

BOREHOLE RECORD - Concrete core


Project STOCKPORT BUS STATION

Engineer AECOM


Borehole Project No

CC5
PN153428

Client TRANSPORT FOR GREATER MANCHESTER

Drilling		Properties/Sampling			Strata				Scale 1:50	
Core Run/Depth (Core Dia)	Depth Cased & (to Water)	Type TCR/SCR%	Length Max/Min	RQD %	Description General	Description Detail	Depth	Legend		
0.00- 0.40		C			MADE GROUND: Medium strong orangish brown bricks (216 x 102 x 64mm) with voids up to 5mm in size. Well bonded dark brown mortar up to 10mm thick.		G.L. 0.40			
					End of Borehole					


Drilling				Progress					Groundwater					
Depth	Hole Dia	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater
0.40		Concrete core	UU											

Remarks  Angle of Inclination: 0 degrees from horizontal.

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres. Logged in accordance with BS5930:1999 + A2:2010

Logged by NM
Figure 1 of 1
11/03/2016



BOREHOLE RECORD - Concrete core


Project STOCKPORT BUS STATION

Engineer AECOM


Borehole Project No

CC5A
PN153428

Client TRANSPORT FOR GREATER MANCHESTER

Drilling		Properties/Sampling			Strata				Scale 1:50	
Core Run/Depth (Core Dia)	Depth Cased & (to Water)	Type TCR/SCR%	Length Max/Min	RQD %	Description General	Description Detail	Depth	Legend		
0.00- 0.52		C			<p>MADE GROUND: Medium strong orangish brown bricks (216 x 102 x 64) with voids up to 30mm in size. Well bonded, occasionally poorly bonded, dark brown mortar up to 15mm thick.</p> <p>End of Borehole</p>		G.L. 0.52			


Drilling				Progress					Groundwater					
Depth	Hole Dia	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater
0.52		Concrete core	UU											

Remarks  Angle of Inclination: 0 degrees from horizontal.

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres. Logged in accordance with BS5930:1999 + A2:2010

Logged by NM
Figure 1 of 1
11/03/2016



BOREHOLE RECORD - Concrete core


Project STOCKPORT BUS STATION

Engineer AECOM


Borehole
Project No

CC6
PN153428

Client TRANSPORT FOR GREATER MANCHESTER

Drilling		Properties/Sampling			Strata				Scale 1:50	
Core Run/Depth (Core Dia)	Depth Cased & (to Water)	Type TCR/SCR%	Length Max/Min	RQD %	Description General	Description Detail	Depth	Legend		
0.00- 0.27		C			MADE GROUND: Strong light grey coarse grained sandstone.		G.L. 0.27			
					End of Borehole					


Drilling				Progress					Groundwater					
Depth	Hole Dia	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater
0.27		Concrete core	UU											

Remarks  Angle of Inclination: 0 degrees from horizontal.

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres. Logged in accordance with BS5930:1999 + A2:2010

Logged by NM
Figure 1 of 1
11/03/2016



BOREHOLE RECORD - Concrete core

Project STOCKPORT BUS STATION

Engineer AECOM

Borehole Project No

CC8
PN153428

Client TRANSPORT FOR GREATER MANCHESTER

Drilling		Properties/Sampling			Strata		Scale 1:50		
Core Run/Depth (Core Dia)	Depth Cased & (to Water)	Type TCR/SCR%	Length Max/Min	RQD %	Description General	Description Detail	Depth	Legend	
0.00- 0.67		C			<p>MADE GROUND: Strong to very strong grey coarse grained sandstone.</p> <p>MADE GROUND: Orangish brown/reddish brown bricks (216 x 102 x 64mm) with voids up to 30mm in size. Well bonded grey mortar up to 10mm thick.</p> <p>End of Borehole</p>	<p>Between 0.10-0.17m, 70mm diameter void (probably previous core hole).</p>	G.L. 0.32 0.67		

Drilling				Progress					Groundwater					
Depth	Hole Dia	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater
0.67		Concrete core	UU											

Remarks Angle of Inclination: 0 degrees from horizontal.

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres. Logged in accordance with BS5930:1999 + A2:2010

Logged by NM
Figure 1 of 1
11/03/2016


BOREHOLE RECORD - Concrete core

Project STOCKPORT BUS STATION


Engineer AECOM

Borehole CC9
Project No PN153428

Client TRANSPORT FOR GREATER MANCHESTER

Drilling		Properties/Sampling			Strata		Scale 1:50		
Core Run/Depth (Core Dia)	Depth Cased & (to Water)	Type TCR/SCR%	Length Max/Min	RQD %	Description General	Description Detail	Depth	Legend	
0.00- 0.48		C			Brownish orange/red mottled yellow bricks (216 x 102 x 64mm) with voids up to 10mm. Well bonded grey mortar, up to 25mm thick.		G.L. 0.48		
					End of Borehole				


Drilling				Progress					Groundwater					
Depth	Hole Dia	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater
0.48		Concrete core	UU											

Remarks  Angle of Inclination: 0 degrees from horizontal.

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres. Logged in accordance with BS5930:1999 + A2:2010

Logged by NM
Figure 1 of 1
11/03/2016



BOREHOLE RECORD - Concrete core

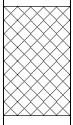
Project STOCKPORT BUS STATION

Engineer AECOM


Borehole
Project No

CC10
PN153428

Client TRANSPORT FOR GREATER MANCHESTER

Drilling		Properties/Sampling			Strata				Scale 1:50	
Core Run/Depth (Core Dia)	Depth Cased & (to Water)	Type TCR/SCR%	Length Max/Min	RQD %	Description General	Description Detail	Depth	Legend		
0.00- 0.71		C			MADE GROUND: Reddish brown locally mottled yellowish brown bricks (216 x 102 x 64mm) with voids up to 50mm. Well bonded light grey sharp sand mortar up to 10mm thick.		G.L.			
					End of Borehole		0.71			

Drilling				Progress					Groundwater					
Depth	Hole Dia	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater
0.71		Concrete core	UU											

Remarks  Angle of Inclination: 0 degrees from horizontal.

Logged by NM

Symbols and abbreviations are explained on the accompanying key sheet.

Figure 1 of 1
11/03/2016

All dimensions are in metres.

