓		
23	benzo[a]anthracene	601-033-00-9	200-280-6		0.76 mg/kg		0.65 mg/kg	0.000065 %	✓		
24	chrysene	601-048-00-0	205-923-4		0.7 mg/kg		0.598 mg/kg	0.0000598 %	✓		
25	benzo[b]fluoranthene	601-034-00-4	205-911-9		0.8 mg/kg		0.684 mg/kg	0.0000684 %	✓		
26	benzo[k]fluoranthene	601-036-00-5	205-916-6		0.53 mg/kg		0.453 mg/kg	0.0000453 %	✓		
27	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5		0.69 mg/kg		0.59 mg/kg	0.000059 %	✓		
28	indeno[123-cd]pyrene	205-893-2	193-39-5		0.34 mg/kg		0.291 mg/kg	0.0000291 %	✓		
29	dibenz[a,h]anthracene	601-041-00-2	200-181-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
30	benzo[ghi]perylene	205-883-8	191-24-2		0.39 mg/kg		0.333 mg/kg	0.0000333 %	✓		
Total:									0.0906 %		

#### Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
•	Determinand defined or amended by HazWasteOnline (see Appendix A)
•	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

#### Supplementary Hazardous Property Information

**HP 3(i): Flammable** "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and ≤ 75°C"

**Force this Hazardous property to non hazardous because** No obvious sources of materials capable of ignition during exploratory work

Hazard Statements hit:

**Flam. Liq. 3; H226** "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0137%)

## Classification of sample: BH03 (0.45)

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

## Sample details

Sample name:	LoW Code:
<b>BH03 (0.45)</b>	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
<b>12%</b>	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
(dry weight correction)	Entry:

## Hazard properties

None identified

## Determinands

Moisture content: 12% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				15 mg/kg	1.32	17.683 mg/kg	0.00177 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	beryllium { beryllium oxide }				1.7 mg/kg	2.775	4.213 mg/kg	0.000421 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
3	boron { diboron trioxide; boric oxide }				0.7 mg/kg	3.22	2.012 mg/kg	0.000201 %	✓	
	005-008-00-8	215-125-8	1303-86-2							
4	cadmium { cadmium oxide }				0.5 mg/kg	1.142	0.51 mg/kg	0.000051 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
5	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<4 mg/kg	2.27	<9.08 mg/kg	<0.000908 %		<LOD
	024-017-00-8									
6	copper { dicopper oxide; copper (I) oxide }				180 mg/kg	1.126	180.946 mg/kg	0.0181 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
7	lead { lead chromate }			1	260 mg/kg	1.56	362.1 mg/kg	0.0232 %	✓	
	082-004-00-2	231-846-0	7758-97-6							
8	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
9	nickel { nickel chromate }				25 mg/kg	2.976	66.434 mg/kg	0.00664 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
10	selenium { nickel selenate }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5							
11	zinc { zinc sulphate (hydrous) (mono-, hexa- and hepta hydrate); [1] zinc sulphate (anhydrous) [2] }				150 mg/kg	4.398	589.008 mg/kg	0.0589 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
12	TPH (C6 to C40) petroleum group				370 mg/kg		330.357 mg/kg	0.033 %	✓	
			TPH							
13	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
14	pH				9.3 pH		9.3 pH	9.3 pH		
			PH							
15	naphthalene				0.45 mg/kg		0.402 mg/kg	0.0000402 %	✓	
	601-052-00-2	202-049-5	91-20-3							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
16	acenaphthylene	205-917-1	208-96-8		0.32 mg/kg		0.286 mg/kg	0.0000286 %	✓	
17	acenaphthene	201-469-6	83-32-9		0.27 mg/kg		0.241 mg/kg	0.0000241 %	✓	
18	fluorene	201-695-5	86-73-7		0.66 mg/kg		0.589 mg/kg	0.0000589 %	✓	
19	phenanthrene	201-581-5	85-01-8		4.4 mg/kg		3.929 mg/kg	0.000393 %	✓	
20	anthracene	204-371-1	120-12-7		1.2 mg/kg		1.071 mg/kg	0.000107 %	✓	
21	fluoranthene	205-912-4	206-44-0		5.2 mg/kg		4.643 mg/kg	0.000464 %	✓	
22	pyrene	204-927-3	129-00-0		4.7 mg/kg		4.196 mg/kg	0.00042 %	✓	
23	benzo[a]anthracene	601-033-00-9	200-280-6		3.4 mg/kg		3.036 mg/kg	0.000304 %	✓	
24	chrysene	601-048-00-0	205-923-4		3 mg/kg		2.679 mg/kg	0.000268 %	✓	
25	benzo[b]fluoranthene	601-034-00-4	205-911-9		3.4 mg/kg		3.036 mg/kg	0.000304 %	✓	
26	benzo[k]fluoranthene	601-036-00-5	205-916-6		1.4 mg/kg		1.25 mg/kg	0.000125 %	✓	
27	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5		3 mg/kg		2.679 mg/kg	0.000268 %	✓	
28	indeno[123-cd]pyrene	205-893-2	193-39-5		1.6 mg/kg		1.429 mg/kg	0.000143 %	✓	
29	dibenz[a,h]anthracene	601-041-00-2	200-181-8		0.47 mg/kg		0.42 mg/kg	0.000042 %	✓	
30	benzo[ghi]perylene	205-883-8	191-24-2		1.7 mg/kg		1.518 mg/kg	0.000152 %	✓	
Total:								0.147 %		

#### Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
•	Determinand defined or amended by HazWasteOnline (see Appendix A)
•	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

#### Supplementary Hazardous Property Information

**HP 3(i): Flammable** "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and ≤ 75°C"

Force this Hazardous property to non hazardous because No obvious sources of materials capable of ignition during exploratory work

Hazard Statements hit:

**Flam. Liq. 3; H226** "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.033%)

Classification of sample: SSS01 (0.2)

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name:	LoW Code:
<b>SSS01 (0.2)</b>	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
<b>16%</b>	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
(dry weight correction)	Entry:

Hazard properties

None identified

Determinands

Moisture content: 16% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				15 mg/kg	1.32	17.073 mg/kg	0.00171 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	beryllium { beryllium oxide }				1 mg/kg	2.775	2.393 mg/kg	0.000239 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
3	boron { diboron trioxide; boric oxide }				1.2 mg/kg	3.22	3.331 mg/kg	0.000333 %	✓	
	005-008-00-8	215-125-8	1303-86-2							
4	cadmium { cadmium oxide }				0.7 mg/kg	1.142	0.689 mg/kg	0.0000689 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
5	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<4 mg/kg	2.27	<9.08 mg/kg	<0.000908 %		<LOD
	024-017-00-8									
6	copper { dicopper oxide; copper (I) oxide }				70 mg/kg	1.126	67.942 mg/kg	0.00679 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
7	lead { lead chromate }			1	130 mg/kg	1.56	174.807 mg/kg	0.0112 %	✓	
	082-004-00-2	231-846-0	7758-97-6							
8	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
9	nickel { nickel chromate }				26 mg/kg	2.976	66.709 mg/kg	0.00667 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
10	selenium { nickel selenate }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5							
11	zinc { zinc sulphate (hydrous) (mono-, hexa- and hepta hydrate); [1] zinc sulphate (anhydrous) [2] }				140 mg/kg	4.398	530.784 mg/kg	0.0531 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
12	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
13	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
14	pH				8.2 pH		8.2 pH	8.2 pH		
			PH							
15	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
16	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
17	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
18	fluorene	201-695-5	86-73-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
19	phenanthrene	201-581-5	85-01-8		0.33 mg/kg		0.284 mg/kg	0.0000284 %	✓	
20	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
21	fluoranthene	205-912-4	206-44-0		0.7 mg/kg		0.603 mg/kg	0.0000603 %	✓	
22	pyrene	204-927-3	129-00-0		0.64 mg/kg		0.552 mg/kg	0.0000552 %	✓	
23	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	0.51 mg/kg		0.44 mg/kg	0.000044 %	✓	
24	chrysene	601-048-00-0	205-923-4	218-01-9	0.44 mg/kg		0.379 mg/kg	0.0000379 %	✓	
25	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	0.57 mg/kg		0.491 mg/kg	0.0000491 %	✓	
26	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	0.21 mg/kg		0.181 mg/kg	0.0000181 %	✓	
27	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	0.62 mg/kg		0.534 mg/kg	0.0000534 %	✓	
28	indeno[123-cd]pyrene	205-893-2	193-39-5		0.28 mg/kg		0.241 mg/kg	0.0000241 %	✓	
29	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
30	benzo[ghi]perylene	205-883-8	191-24-2		0.45 mg/kg		0.388 mg/kg	0.0000388 %	✓	
Total:								0.0829 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
•	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: SSS02 (0.2)