Logged in accordance with BS5930:1999 + A2:2010

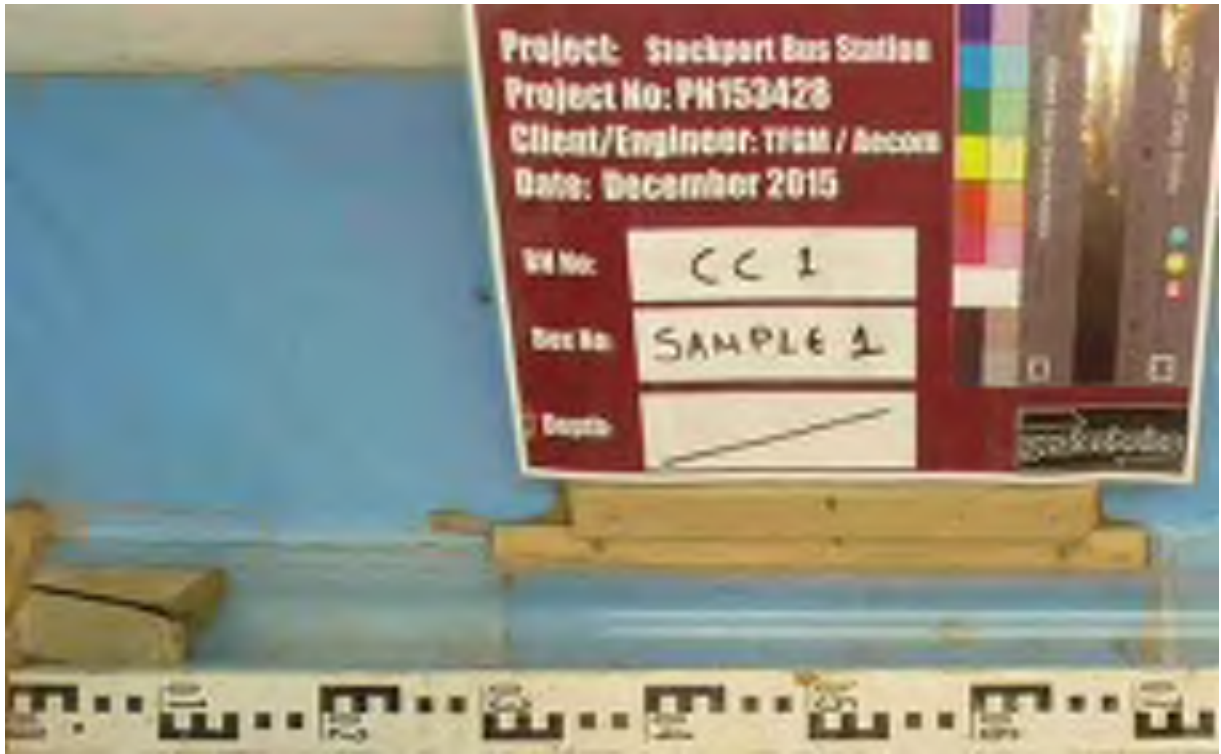


APPENDIX 9
Concrete Core Photographs

PHOTOGRAPHS

Project Number : PNI53428

Project : STOCKPORT BUS STATION



Concrete core 1

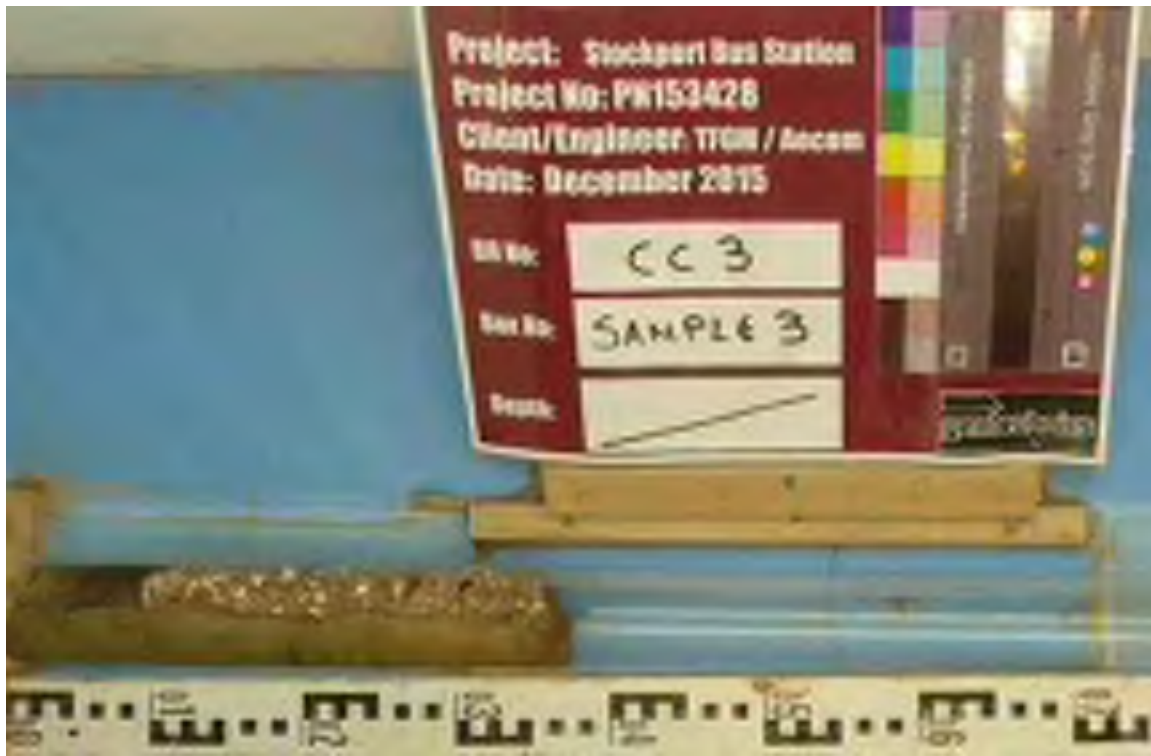


Concrete core 2

PHOTOGRAPHS

Project Number : PNI53428

Project : STOCKPORT BUS STATION



Concrete core 3



Concrete core 4

PHOTOGRAPHS

Project Number : PNI53428

Project : STOCKPORT BUS STATION



Concrete core 5

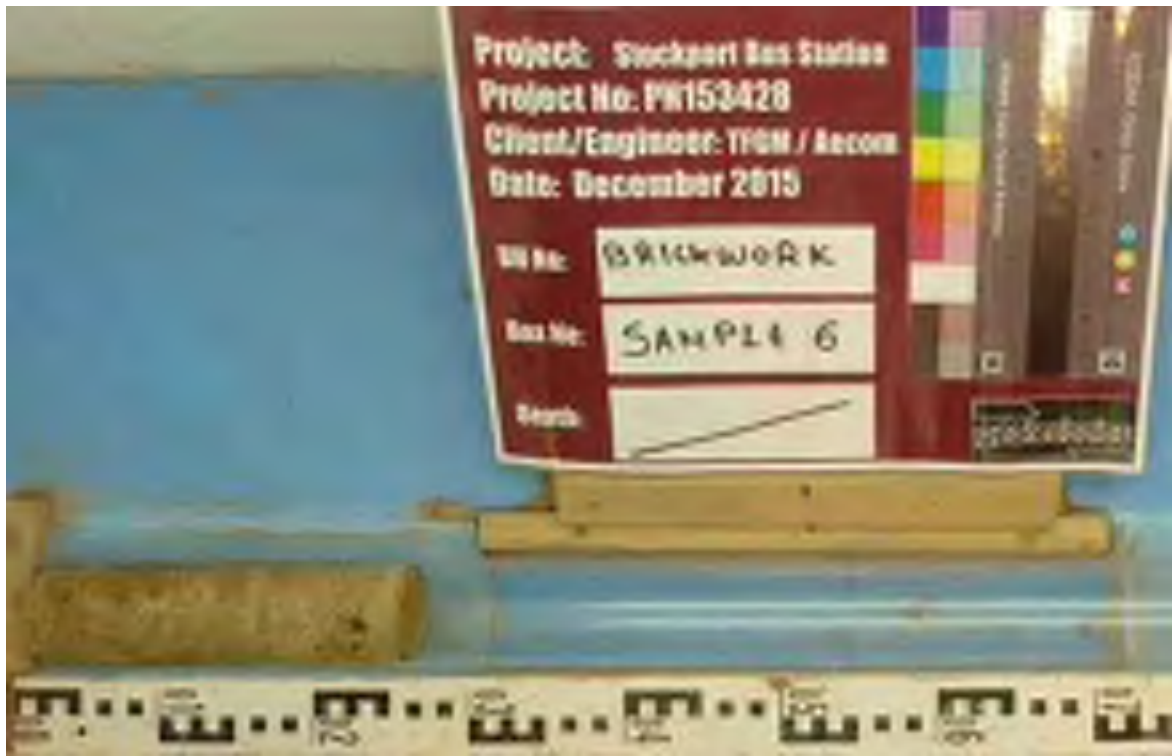


Concrete core 5A

PHOTOGRAPHS

Project Number : PNI53428

Project : STOCKPORT BUS STATION



Concrete core 6

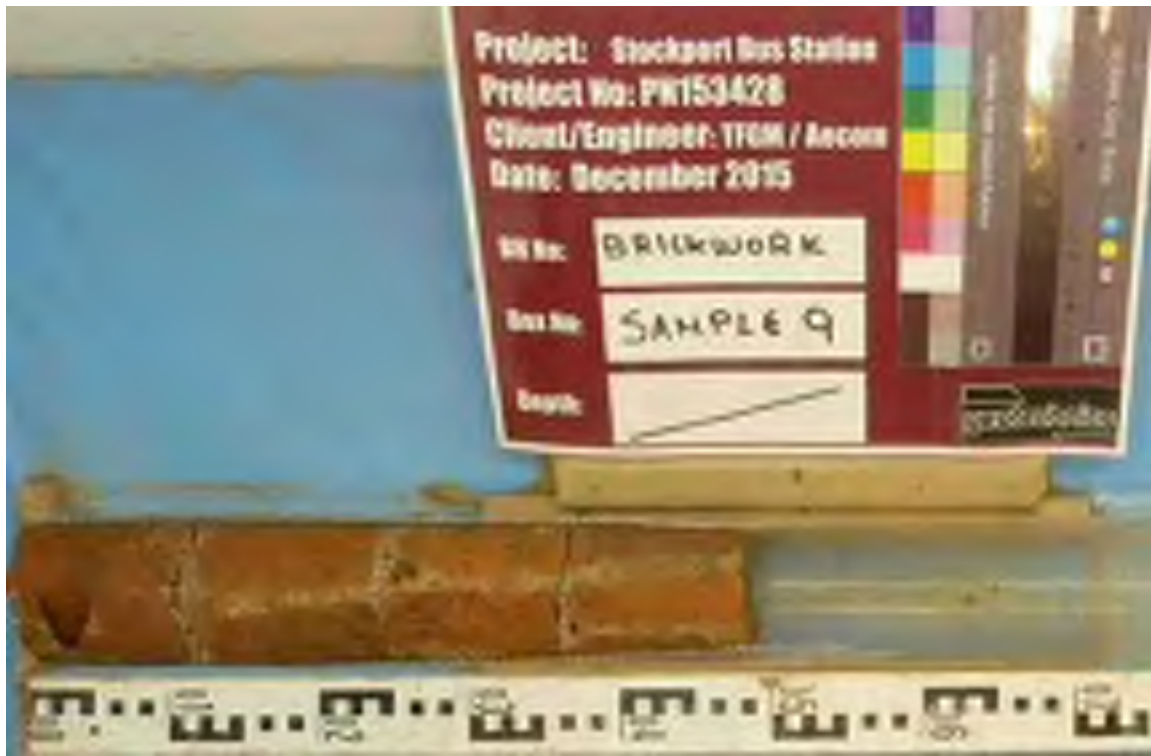


Concrete core 8

PHOTOGRAPHS

Project Number : PNI53428

Project : STOCKPORT BUS STATION



Concrete core 9



Concrete core 10

APPENDIX 10
Monitoring Results

FIELDWORK - Water Level Monitoring

Project STOCKPORT BUS STATION

Project No PN153428

Client TRANSPORT FOR GREATER MANCHESTER


Sheet No 1

Borehole		BH101		BH102		BH103		BH104		BH105		BH106	
Instrument (dia. mm)		S (50mm)		S (50mm)		S (50mm)		S (50mm)		S (50mm)		S (50mm)	
Depth to Base (m)		7.00		10.00		14.70		3.50		12.00		7.00	
Filter Zone (m)		5.00-7.00		8.00-10.00		11.00-14.00		1.00-3.50		9.50-12.00		5.00-7.00	
Level		45.22 m OD		43.35 m OD		42.42 m OD		42.47 m OD		42.62 m OD		42.45 m OD	
Date	Time	Depth (m)	Level	Depth (m)	Level	Depth (m)	Level	Depth (m)	Level	Depth (m)	Level	Depth (m)	Level
11 Jan 2016		6.17	39.05	5.42	37.93	6.60	35.82	3.56	38.91	6.41	36.21	5.41	37.04
25 Jan 2016		5.83	39.39	5.46	37.89	6.20	36.22	DRY		6.49	36.13	5.46	36.99
9 Feb 2016		5.79	39.43	5.35	38.00	6.50	35.92	3.57	38.90	6.40	36.22	5.20	37.25
22 Feb 2016		5.54	39.68	5.45	37.90	6.66	35.76	DRY		6.48	36.14	5.45	37.00
8 Mar 2016		6.03	39.19	5.47	37.88	6.67	35.75	DRY		6.50	36.12	5.50	36.95

Remarks

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.



FIELDWORK - Water Level Monitoring

Project STOCKPORT BUS STATION

Project No PN153428

Client TRANSPORT FOR GREATER MANCHESTER

Sheet No 2

Borehole		BH108		BH109		BH112		WS201		WS203		WS204	
Instrument (dia. mm)		S (50mm)		S (50mm)		S (50mm)		S (50mm)		S (50mm)		S (50mm)	
Depth to Base (m)		21.00		20.00		14.80		4.00		3.00		2.45	
Filter Zone (m)		18.00-21.00		18.00-20.00		12.80-14.80		3.50-4.00		2.00-3.00		1.50-2.45	
Level		42.72 m OD		42.36 m OD		43.70 m OD		45.61 m OD		43.01 m OD		42.85 m OD	