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name:	LoW Code:
<b>SSS02 (0.2)</b>	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
<b>17%</b>	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
(dry weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 17% Dry Weight Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
1		arsenic { arsenic trioxide }				16	mg/kg	1.32	18.056	mg/kg	0.00181 %	✓	
		033-003-00-0	215-481-4	1327-53-3									
2		beryllium { beryllium oxide }				1.1	mg/kg	2.775	2.609	mg/kg	0.000261 %	✓	
		004-003-00-8	215-133-1	1304-56-9									
3		boron { diboron trioxide; boric oxide }				0.7	mg/kg	3.22	1.926	mg/kg	0.000193 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
4		cadmium { cadmium oxide }				0.6	mg/kg	1.142	0.586	mg/kg	0.0000586 %	✓	
		048-002-00-0	215-146-2	1306-19-0									
5		chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<4	mg/kg	2.27	<9.08	mg/kg	<0.000908 %		<LOD
		024-017-00-8											
6		copper { dicopper oxide; copper (I) oxide }				26	mg/kg	1.126	25.02	mg/kg	0.0025 %	✓	
		029-002-00-X	215-270-7	1317-39-1									
7		lead { lead chromate }			1	74	mg/kg	1.56	98.655	mg/kg	0.00632 %	✓	
		082-004-00-2	231-846-0	7758-97-6									
8		mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
		080-010-00-X	231-299-8	7487-94-7									
9		nickel { nickel chromate }				22	mg/kg	2.976	55.964	mg/kg	0.0056 %	✓	
		028-035-00-7	238-766-5	14721-18-7									
10		selenium { nickel selenate }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
		028-031-00-5	239-125-2	15060-62-5									
11		zinc { zinc sulphate (hydrous) (mono-, hexa- and hepta hydrate); [1] zinc sulphate (anhydrous) [2] }				91	mg/kg	4.398	342.061	mg/kg	0.0342 %	✓	
		030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
12		TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
				TPH									
13		cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
		006-007-00-5											
14		pH				6.9	pH		6.9	pH	6.9 pH		
				PH									
15		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-052-00-2	202-049-5	91-20-3									

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
16	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
17	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
18	fluorene	201-695-5	86-73-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
19	phenanthrene	201-581-5	85-01-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
20	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
21	fluoranthene	205-912-4	206-44-0		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
22	pyrene	204-927-3	129-00-0		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
23	benzo[a]anthracene	601-033-00-9	200-280-6		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
24	chrysene	601-048-00-0	205-923-4		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
25	benzo[b]fluoranthene	601-034-00-4	205-911-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
26	benzo[k]fluoranthene	601-036-00-5	205-916-6		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
27	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
28	indeno[123-cd]pyrene	205-893-2	193-39-5		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
29	dibenz[a,h]anthracene	601-041-00-2	200-181-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
30	benzo[ghi]perylene	205-883-8	191-24-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
Total:								0.0534 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP01 (0.6)

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name:	LoW Code:
<b>TP01 (0.6)</b>	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
<b>8.5%</b>	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
(dry weight correction)	Entry:

Hazard properties

None identified

Determinands

Moisture content: 8.5% Dry Weight Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
1		arsenic { arsenic trioxide }				25	mg/kg	1.32	30.422	mg/kg	0.00304 %	✓	
		033-003-00-0	215-481-4	1327-53-3									
2		beryllium { beryllium oxide }				1.6	mg/kg	2.775	4.093	mg/kg	0.000409 %	✓	
		004-003-00-8	215-133-1	1304-56-9									
3		boron { diboron trioxide; boric oxide }				2.8	mg/kg	3.22	8.309	mg/kg	0.000831 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
4		cadmium { cadmium oxide }				1.7	mg/kg	1.142	1.79	mg/kg	0.000179 %	✓	
		048-002-00-0	215-146-2	1306-19-0									
5		chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<4	mg/kg	2.27	<9.08	mg/kg	<0.000908 %		<LOD
		024-017-00-8											
6		copper { dicopper oxide; copper (I) oxide }				190	mg/kg	1.126	197.16	mg/kg	0.0197 %	✓	
		029-002-00-X	215-270-7	1317-39-1									
7		lead { lead chromate }			1	210	mg/kg	1.56	301.9	mg/kg	0.0194 %	✓	
		082-004-00-2	231-846-0	7758-97-6									
8		mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
		080-010-00-X	231-299-8	7487-94-7									
9		nickel { nickel chromate }				43	mg/kg	2.976	117.953	mg/kg	0.0118 %	✓	
		028-035-00-7	238-766-5	14721-18-7									
10		selenium { nickel selenate }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
		028-031-00-5	239-125-2	15060-62-5									
11		zinc { zinc sulphate (hydrous) (mono-, hexa- and hepta hydrate); [1] zinc sulphate (anhydrous) [2] }				390	mg/kg	4.398	1580.821	mg/kg	0.158 %	✓	
		030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
12		TPH (C6 to C40) petroleum group				160	mg/kg		147.465	mg/kg	0.0147 %	✓	
				TPH									
13		cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
		006-007-00-5											
14		pH				8.5	pH		8.5	pH	8.5 pH		
				PH									
15		naphthalene				0.96	mg/kg		0.885	mg/kg	0.0000885 %	✓	
		601-052-00-2	202-049-5	91-20-3									