Date	Time	Depth (m)	Level	Depth (m)	Level	Depth (m)	Level	Depth (m)	Level	Depth (m)	Level	Depth (m)	Level
11 Jan 2016		6.68	36.04	5.18	37.18	5.02	38.68	3.85	41.76	CAR		2.45	40.40
25 Jan 2016		6.86	35.86	5.29	37.07	5.05	38.65	DRY		DRY		DRY	
9 Feb 2016		6.35	36.37	4.83	37.53	4.96	38.74	DRY		CAR		DRY	
22 Feb 2016		6.72	36.00	5.16	37.20	5.07	38.63	DRY		2.66	40.35	DRY	
8 Mar 2016		6.84	35.88	5.24	37.12	5.06	38.64	DRY		2.67	40.34	CAR	

Remarks

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.



FIELDWORK - Water Level Monitoring

Project STOCKPORT BUS STATION

Project No PN153428

Client TRANSPORT FOR GREATER MANCHESTER

Sheet No 3

Borehole		WS205		WS206		WS208		WS209		WS210		WS211	
Instrument (dia. mm)		S (50mm)		S (50mm)		S (50mm)		S (50mm)		S (50mm)		S (50mm)	
Depth to Base (m)		2.00		2.00		2.80		3.00		5.00		2.00	
Filter Zone (m)		1.50-2.00		1.00-2.00		1.70-2.80		1.00-3.00		3.00-5.00		1.00-2.00	
Level		42.39 m OD		48.13 m OD		42.35 m OD		42.67 m OD		44.43 m OD		44.88 m OD	
Date	Time	Depth (m)	Level	Depth (m)	Level	Depth (m)	Level	Depth (m)	Level	Depth (m)	Level	Depth (m)	Level
11 Jan 2016		1.94	40.45	1.82	46.31	2.72	39.63	2.91	39.76	5.00	39.43	1.87	43.01
25 Jan 2016		DRY		DRY		DRY		DRY		DRY		1.92	42.96
9 Feb 2016		DRY		DRY		DRY		DRY		DRY		1.90	42.98
22 Feb 2016		DRY		DRY		DRY		DRY		DRY		1.87	43.01
8 Mar 2016		DRY		DRY		DRY		DRY		DRY		1.87	43.01

Remarks

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.



FIELDWORK - Water Level Monitoring

Project STOCKPORT BUS STATION

Project No PN153428

Client TRANSPORT FOR GREATER MANCHESTER

Sheet No 4

Borehole		WS212		WS214		WS217		WS218A		WS220		WS223	
Instrument (dia. mm)		S (50mm)		S (50mm)		S (50mm)		S (50mm)		S (50mm)		S (50mm)	
Depth to Base (m)		3.50		1.00		2.50		2.50		1.70		1.40	
Filter Zone (m)		2.50-3.50		0.50-1.00		1.50-2.50		1.00-2.50		1.20-1.70		0.50-1.40	
Level		45.74 m OD		46.35 m OD		42.30 m OD		42.71 m OD		44.69 m OD		43.39 m OD	
Date	Time	Depth (m)	Level	Depth (m)	Level	Depth (m)	Level	Depth (m)	Level	Depth (m)	Level	Depth (m)	Level
11 Jan 2016		3.16	42.58	0.93	45.42	2.50	39.80	2.50	40.21	1.60	43.09	1.60	41.79
25 Jan 2016		3.20	42.54	DRY		DRY		DRY		1.65	43.04	1.60	41.79
9 Feb 2016		3.20	42.54	DRY		DRY		DRY		1.60	43.09	1.50	41.89
22 Feb 2016		3.18	42.56	DRY		DRY		DRY		1.65	43.04	1.53	41.86
8 Mar 2016		3.18	42.56	DRY		DRY		DRY		1.67	43.02	DRY	

Remarks

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.