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
16	acenaphthylene	205-917-1	208-96-8		0.08 mg/kg		0.0737 mg/kg	0.00000737 %	✓	
17	acenaphthene	201-469-6	83-32-9		0.87 mg/kg		0.802 mg/kg	0.0000802 %	✓	
18	fluorene	201-695-5	86-73-7		0.77 mg/kg		0.71 mg/kg	0.000071 %	✓	
19	phenanthrene	201-581-5	85-01-8		7.4 mg/kg		6.82 mg/kg	0.000682 %	✓	
20	anthracene	204-371-1	120-12-7		1.8 mg/kg		1.659 mg/kg	0.000166 %	✓	
21	fluoranthene	205-912-4	206-44-0		8 mg/kg		7.373 mg/kg	0.000737 %	✓	
22	pyrene	204-927-3	129-00-0		7 mg/kg		6.452 mg/kg	0.000645 %	✓	
23	benzo[a]anthracene	601-033-00-9	200-280-6		2.8 mg/kg		2.581 mg/kg	0.000258 %	✓	
24	chrysene	601-048-00-0	205-923-4		2.2 mg/kg		2.028 mg/kg	0.000203 %	✓	
25	benzo[b]fluoranthene	601-034-00-4	205-911-9		2.7 mg/kg		2.488 mg/kg	0.000249 %	✓	
26	benzo[k]fluoranthene	601-036-00-5	205-916-6		1.3 mg/kg		1.198 mg/kg	0.00012 %	✓	
27	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5		2.6 mg/kg		2.396 mg/kg	0.00024 %	✓	
28	indeno[123-cd]pyrene	205-893-2	193-39-5		1.5 mg/kg		1.382 mg/kg	0.000138 %	✓	
29	dibenz[a,h]anthracene	601-041-00-2	200-181-8		0.45 mg/kg		0.415 mg/kg	0.0000415 %	✓	
30	benzo[ghi]perylene	205-883-8	191-24-2		1.7 mg/kg		1.567 mg/kg	0.000157 %	✓	
Total:								0.233 %		

#### Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
•	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

#### Supplementary Hazardous Property Information

**HP 3(i): Flammable** "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and ≤ 75°C"

**Force this Hazardous property to non hazardous because** No obvious sources of materials capable of ignition during exploratory work

Hazard Statements hit:

**Flam. Liq. 3; H226** "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0147%)

Classification of sample: WS01 (0.2)

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name:	LoW Code:
<b>WS01 (0.2)</b>	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
<b>14%</b>	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
(dry weight correction)	Entry:

Hazard properties

None identified

Determinands

Moisture content: 14% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				13 mg/kg	1.32	15.056 mg/kg	0.00151 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	beryllium { beryllium oxide }				0.96 mg/kg	2.775	2.337 mg/kg	0.000234 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
3	boron { diboron trioxide; boric oxide }				2.5 mg/kg	3.22	7.061 mg/kg	0.000706 %	✓	
	005-008-00-8	215-125-8	1303-86-2							
4	cadmium { cadmium oxide }				0.6 mg/kg	1.142	0.601 mg/kg	0.0000601 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
5	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<4 mg/kg	2.27	<9.08 mg/kg	<0.000908 %		<LOD
	024-017-00-8									
6	copper { dicopper oxide; copper (I) oxide }				35 mg/kg	1.126	34.567 mg/kg	0.00346 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
7	lead { lead chromate }			1	71 mg/kg	1.56	97.146 mg/kg	0.00623 %	✓	
	082-004-00-2	231-846-0	7758-97-6							
8	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
9	nickel { nickel chromate }				21 mg/kg	2.976	54.826 mg/kg	0.00548 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
10	selenium { nickel selenate }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5							
11	zinc { zinc sulphate (hydrous) (mono-, hexa- and hepta hydrate); [1] zinc sulphate (anhydrous) [2] }				110 mg/kg	4.398	424.361 mg/kg	0.0424 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
12	TPH (C6 to C40) petroleum group				14 mg/kg		12.281 mg/kg	0.00123 %	✓	
			TPH							
13	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
14	pH				8.1 pH		8.1 pH	8.1 pH		
			PH							
15	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
16	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
17	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
18	fluorene	201-695-5	86-73-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
19	phenanthrene	201-581-5	85-01-8		0.76 mg/kg		0.667 mg/kg	0.0000667 %		✓	
20	anthracene	204-371-1	120-12-7		0.71 mg/kg		0.623 mg/kg	0.0000623 %		✓	
21	fluoranthene	205-912-4	206-44-0		0.79 mg/kg		0.693 mg/kg	0.0000693 %		✓	
22	pyrene	204-927-3	129-00-0		0.62 mg/kg		0.544 mg/kg	0.0000544 %		✓	
23	benzo[a]anthracene	601-033-00-9	200-280-6		0.29 mg/kg		0.254 mg/kg	0.0000254 %		✓	
24	chrysene	601-048-00-0	205-923-4		0.35 mg/kg		0.307 mg/kg	0.0000307 %		✓	
25	benzo[b]fluoranthene	601-034-00-4	205-911-9		0.48 mg/kg		0.421 mg/kg	0.0000421 %		✓	
26	benzo[k]fluoranthene	601-036-00-5	205-916-6		0.14 mg/kg		0.123 mg/kg	0.0000123 %		✓	
27	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5		0.32 mg/kg		0.281 mg/kg	0.0000281 %		✓	
28	indeno[123-cd]pyrene	205-893-2	193-39-5		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
29	dibenz[a,h]anthracene	601-041-00-2	200-181-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
30	benzo[ghi]perylene	205-883-8	191-24-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
Total:									0.0632 %		

#### Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
•	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

#### Supplementary Hazardous Property Information

**HP 3(i): Flammable** "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and ≤ 75°C"

Force this Hazardous property to non hazardous because No obvious sources of materials capable of ignition during exploratory work

Hazard Statements hit:

**Flam. Liq. 3; H226** "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00123%)

Classification of sample: WS02 (0.3)

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name:	LoW Code:
<b>WS02 (0.3)</b>	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
<b>11%</b>	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
(dry weight correction)	Entry:

Hazard properties

None identified

Determinands

Moisture content: 11% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
1	arsenic { arsenic trioxide }				28	mg/kg	1.32	33.306	mg/kg	0.00333 %	✓	
	033-003-00-0	215-481-4	1327-53-3									
2	beryllium { beryllium oxide }				1.4	mg/kg	2.775	3.5	mg/kg	0.00035 %	✓	
	004-003-00-8	215-133-1	1304-56-9									
3	boron { diboron trioxide; boric oxide }				7.5	mg/kg	3.22	21.756	mg/kg	0.00218 %	✓	
	005-008-00-8	215-125-8	1303-86-2									
4	cadmium { cadmium oxide }				1.6	mg/kg	1.142	1.647	mg/kg	0.000165 %	✓	
	048-002-00-0	215-146-2	1306-19-0									
5	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<4	mg/kg	2.27	<9.08	mg/kg	<0.000908 %		<LOD
	024-017-00-8											
6	copper { dicopper oxide; copper (I) oxide }				240	mg/kg	1.126	243.435	mg/kg	0.0243 %	✓	
	029-002-00-X	215-270-7	1317-39-1									
7	lead { lead chromate }			1	500	mg/kg	1.56	702.619	mg/kg	0.045 %	✓	
	082-004-00-2	231-846-0	7758-97-6									
8	mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
9	nickel { nickel chromate }				52	mg/kg	2.976	139.429	mg/kg	0.0139 %	✓	
	028-035-00-7	238-766-5	14721-18-7									
10	selenium { nickel selenate }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5									
11	zinc { zinc sulphate (hydrous) (mono-, hexa- and hepta hydrate); [1] zinc sulphate (anhydrous) [2] }				470	mg/kg	4.398	1862.185	mg/kg	0.186 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
12	TPH (C6 to C40) petroleum group				790	mg/kg		711.712	mg/kg	0.0712 %	✓	
			TPH									
13	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
	006-007-00-5											
14	pH				8.4	pH		8.4	pH	8.4 pH		
			PH									
15	naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3									

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
16	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
17	acenaphthene	201-469-6	83-32-9		0.8 mg/kg		0.721 mg/kg	0.0000721 %		✓	
18	fluorene	201-695-5	86-73-7		0.59 mg/kg		0.532 mg/kg	0.0000532 %		✓	
19	phenanthrene	201-581-5	85-01-8		2.5 mg/kg		2.252 mg/kg	0.000225 %		✓	
20	anthracene	204-371-1	120-12-7		0.72 mg/kg		0.649 mg/kg	0.0000649 %		✓	
21	fluoranthene	205-912-4	206-44-0		4.4 mg/kg		3.964 mg/kg	0.000396 %		✓	
22	pyrene	204-927-3	129-00-0		4 mg/kg		3.604 mg/kg	0.00036 %		✓	
23	benzo[a]anthracene	601-033-00-9	200-280-6		2.5 mg/kg		2.252 mg/kg	0.000225 %		✓	
24	chrysene	601-048-00-0	205-923-4		2.2 mg/kg		1.982 mg/kg	0.000198 %		✓	
25	benzo[b]fluoranthene	601-034-00-4	205-911-9		3.2 mg/kg		2.883 mg/kg	0.000288 %		✓	
26	benzo[k]fluoranthene	601-036-00-5	205-916-6		1.3 mg/kg		1.171 mg/kg	0.000117 %		✓	
27	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5		2.4 mg/kg		2.162 mg/kg	0.000216 %		✓	
28	indeno[123-cd]pyrene	205-893-2	193-39-5		1.2 mg/kg		1.081 mg/kg	0.000108 %		✓	
29	dibenz[a,h]anthracene	601-041-00-2	200-181-8		0.39 mg/kg		0.351 mg/kg	0.0000351 %		✓	
30	benzo[ghi]perylene	205-883-8	191-24-2		1.3 mg/kg		1.171 mg/kg	0.000117 %		✓	
Total:									0.351 %		

#### Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
•	Determinand defined or amended by HazWasteOnline (see Appendix A)
•	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

#### Supplementary Hazardous Property Information

**HP 3(i): Flammable** "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and ≤ 75°C"

**Force this Hazardous property to non hazardous because** No obvious sources of materials capable of ignition during exploratory work

Hazard Statements hit:

**Flam. Liq. 3; H226** "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0712%)

Classification of sample: WS03 (1)