FIELDWORK- Insitu Gas Monitoring - Daily Record

Project STOCKPORT BUS STATION

Project No PN153428

Date 11/01/2016

Client TRANSPORT FOR GREATER MANCHESTER

Sheet No. 1 (1 of 2)

Equipment Used									
GI Infra Red Gas Analyser		MK1 <input type="checkbox"/>	MK2 <input type="checkbox"/>	GA2000 <input type="checkbox"/>					
Other Gas Data LMSxi gas analyser;									
Weather / Site Conditions									
Wind		Still <input checked="" type="checkbox"/>	Light <input type="checkbox"/>		Moderate <input type="checkbox"/>		Strong <input type="checkbox"/>		
Cloud Cover		None <input type="checkbox"/>		Slight <input type="checkbox"/>		Cloudy <input checked="" type="checkbox"/>		Overcast <input type="checkbox"/>	
Precipitation		Dry <input checked="" type="checkbox"/>		Slight <input type="checkbox"/>		Moderate <input type="checkbox"/>		Heavy <input type="checkbox"/>	
Borehole	Depth to Base (m)	Depth to Water (m bgl)	Current Hole Depth (m bgl)	Methane CH4 (% VOL)	Methane CH4 (% LEL)	Carbon Dioxide CO2 (% VOL)	Oxygen O2 (% VOL)	Nitrogen N2 (% VOL)	Remarks
BH101	7.00	6.17	7.00	0.0	0.0	0.0	21.0	78.9	
BH102	10.00	5.42	9.85	0.0	0.0	0.1	20.8	79.0	
BH103	14.70	6.60	13.06	0.0	0.0	0.0	20.9	79.0	
BH104	3.50	3.56	3.64	0.0	0.0	2.2	18.9	78.8	
BH105	12.00	6.41	11.90	0.0	0.0	0.0	21.0	78.9	
BH106	7.00	5.41	7.00	0.0	0.0	0.0	20.9	79.0	
BH108	21.00	6.68	20.94	0.0	0.0	0.5	20.5	78.9	
BH109	20.00	5.18	20.12	0.0	0.0	1.3	20.5	78.1	
BH112	14.80	5.02	14.52	0.0	0.0	0.0	21.1	78.8	
WS201	4.00	3.85	3.85	0.0	0.0	0.0	21.0	78.9	
WS203	3.00	CAR		-	-	-	-	-	Car over
WS204	2.45	2.45	2.45	0.0	0.0	7.1	11.8	81.0	
WS205	2.00	1.94	1.94	0.0	0.0	0.0	21.0	78.9	
WS206	2.00	1.82	1.82	0.0	0.0	0.4	20.5	79.0	
WS208	2.80	2.72	2.72	0.0	0.0	2.5	18.6	78.8	
WS209	3.00	2.91	2.91	0.0	0.0	2.6	19.6	77.7	
WS210	5.00	5.00	4.40	0.0	0.0	1.0	20.4	78.5	
WS211	2.00	1.87	1.98	0.0	0.0	0.3	20.3	79.3	
WS212	3.50	3.16	3.46	0.0	0.0	4.0	7.2	88.7	
WS214	1.00	0.93	0.94	0.0	0.0	0.3	20.6	79.0	
WS217	2.50	2.50	2.23	0.0	0.0	3.2	18.6	78.1	
WS218A	2.50	2.50	2.46	0.0	0.0	0.4	20.4	79.1	
WS220	1.70	1.60	1.72	0.0	0.0	0.6	19.4	79.9	
WS223	1.40	1.60	1.64	0.0	0.0	0.0	18.9	81.0	

FIELDWORK- Insitu Gas Monitoring - Daily Record

Project STOCKPORT BUS STATION

Project No PN153428

Date 11/01/2016

Client TRANSPORT FOR GREATER MANCHESTER

Sheet No. 1 (2 of 2)

Equipment Used

GI Infra Red Gas Analyser MK1 MK2 GA2000

Other Gas Data LMSxi gas analyser;

Weather / Site Conditions

Wind Still Light Moderate Strong

Cloud Cover None Slight Cloudy Overcast

Precipitation Dry Slight Moderate Heavy

Borehole	Depth to Base (m)	Hydrogen Sulphide H2S (ppm)	Carbon Monoxide CO (ppm)	Barometric Pressure (mBars)	Flow Rate (Peak) (l/hr)	Flow Rate (Steady) (l/hr)	Remarks
BH101	7.00	0.0	0.0	996	-2.0	-1.9	
BH102	10.00	0.0	0.0	969	0.0	0.0	
BH103	14.70	0.0	0.0	969	-0.1	0.0	
BH104	3.50	0.0	0.0	969	0.0	0.0	
BH105	12.00	0.0	0.0	969	0.4	0.0	
BH106	7.00	0.0	0.0	969	-0.9	-0.7	
BH108	21.00	0.0	0.0	969	0.0	0.0	
BH109	20.00	0.0	0.0	969	-0.1	0.0	
BH112	14.80	0.0	0.0	969	-0.1	0.0	
WS201	4.00	0.0	0.0	969	-0.3	-0.1	
WS203	3.00	-	-	969	-	-	Car over
WS204	2.45	0.0	0.0	969	0.0	0.0	
WS205	2.00	0.0	0.0	969	0.0	0.0	
WS206	2.00	0.0	0.0	969	-0.3	-0.1	
WS208	2.80	0.0	0.0	969	0.0	0.0	
WS209	3.00	0.0	0.0	969	0.0	0.0	
WS210	5.00	0.0	0.0	969	0.0	0.0	
WS211	2.00	0.0	0.0	969	-0.1	0.0	
WS212	3.50	0.0	0.0	969	0.0	0.0	
WS214	1.00	0.0	0.0	969	0.0	0.0	
WS217	2.50	0.0	0.0	969	0.0	0.0	
WS218A	2.50	0.0	0.0	969	0.0	0.0	
WS220	1.70	0.0	0.0	969	0.0	0.0	
WS223	1.40	0.0	0.0	969	0.0	0.0	

Remarks



FIELDWORK- Insitu Gas Monitoring - Daily Record

Project STOCKPORT BUS STATION

Project No PN153428

Date 25/01/2016

Client TRANSPORT FOR GREATER MANCHESTER

Sheet No. 1 (1 of 2)

Equipment Used

GI Infra Red Gas Analyser MK1 MK2 GA2000

Other Gas Data LMSxi gas analyser;

Weather / Site Conditions

Wind Still Light Moderate Strong

Cloud Cover None Slight Cloudy Overcast

Precipitation Dry Slight Moderate Heavy

Borehole	Depth to Base (m)	Depth to Water (m bgl)	Current Hole Depth (m bgl)	Methane CH4 (% VOL)	Methane CH4 (% LEL)	Carbon Dioxide CO2 (% VOL)	Oxygen O2 (% VOL)	Nitrogen N2 (% VOL)	Remarks
BH101	7.00	5.83	7.00	0.0	0.0	4.0	16.7	79.2	
BH102	10.00	5.46	9.85	0.0	0.0	0.0	20.9	79.0	
BH103	14.70	6.20	13.06	0.0	0.0	0.0	20.8	79.1	
BH104	3.50	DRY	3.64	0.0	0.0	1.5	19.5	78.9	
BH105	12.00	6.49	11.90	0.0	0.0	0.0	20.7	74.2	
BH106	7.00	5.46	7.00	0.0	0.0	0.0	20.6	79.3	
BH108	21.00	6.86	20.94	0.0	0.0	0.3	20.7	78.9	
BH109	20.00	5.29	20.12	0.0	0.0	0.4	20.5	79.0	
BH112	14.80	5.05	14.52	0.0	0.0	0.0	21.1	78.8	
WS201	4.00	DRY	3.85	0.0	0.0	3.6	18.2	78.1	
WS203	3.00	DRY	2.76	0.0	0.0	2.0	14.4	78.5	
WS204	2.45	DRY	2.45	0.0	0.0	0.0	20.9	79.0	
WS205	2.00	DRY	1.94	0.0	0.0	0.0	20.9	79.0	
WS206	2.00	DRY	1.82	0.0	0.0	0.0	20.8	79.1	
WS208	2.80	DRY	2.72	0.0	0.0	0.0	20.7	79.2	
WS209	3.00	DRY	2.91	0.0	0.0	2.3	19.8	77.9	
WS210	5.00	DRY	4.40	0.0	0.0	0.2	20.7	79.0	
WS211	2.00	1.92	1.98	0.0	0.0	0.6	20.0	79.3	
WS212	3.50	3.20	3.46	0.0	0.0	1.4	15.1	85.4	
WS214	1.00	DRY	0.94	0.0	0.0	0.0	20.9	79.0	
WS217	2.50	DRY	2.23	0.0	0.0	0.6	19.4	79.9	
WS218A	2.50	DRY	2.46	0.0	0.0	0.1	20.7	79.1	
WS220	1.70	1.65	1.72	0.0	0.0	0.0	20.8	79.1	
WS223	1.40	1.60	1.64	0.0	0.0	0.0	18.3	81.6	