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name:	LoW Code:
<b>WS03 (1)</b>	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
<b>9%</b>	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
(dry weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 9% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
1	arsenic { arsenic trioxide }				31	mg/kg	1.32	37.551	mg/kg	0.00376 %	✓	
	033-003-00-0	215-481-4	1327-53-3									
2	beryllium { beryllium oxide }				3	mg/kg	2.775	7.639	mg/kg	0.000764 %	✓	
	004-003-00-8	215-133-1	1304-56-9									
3	boron { diboron trioxide; boric oxide }				3.1	mg/kg	3.22	9.157	mg/kg	0.000916 %	✓	
	005-008-00-8	215-125-8	1303-86-2									
4	cadmium { cadmium oxide }				1.1	mg/kg	1.142	1.153	mg/kg	0.000115 %	✓	
	048-002-00-0	215-146-2	1306-19-0									
5	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<4	mg/kg	2.27	<9.08	mg/kg	<0.000908 %		<LOD
	024-017-00-8											
6	copper { dicopper oxide; copper (I) oxide }				310	mg/kg	1.126	320.207	mg/kg	0.032 %	✓	
	029-002-00-X	215-270-7	1317-39-1									
7	lead { lead chromate }			1	320	mg/kg	1.56	457.927	mg/kg	0.0294 %	✓	
	082-004-00-2	231-846-0	7758-97-6									
8	mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
9	nickel { nickel chromate }				58	mg/kg	2.976	158.37	mg/kg	0.0158 %	✓	
	028-035-00-7	238-766-5	14721-18-7									
10	selenium { nickel selenate }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5									
11	zinc { zinc sulphate (hydrous) (mono-, hexa- and hepta hydrate); [1] zinc sulphate (anhydrous) [2] }				320	mg/kg	4.398	1291.134	mg/kg	0.129 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
12	TPH (C6 to C40) petroleum group				360	mg/kg		330.275	mg/kg	0.033 %	✓	
			TPH									
13	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
	006-007-00-5											
14	pH				9.6	pH		9.6	pH	9.6 pH		
			PH									
15	naphthalene				0.98	mg/kg		0.899	mg/kg	0.0000899 %	✓	
	601-052-00-2	202-049-5	91-20-3									

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
16	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
17	acenaphthene	201-469-6	83-32-9		4.2 mg/kg		3.853 mg/kg	0.000385 %		✓	
18	fluorene	201-695-5	86-73-7		2.5 mg/kg		2.294 mg/kg	0.000229 %		✓	
19	phenanthrene	201-581-5	85-01-8		25 mg/kg		22.936 mg/kg	0.00229 %		✓	
20	anthracene	204-371-1	120-12-7		1.6 mg/kg		1.468 mg/kg	0.000147 %		✓	
21	fluoranthene	205-912-4	206-44-0		34 mg/kg		31.193 mg/kg	0.00312 %		✓	
22	pyrene	204-927-3	129-00-0		29 mg/kg		26.606 mg/kg	0.00266 %		✓	
23	benzo[a]anthracene	601-033-00-9	200-280-6		15 mg/kg		13.761 mg/kg	0.00138 %		✓	
24	chrysene	601-048-00-0	205-923-4		11 mg/kg		10.092 mg/kg	0.00101 %		✓	
25	benzo[b]fluoranthene	601-034-00-4	205-911-9		13 mg/kg		11.927 mg/kg	0.00119 %		✓	
26	benzo[k]fluoranthene	601-036-00-5	205-916-6		6.1 mg/kg		5.596 mg/kg	0.00056 %		✓	
27	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5		10 mg/kg		9.174 mg/kg	0.000917 %		✓	
28	indeno[123-cd]pyrene	205-893-2	193-39-5		4.6 mg/kg		4.22 mg/kg	0.000422 %		✓	
29	dibenz[a,h]anthracene	601-041-00-2	200-181-8		1.4 mg/kg		1.284 mg/kg	0.000128 %		✓	
30	benzo[ghi]perylene	205-883-8	191-24-2		5.2 mg/kg		4.771 mg/kg	0.000477 %		✓	
Total:									0.261 %		

#### Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
•	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

#### Supplementary Hazardous Property Information

**HP 3(i): Flammable** "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and ≤ 75°C"

**Force this Hazardous property to non hazardous because** No obvious sources of materials capable of ignition during exploratory work

Hazard Statements hit:

**Flam. Liq. 3; H226** "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.033%)



## Appendix A: Classifier defined and non CLP determinands

### TPH (C6 to C40) petroleum group (CAS Number: TPH)

Description/Comments: Hazard statements taken from WM3 1st Edition 2015; Risk phrases: WM2 3rd Edition 2013

Data source: WM3 1st Edition 2015

Data source date: 25 May 2015

Hazard Statements: Flam. Liq. 3 H226 , Asp. Tox. 1 H304 , STOT RE 2 H373 , Muta. 1B H340 , Carc. 1B H350 , Repr. 2 H361d , Aquatic Chronic 2 H411

### salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex

CLP index number: 006-007-00-5

Description/Comments: Conversion factor based on a worst case compound: sodium cyanide

Data source: Commission Regulation (EC) No 790/2009 - 1st Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP1)

Additional Hazard Statement(s): EUH032 >= 0.2 %

Reason for additional Hazards Statement(s):

14 Dec 2015 - EUH032 >= 0.2 % hazard statement sourced from: WM3, Table C12.2

### pH (CAS Number: PH)

Description/Comments: Appendix C4

Data source: WM3 1st Edition 2015

Data source date: 25 May 2015

Hazard Statements: None.