Remarks



FIELDWORK- Insitu Gas Monitoring - Daily Record

Project STOCKPORT BUS STATION

Project No PN153428

Date 25/01/2016

Client TRANSPORT FOR GREATER MANCHESTER

Sheet No. 1 (2 of 2)

Equipment Used

GI Infra Red Gas Analyser MK1 MK2 GA2000

Other Gas Data LMSxi gas analyser;

Weather / Site Conditions

Wind Still Light Moderate Strong

Cloud Cover None Slight Cloudy Overcast

Precipitation Dry Slight Moderate Heavy

Borehole	Depth to Base (m)	Hydrogen Sulphide H2S (ppm)	Carbon Monoxide CO (ppm)	Barometric Pressure (mBars)	Flow Rate (Peak) (l/hr)	Flow Rate (Steady) (l/hr)	Remarks
BH101	7.00	0.0	0.0	1001	-0.5	0.0	
BH102	10.00	0.0	0.0	1001	0.0	0.0	
BH103	14.70	0.0	0.0	1001	1.0	0.5	
BH104	3.50	0.0	0.0	1001	1.2	0.4	
BH105	12.00	0.0	0.0	1001	0.3	0.0	
BH106	7.00	0.0	0.0	1001	-0.5	0.0	
BH108	21.00	0.0	0.0	1001	0.0	0.0	
BH109	20.00	0.0	0.0	1001	0.0	0.0	
BH112	14.80	0.0	0.0	1001	0.0	0.0	
WS201	4.00	0.0	0.0	1001	0.0	0.0	
WS203	3.00	0.0	0.0	1001	0.0	-0.5	
WS204	2.45	0.0	0.0	1001	0.0	0.0	
WS205	2.00	0.0	0.0	1001	0.0	0.0	
WS206	2.00	0.0	0.0	1001	0.0	0.4	
WS208	2.80	0.0	0.0	1001	0.0	0.0	
WS209	3.00	0.0	0.0	1001	0.0	0.0	
WS210	5.00	0.0	0.0	1001	1.4	0.4	
WS211	2.00	0.0	0.0	1001	-0.2	0.0	
WS212	3.50	0.0	0.0	1001	1.4	0.1	
WS214	1.00	0.0	0.0	1001	0.0	0.0	
WS217	2.50	0.0	0.0	1001	0.0	0.0	
WS218A	2.50	0.0	0.0	1001	-0.5	0.0	
WS220	1.70	0.0	0.0	1001	0.0	0.0	
WS223	1.40	0.0	0.0	1001	0.0	0.0	

Remarks



FIELDWORK- Insitu Gas Monitoring - Daily Record

Project STOCKPORT BUS STATION

Project No PN153428

Date 09/02/2016

Client TRANSPORT FOR GREATER MANCHESTER

Sheet No. 1 (1 of 2)

Equipment Used

GI Infra Red Gas Analyser MK1 MK2 GA2000

Other Gas Data LMSxi gas analyser;

Weather / Site Conditions

Wind Still Light Moderate Strong

Cloud Cover None Slight Cloudy Overcast

Precipitation Dry Slight Moderate Heavy

Borehole	Depth to Base (m)	Depth to Water (m bgl)	Current Hole Depth (m bgl)	Methane CH4 (% VOL)	Methane CH4 (% LEL)	Carbon Dioxide CO2 (% VOL)	Oxygen O2 (% VOL)	Nitrogen N2 (% VOL)	Remarks
BH101	7.00	5.79	7.00	0.0	0.0	3.8	17.6	78.5	
BH102	10.00	5.35	9.85	0.0	0.0	0.1	21.1	78.7	
BH103	14.70	6.50	13.06	0.0	0.0	0.0	20.6	79.3	
BH104	3.50	3.57	3.64	0.0	0.0	2.4	19.1	78.4	
BH105	12.00	6.40	11.90	0.0	0.0	0.0	20.8	79.1	
BH106	7.00	5.20	7.00	0.0	0.0	0.7	18.8	80.4	
BH108	21.00	6.35	20.94	0.0	0.0	1.9	19.9	78.1	
BH109	20.00	4.83	20.12	0.0	0.0	2.4	19.7	77.8	
BH112	14.80	4.96	14.52	0.0	0.0	0.1	21.2	78.6	
WS201	4.00	DRY	3.85	0.0	0.0	6.1	16.5	77.3	
WS203	3.00	CAR	2.76	-	-	-	-	-	Car over
WS204	2.45	DRY	2.45	0.0	0.0	1.8	19.9	78.2	
WS205	2.00	DRY	1.94	0.0	0.0	2.3	18.4	79.2	
WS206	2.00	DRY	1.82	0.0	0.0	0.2	21.1	78.6	
WS208	2.80	DRY	2.72	0.0	0.0	3.6	18.5	77.8	
WS209	3.00	DRY	2.91	0.0	0.0	1.8	20.3	77.8	
WS210	5.00	DRY	4.40	0.0	0.0	0.4	20.8	78.7	
WS211	2.00	1.90	1.98	0.0	0.0	0.7	19.8	79.4	
WS212	3.50	3.20	3.46	0.0	0.0	3.5	8.5	87.9	
WS214	1.00	DRY	0.94	0.0	0.0	3.0	18.1	78.8	
WS217	2.50	DRY	2.23	0.0	0.0	3.0	18.9	78.0	
WS218A	2.50	DRY	2.46	0.0	0.0	0.0	20.8	79.1	
WS220	1.70	1.60	1.72	0.0	0.0	2.5	17.2	80.2	
WS223	1.40	1.50	1.64	0.0	0.0	0.1	20.2	79.6	

Remarks



FIELDWORK- Insitu Gas Monitoring - Daily Record

Project STOCKPORT BUS STATION

Project No PN153428

Date 09/02/2016

Client TRANSPORT FOR GREATER MANCHESTER

Sheet No. 1 (2 of 2)

Equipment Used

GI Infra Red Gas Analyser MK1 MK2 GA2000

Other Gas Data LMSxi gas analyser;

Weather / Site Conditions

Wind Still Light Moderate Strong

Cloud Cover None Slight Cloudy Overcast

Precipitation Dry Slight Moderate Heavy

Borehole	Depth to Base (m)	Hydrogen Sulphide H2S (ppm)	Carbon Monoxide CO (ppm)	Barometric Pressure (mBars)	Flow Rate (Peak) (l/hr)	Flow Rate (Steady) (l/hr)	Remarks
BH101	7.00	0.0	0.0	969	-4.6	-2.1	
BH102	10.00	0.0	0.0	969	0.1	0.0	
BH103	14.70	0.0	0.0	969	7.4	6.4	
BH104	3.50	0.0	1.6	969	0.0	0.0	
BH105	12.00	0.0	1.3	969	0.0	0.0	
BH106	7.00	0.0	0.0	969	-0.6	-0.2	
BH108	21.00	0.0	0.0	969	0.0	0.0	
BH109	20.00	0.0	2.0	969	0.0	0.0	
BH112	14.80	0.0	0.0	969	0.0	0.0	
WS201	4.00	0.0	0.0	969	0.0	0.0	
WS203	3.00	-	-	969	-	-	Car over
WS204	2.45	0.0	0.0	969	0.0	0.0	
WS205	2.00	0.0	3.2	969	0.0	0.0	
WS206	2.00	0.0	0.0	969	0.3	0.1	
WS208	2.80	0.0	0.0	969	0.0	0.0	
WS209	3.00	0.0	0.0	969	0.2	0.1	
WS210	5.00	0.0	0.0	969	0.2	0.1	
WS211	2.00	0.0	0.0	969	0.0	0.0	
WS212	3.50	0.0	0.0	969	0.0	0.0	
WS214	1.00	0.0	0.0	969	0.0	0.0	
WS217	2.50	0.0	0.0	969	0.0	0.0	
WS218A	2.50	0.0	0.0	969	-0.1	0.0	
WS220	1.70	0.0	0.0	969	0.0	0.0	
WS223	1.40	0.0	0.0	969	0.0	0.0	

Remarks



FIELDWORK- Insitu Gas Monitoring - Daily Record

Project STOCKPORT BUS STATION

Project No PN153428

Date 22/02/2016

Client TRANSPORT FOR GREATER MANCHESTER

Sheet No. 1 (1 of 2)

Equipment Used

GI Infra Red Gas Analyser MK1 MK2 GA2000

Other Gas Data LMSxi gas analyser;

Weather / Site Conditions

Wind Still Light Moderate Strong

Cloud Cover None Slight Cloudy Overcast

Precipitation Dry Slight Moderate Heavy

Borehole	Depth to Base (m)	Depth to Water (m bgl)	Current Hole Depth (m bgl)	Methane CH4 (% VOL)	Methane CH4 (% LEL)	Carbon Dioxide CO2 (% VOL)	Oxygen O2 (% VOL)	Nitrogen N2 (% VOL)	Remarks
BH101	7.00	5.54	7.00	0.0	0.0	0.0	21.2	78.7	
BH102	10.00	5.45	9.85	0.0	0.0	0.0	20.9	79.0	
BH103	14.70	6.66	13.06	0.0	0.0	0.0	20.9	79.0	
BH104	3.50	DRY	3.64	0.0	0.0	0.1	20.9	78.9	
BH105	12.00	6.48	11.90	0.0	0.0	0.0	21.0	78.9	
BH106	7.00	5.45	7.00	0.0	0.0	0.0	20.9	79.0	
BH108	21.00	6.72	20.94	0.0	0.0	1.2	20.4	78.3	
BH109	20.00	5.16	20.12	0.0	0.0	0.5	20.5	78.9	
BH112	14.80	5.07	14.52	0.0	0.0	0.0	21.4	78.5	
WS201	4.00	DRY	3.85	0.0	0.0	1.5	20.3	78.1	
WS203	3.00	2.66	2.76	0.0	0.0	0.6	20.4	78.9	
WS204	2.45	DRY	2.45	0.0	0.0	0.0	20.9	79.0	
WS205	2.00	DRY	1.94	0.0	0.0	1.2	19.6	79.1	
WS206	2.00	DRY	1.82	0.0	0.0	0.0	21.3	78.6	
WS208	2.80	DRY	2.72	0.0	0.0	3.7	18.3	77.9	
WS209	3.00	DRY	2.91	0.0	0.0	2.4	19.9	77.6	
WS210	5.00	DRY	4.40	0.0	0.0	0.1	21.2	78.6	
WS211	2.00	1.87	1.98	0.0	0.0	0.0	21.1	78.8	
WS212	3.50	3.18	3.46	0.0	0.0	0.4	13.0	86.5	
WS214	1.00	DRY	0.94	0.0	0.0	1.0	19.9	79.0	
WS217	2.50	DRY	2.24	0.0	0.0	2.7	19.2	78.0	
WS218A	2.50	DRY	2.46	0.0	0.0	0.0	21.0	78.9	
WS220	1.70	1.65	1.72	0.0	0.0	2.3	19.1	78.5	
WS223	1.40	1.53	1.65	0.0	0.0	0.0	19.8	80.1	

Remarks



FIELDWORK- Insitu Gas Monitoring - Daily Record

Project STOCKPORT BUS STATION

Project No

PN153428

Date

22/02/2016

Client TRANSPORT FOR GREATER MANCHESTER

Sheet No.

1 (2 of 2)

Equipment Used

GI Infra Red Gas Analyser MK1 MK2 GA2000

Other Gas Data LMSxi gas analyser;

Weather / Site Conditions

Wind Still Light Moderate Strong

Cloud Cover None Slight Cloudy Overcast

Precipitation Dry Slight Moderate Heavy

Borehole	Depth to Base (m)	Hydrogen Sulphide H2S (ppm)	Carbon Monoxide CO (ppm)	Barometric Pressure (mBars)	Flow Rate (Peak) (l/hr)	Flow Rate (Steady) (l/hr)	Remarks
BH101	7.00	0.0	0.0	996	-2.8	-1.5	
BH102	10.00	0.0	0.0	996	0.0	0.0	
BH103	14.70	0.0	0.0	996	1.5	1.2	
BH104	3.50	0.0	0.0	996	0.0	0.0	
BH105	12.00	0.0	0.0	996	-1.3	0.0	
BH106	7.00	0.0	0.0	996	-0.2	-0.1	
BH108	21.00	0.0	0.0	996	0.0	0.0	
BH109	20.00	0.0	0.0	996	1.7	0.0	
BH112	14.80	0.0	0.0	996	0.0	0.0	
WS201	4.00	0.0	0.0	996	0.0	0.0	
WS203	3.00	0.0	0.0	996	0.2	0.1	
WS204	2.45	0.0	0.0	996	0.2	0.0	
WS205	2.00	0.0	1.3	996	0.0	0.0	
WS206	2.00	0.0	0.0	996	-0.4	0.0	
WS208	2.80	0.0	0.0	996	0.0	0.0	
WS209	3.00	0.0	0.0	996	-0.1	0.0	
WS210	5.00	0.0	0.0	996	-1.4	-0.3	
WS211	2.00	0.0	0.0	996	-0.1	0.0	
WS212	3.50	0.0	1.3	996	0.8	0.2	
WS214	1.00	0.0	0.0	996	-0.6	-0.3	
WS217	2.50	0.0	0.0	996	0.0	0.0	
WS218A	2.50	0.0	0.0	996	0.0	0.0	
WS220	1.70	0.0	0.0	996	-0.2	0.0	
WS223	1.40	0.0	2.6	996	0.0	0.0	

Remarks



FIELDWORK- Insitu Gas Monitoring - Daily Record

Project STOCKPORT BUS STATION

Project No PN153428

Date 08/03/2016

Client TRANSPORT FOR GREATER MANCHESTER

Sheet No. 1 (1 of 2)

Equipment Used

GI Infra Red Gas Analyser MK1 MK2 GA2000

Other Gas Data LMSxi gas analyser;

Weather / Site Conditions

Wind Still Light Moderate Strong

Cloud Cover None Slight Cloudy Overcast

Precipitation Dry Slight Moderate Heavy

Borehole	Depth to Base (m)	Depth to Water (m bgl)	Current Hole Depth (m bgl)	Methane CH4 (% VOL)	Methane CH4 (% LEL)	Carbon Dioxide CO2 (% VOL)	Oxygen O2 (% VOL)	Nitrogen N2 (% VOL)	Remarks
BH101	7.00	6.03	7.00	0.0	0.0	0.1	21.1	78.7	
BH102	10.00	5.47	9.85	0.0	0.0	0.0	20.8	79.1	
BH103	14.70	6.67	13.06	0.0	0.0	0.0	21.0	78.9	
BH104	3.50	DRY	3.64	0.0	0.0	4.0	18.0	77.9	
BH105	12.00	6.50	11.90	0.0	0.0	0.0	20.9	79.0	
BH106	7.00	5.50	7.00	0.0	0.0	0.0	20.9	79.0	
BH108	21.00	6.84	20.94	0.0	0.0	0.6	21.2	78.1	
BH109	20.00	5.24	20.12	0.0	0.0	0.0	20.9	79.0	
BH112	14.80	5.06	14.52	0.0	0.0	0.0	21.3	78.6	
WS201	4.00	DRY	3.85	0.0	0.0	2.5	19.6	77.8	
WS203	3.00	2.67	2.76	0.0	0.0	3.0	19.0	77.9	
WS204	2.45	CAR	2.45	-	-	-	-	-	
WS205	2.00	DRY	1.94	0.0	0.0	0.1	21.0	78.8	
WS206	2.00	DRY	1.82	0.0	0.0	0.3	20.8	78.8	
WS208	2.80	DRY	2.72	0.0	0.0	3.3	18.9	77.7	
WS209	3.00	DRY	2.91	0.0	0.0	2.1	19.9	77.9	
WS210	5.00	DRY	4.40	0.0	0.0	0.5	20.8	78.6	
WS211	2.00	1.87	1.98	0.0	0.0	0.1	21.0	78.8	
WS212	3.50	3.18	3.46	0.0	0.0	2.8	12.4	84.7	
WS214	1.00	DRY	0.94	0.0	0.0	0.5	20.1	79.3	
WS217	2.50	DRY	2.24	0.0	0.0	3.0	19.1	77.8	
WS218A	2.50	DRY	2.46	0.0	0.0	0.0	21.0	78.9	
WS220	1.70	1.67	1.72	0.0	0.0	1.4	19.9	78.6	
WS223	1.40	DRY	1.65	0.0	0.0	0.0	20.1	79.8	