### acenaphthylene (EC Number: 205-917-1, CAS Number: 208-96-8)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 17 Jul 2015

Hazard Statements: Acute Tox. 4 H302 , Acute Tox. 1 H330 , Acute Tox. 1 H310 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315

### acenaphthene (EC Number: 201-469-6, CAS Number: 83-32-9)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 17 Jul 2015

Hazard Statements: Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410 , Aquatic Chronic 2 H411

### fluorene (EC Number: 201-695-5, CAS Number: 86-73-7)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 06 Aug 2015

Hazard Statements: Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

### phenanthrene (EC Number: 201-581-5, CAS Number: 85-01-8)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 06 Aug 2015

Hazard Statements: Acute Tox. 4 H302 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Carc. 2 H351 , Skin Sens. 1 H317 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410 , Skin Irrit. 2 H315

### anthracene (EC Number: 204-371-1, CAS Number: 120-12-7)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 17 Jul 2015

Hazard Statements: Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Skin Sens. 1 H317 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

### fluoranthene (EC Number: 205-912-4, CAS Number: 206-44-0)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 21 Aug 2015

Hazard Statements: Acute Tox. 4 H302 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

### pyrene (EC Number: 204-927-3, CAS Number: 129-00-0)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 2014

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 21 Aug 2015

Hazard Statements: Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410



■ **indeno[123-cd]pyrene** (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database  
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 06 Aug 2015  
Hazard Statements: Carc. 2 H351

■ **benzo[ghi]perylene** (EC Number: 205-883-8, CAS Number: 191-24-2)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015  
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 23 Jul 2015  
Hazard Statements: Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

## Appendix B: Rationale for selection of metal species

### arsenic {arsenic trioxide}

Reasonable case CLP species based on hazard statements/molecular weight and most common (stable) oxide of arsenic. Industrial sources include: smelting; main precursor to other arsenic compounds (edit as required)

### beryllium {beryllium oxide}

Reasonable case CLP species based on hazard statements/molecular weight. Industrial sources include: most common (non alloy) form, used in ceramics (edit as required)

### boron {diboron trioxide; boric oxide}

Reasonable case CLP species based on hazard statements/ molecular weight, physical form and low solubility. Industrial sources include: fluxing agent for glass/enamels; additive for fibre optics, borosilicate glass (edit as required)

### cadmium {cadmium oxide}

Reasonable case CLP species based on hazard statements/molecular weight, very low solubility in water. Industrial sources include: electroplating baths, electrodes for storage batteries, catalysts, ceramic glazes, phosphors, pigments and nematocides. (edit as required) Worst case compounds in CLP: cadmium sulphate, chloride, fluoride & iodide not expected as either very soluble and/or compound's industrial usage not related to site history (edit as required)

### chromium in chromium(VI) compounds {chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex}

Worst case species based on hazard statements/molecular weight (edit as required)

### copper {dicopper oxide; copper (II) oxide}

Reasonable case CLP species based on hazard statements/molecular weight and insolubility in water. Industrial sources include: oxidised copper metal, brake pads, pigments, antifouling paints, fungicide. (edit as required) Worse case copper sulphate is very soluble and likely to have been leached away if ever present and/or not enough soluble sulphate detected. (edit as required)

### lead {lead chromate}

Worst case CLP species based on hazard statements/molecular weight (edit as required)

### mercury {mercury dichloride}

Worst case CLP species based on hazard statements/molecular weight (edit as required)

### nickel {nickel chromate}

Worst case CLP species based on hazard statements/molecular weight (edit as required)

### selenium {nickel selenate}

Worst case CLP species based on hazard statements/molecular weight (edit as required)

### zinc {zinc sulphate (hydrous) (mono-, hexa- and hepta hydrate); [1] zinc sulphate (anhydrous) [2]}

No obvious sources of chromium identified during exploratory work. Elevated concentrations of chromium or hexavalent chromium were not detected in laboratory analysis

### cyanides {salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex}

Harmonised group entry used as most reasonable case as complex cyanides and those specified elsewhere in the annex are not likely to be present in this soil: [Note conversion factor based on a worst case compound: sodium cyanide] (edit as required)

## Appendix C: Version

HazWasteOnline Classification Engine: WM3 1st Edition v1.1, May 2018  
HazWasteOnline Classification Engine Version: 2021.246.4869.9247 (05 Sep 2021)  
HazWasteOnline Database: 2021.246.4869.9247 (05 Sep 2021)