Remarks



FIELDWORK- Insitu Gas Monitoring - Daily Record

Project STOCKPORT BUS STATION

Project No PN153428

Date 08/03/2016

Client TRANSPORT FOR GREATER MANCHESTER

Sheet No. 1 (2 of 2)

Equipment Used

GI Infra Red Gas Analyser MK1 MK2 GA2000

Other Gas Data LMSxi gas analyser;

Weather / Site Conditions

Wind Still Light Moderate Strong

Cloud Cover None Slight Cloudy Overcast

Precipitation Dry Slight Moderate Heavy

Borehole	Depth to Base (m)	Hydrogen Sulphide H2S (ppm)	Carbon Monoxide CO (ppm)	Barometric Pressure (mBars)	Flow Rate (Peak) (l/hr)	Flow Rate (Steady) (l/hr)	Remarks
BH101	7.00	0.0	0.0	999	0.0	0.0	
BH102	10.00	0.0	0.0	999	0.0	0.0	
BH103	14.70	0.0	0.0	999	0.0	0.0	
BH104	3.50	0.0	0.0	999	0.0	0.0	
BH105	12.00	0.0	0.0	999	0.2	0.0	
BH106	7.00	0.0	0.0	999	0.0	0.0	
BH108	21.00	0.0	0.0	999	0.5	0.1	
BH109	20.00	0.0	0.0	999	0.0	0.0	
BH112	14.80	0.0	0.0	999	0.0	0.0	
WS201	4.00	0.0	0.0	999	0.2	0.0	
WS203	3.00	0.0	0.0	999	-0.6	-0.3	
WS204	2.45	-	-	999	-	-	
WS205	2.00	0.0	0.0	999	0.0	0.0	
WS206	2.00	0.0	0.0	999	0.0	0.0	
WS208	2.80	0.0	0.0	999	0.0	0.0	
WS209	3.00	0.0	0.0	999	0.0	0.0	
WS210	5.00	0.0	0.0	999	0.3	0.3	
WS211	2.00	0.0	0.0	999	0.0	0.0	
WS212	3.50	0.0	0.0	999	0.0	0.0	
WS214	1.00	0.0	0.0	999	-0.3	0.0	
WS217	2.50	0.0	0.0	999	0.4	0.2	
WS218A	2.50	0.0	0.0	999	0.0	0.0	
WS220	1.70	0.0	0.0	999	0.0	0.0	
WS223	1.40	0.0	0.0	999	0.1	0.0	

Remarks



APPENDIX II

Laboratory Test Results - Geotechnical

Classification and Strength

Symbol	C - Clay	M - Silt
	(0 - containing organic matter)	
	Plasticity	L - Low
		I - Intermediate
		H - High
		V - Very High
		E - Extremely High
I_p	Plasticity Index	
%	% Retained on 425 μ m sieve, shown under I_p value	
w_L	Liquid Limit	
w_p	Plastic Limit	
NP	Non-Plastic	
NAT	Sample tested in natural state	
w	Water Content	
ρ_d	Particle Density	
Test	Quick undrained triaxial tests	
	SS	Single stage - 102mm diameter.
	S3	Single stage - set of 3 38mm diameter.
	MS	Multistage - 102mm diameter.
	D	Drained Test
	HV	Hand Vane
	PP	Pocket Penetrometer (kg/cm ²)
	NST	Not suitable for test
γ_b	Bulk Density	
σ_3	Triaxial Cell Pressure	
$\sigma_1 - \sigma_3$	Deviator Stress	
##	Excessive Strain	
c_u	Undrained Cohesion	
c	Cohesion Intercept	
ϕ	Angle of Shearing Resistance	
Linear Shrink	Linear Shrinkage	

Consolidation

m_v	Coefficient of Volume Compressibility
c_{v50}	Coefficient of Consolidation - Log t
c_{v90}	Coefficient of Consolidation - \sqrt{t}

Rock

UF	Unacceptable Failure
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Chemical Analysis

Acid Soluble	Total sulphate in specimen, expressed as SO ₃ %, value in brackets expressed as SO ₄ %
Water Soluble	Soluble sulphate in 2:1 water : soil extract, expressed as SO ₃ g/l, value in brackets expressed as SO ₄ g/l
In Water	Sulphate content of groundwater, expressed as SO ₃ g/l, value in brackets expressed as SO ₄ g/l
pH	pH value
Organic content	Organic content expressed as a percentage of dry weight
Chloride	Chloride Ion content expressed as a percentage of dry weight

MCV, Compaction, CBR

MCV	Moisture Condition Value at natural water content
MCC	Moisture Condition Calibration
CCV	Chalk Crushing Value

Compaction

Type	2.5 = BS 2.5 kg Rammer
	4.5 = BS 4.5 kg Rammer
	V = BS Vibrating Hammer

γ_b Bulk Density

γ_d Dry Density

CBR California Bearing Ratio

Type	2.5 = Test on Specimen Recompacted using BS 2.5 kg Rammer
	4.5 = As above but using BS 4.5 kg Rammer
	V = As above but using BS Vibrating Hammer
	M = Test on open drive mould specimen cut in field
	S = Soaked Specimen

Top CBR at top of mould

Bottom CBR at bottom of mould

ND None Detected


Tests performed in accordance with BS 1377: Parts 1-9:1990 incorporating amendments where appropriate and BS EN ISO 17892: Parts 1-2:2014.

LABORATORY RESULTS - Classification and Strength

Project STOCKPORT BUS STATION

Project No: PN153428

Sample					Classification					Strength					
Hole	Depth (Specimen Depth) m	Type	Sample Ref	Description	Symbol	I_p (>425) %	w_L %	w_p %	w (p_d) %	Test	γ_b (γ_d) ³ Mg/m ³	σ_3 kN/m ²	$\sigma_1 - \sigma_3$ kN/m ²	c_u kN/m ²	c_{Avg} kN/m ²
BH101	2.20- 2.65 (2.20)	D	N61653	Grey sandy SILT.		(15%)	26	NP	23.3						
BH106	1.20- 1.70 (1.20)	B	N61702	Yellowish brown sandy fine to coarse GRAVEL.					5.0						
BH108	2.00- 2.50 (2.00)	B	N61711	MADE GROUND: Reddish grey and black sandy fine to coarse gravel with pockets of clay.		(54%)	34	NP	22.2						
BH108	3.00- 3.45 (3.00)	D	N61670	MADE GROUND: Reddish grey and black sandy fine to coarse gravel with pockets of clay.		(65%)	32	NP	16.3						
BH112	1.80 (1.80)	D	N61648	Dark brown/black sandy SILT.		(30%)	77	NP	109						
WS201	1.20- 1.65 (1.20)	D	N61671	MADE GROUND: Brown sandy gravelly silt.		(50%)	33	NP	17.6						
WS201	2.40- 3.00 (2.40)	B	N61675	Firm greyish brown sandy CLAY.	CL	15 (NAT)	33	18	22.9						
WS208	1.20- 1.65 (1.20)	D	N61649	Brown gravelly very clayey SAND.		(51%)	29	NP	12.4						
WS211	3.80- 4.00 (3.80)	D	N61652	Dark grey sandy SILT.		(9%)	38	NP	42.5						
WS212	3.00- 3.45 (3.00)	D	N61651	Brown slightly gravelly sandy SILT.		(49%)	37	NP	21.9						
WS220	1.30- 1.70 (1.30)	D	N61793	MADE GROUND: Dark brown gravelly sand with ash. (See Test Remarks Sheet for further information)		(73%)	69	NP	33.2						
WS223	1.20 (1.20)	D	N61655	MADE GROUND: Brown gravelly fine to medium sand.		(25%)	29	NP	19.9						

Remarks  NST - Not suitable for Test
 Water Content Test performed in accordance with BS EN ISO 17892 - 1: 2014
 All other Tests performed in accordance with BS1377: 1990