This classification utilises the following guidance and legislation:

**WM3 v1.1 - Waste Classification** - 1st Edition v1.1 - May 2018

**CLP Regulation** - Regulation 1272/2008/EC of 16 December 2008

**1st ATP** - Regulation 790/2009/EC of 10 August 2009

**2nd ATP** - Regulation 286/2011/EC of 10 March 2011

**3rd ATP** - Regulation 618/2012/EU of 10 July 2012

**4th ATP** - Regulation 487/2013/EU of 8 May 2013

**Correction to 1st ATP** - Regulation 758/2013/EU of 7 August 2013

**5th ATP** - Regulation 944/2013/EU of 2 October 2013

**6th ATP** - Regulation 605/2014/EU of 5 June 2014

**WFD Annex III replacement** - Regulation 1357/2014/EU of 18 December 2014

**Revised List of Waste 2014** - Decision 2014/955/EU of 18 December 2014

**7th ATP** - Regulation 2015/1221/EU of 24 July 2015

**8th ATP** - Regulation (EU) 2016/918 of 19 May 2016

**9th ATP** - Regulation (EU) 2016/1179 of 19 July 2016

**10th ATP** - Regulation (EU) 2017/776 of 4 May 2017

**HP14 amendment** - Regulation (EU) 2017/997 of 8 June 2017

**13th ATP** - Regulation (EU) 2018/1480 of 4 October 2018

**14th ATP** - Regulation (EU) 2020/217 of 4 October 2019

**15th ATP** - Regulation (EU) 2020/1182 of 19 May 2020

**The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use)(Amendment etc.) (EU Exit)**

**Regulations 2019** - UK: 2019 No. 720 of 27th March 2019

**The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use)(Amendment etc.) (EU Exit)**

**Regulations 2020** - UK: 2020 No. 1567 of 16th December 2020

**The Waste and Environmental Permitting etc. (Legislative Functions and Amendment etc.) (EU Exit) Regulations 2020** - UK:

2020 No. 1540 of 16th December 2020

**POPs Regulation 2019** - Regulation (EU) 2019/1021 of 20 June 2019

## Appendix E: Asbestos Decision Work Tool Outputs



## Joint Industry Working Group

Asbestos in Soil and Construction & Demolition Materials

Project Reference	13675
Site Name	Big Yellow, Kentish Town
Client	Big Yellow Self Storage Company Ltd
Run by	CampbellReith
Date	11-Oct-21
Scenario details	Potential Exposure of Groundworkers for Absestos in Soils

### Decision Support Tool for CAR2012 Work Categories

#### Stage 1

##### Hazard Factors

Select ACM type (run model for each type to generate 'Worst Case' output)  
Extent of degradation of ACMs at outset of work  
Friability and degree of bonding by matrix (ACM matrix, not ground materials)  
Distribution of Visible Asbestos Across Affected Area  
Amount of asbestos fibre in selected ACM/fibre type as % of host material

Loose fibrous asbestos debris	3
Disaggregated (dominated by loose fibrous material: extreme degradation in ACM and/or free asbestos fibres/fibre bundles)	4
Friable ACM or ACM with fibres not firmly linked in a matrix	2
No visible ACMs/fibre bundles	0
Very Low quantities - <0.001 to 0.01 %wt/wt	1

Sub-total

Score

10

*Note: the asbestos licensing regime is unaffected by the type of asbestos fibre present in ACMs*

Hazard ranking

Low

No warranty, expressed or implied, or reliance, is provided in relation to the use of this tool.

It is contingent on users to satisfy themselves that the output from the tool is relevant and appropriate to the assessment being made.

## Stage 2

### Exposure Factors

### Score

Anticipated airborne fibre concentration - Control Limit or SALI?

<0.001 fibres/ml

0

Anticipated duration of exposure to asbestos

< 1 hour for any one person in any week (e.g. Short Duration Work)

1

Activity type and effect on deterioration of ACMs during work

Sampling, manual or mechanical (no or minimal deterioration expected)

0

Best description of primary host material matrix (soil/made ground)

Fine Silt and/or Clay

1

Respirable fibre index for ACM - RIVM report 711701034 (2003)

Medium

3

Sub-total

5

Exposure ranking

Very low

Combined hazard and exposure ranking

15

Low

## Stage 3

### Risk Assessment Outputs

Probable Licensing Status	Non-Licensed Work
RPE*	EN149 type FFP3 disposable
Dust Suppression**	Manual/localised dust suppression
Hygiene/Decontamination***	Localised and basic personal decontamination facilities

\*Where RPE has to be worn continuously for long periods (e.g. more than 1-hour), then powered RPE may be necessary.

\*\*Reduction in control measures possible if natural mitigation factors are present (e.g. raining, wet ground)

\*\*\*Guide only; suitability of selected personal hygiene measures may be reviewed on a site/contamination-specific basis

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