LABORATORY RESULTS - Particle Size Distribution

Project: STOCKPORT BUS STATION

Hole: BH101

Sample Depth: 1.20-1.65m

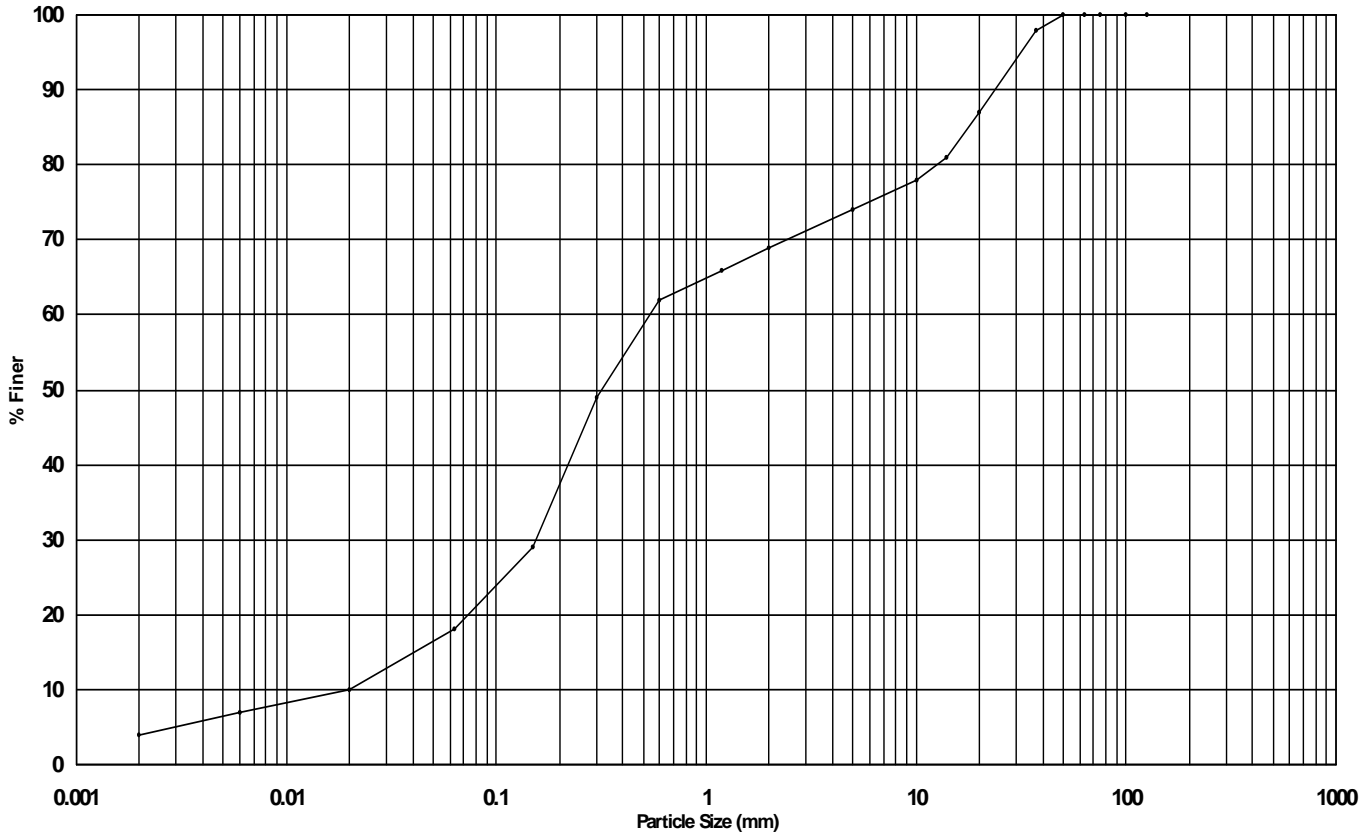
Project No: PN153428

Sample Type: B

Sample Ref: N61674

Sample Description

Yellowish brown clayey very gravelly fine to coarse SAND.



Classification	CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Cobbles	Boulders
		SILT			SAND			Gravel				

Classification	% of each
CLAY	4
SILT	14
SAND	51
GRAVEL	31
COBBLES	0
BOULDERS	0

Size	% Finer
125 mm	100
100 mm	100
75 mm	100
63 mm	100
50 mm	100
37.5 mm	98
20 mm	87
14 mm	81
10 mm	78
5 mm	74
2 mm	69
1.18 mm	66
600 µm	62
300 µm	49
150 µm	29
63 µm	18

Size	% Finer
20 µm	10
6 µm	7
2 µm	4

Uniformity Coefficient	
30.88	
Sieving Method	
Wet sieve	
Fine Particle Analysis	
Method	Pipette
Pre-treated with	Hydrogen Peroxide
% loss on Pre-treatment	0.00
Particle Density	2.65 (Assumed)

Remarks: Test performed in accordance with BS 1377:Part 2:1990

10/02/2016



LABORATORY RESULTS - Particle Size Distribution

Project: STOCKPORT BUS STATION

Hole BH103

Sample Depth 2.20-2.65m

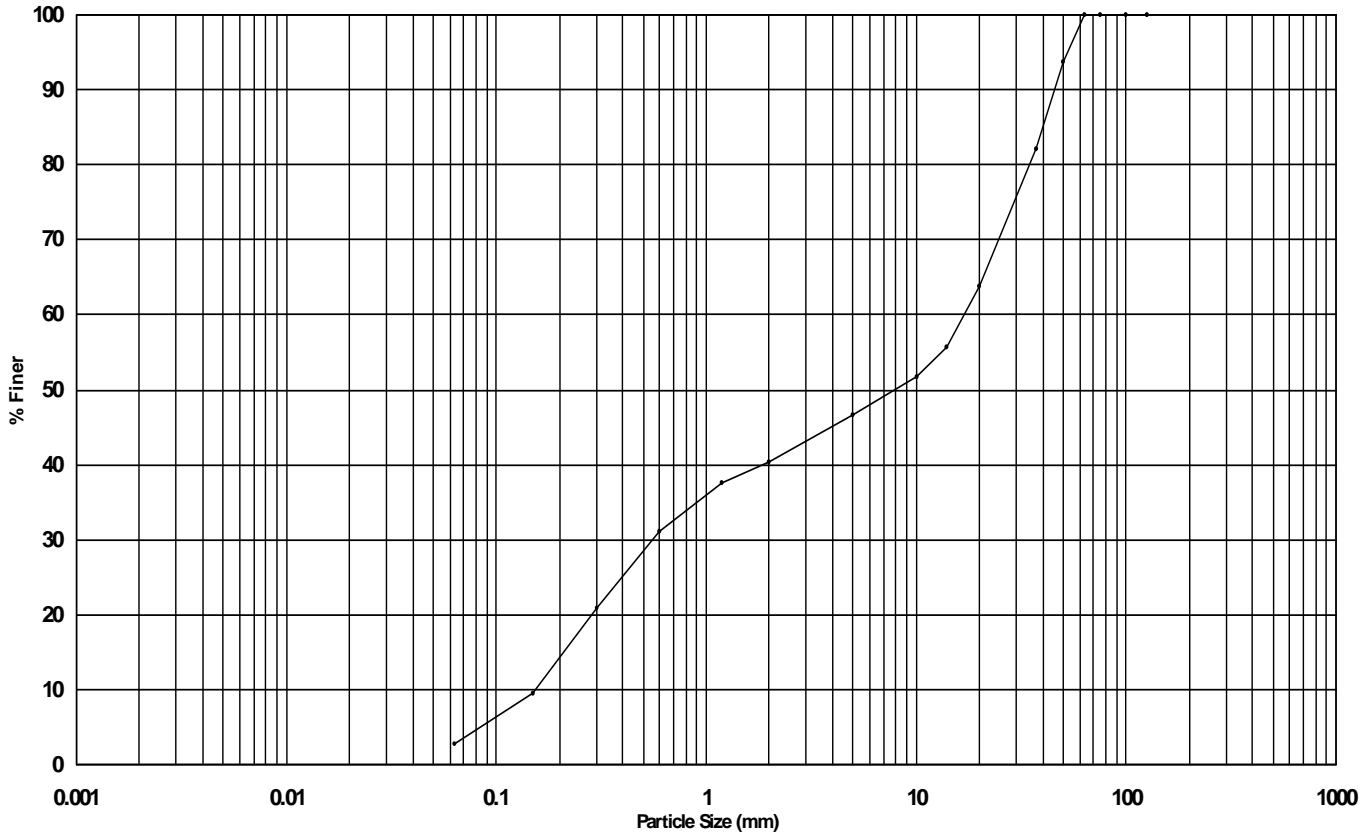
Project No: PN153428

Sample Type B

Sample Ref N61706

Sample Description

Yellowish brown and greyish brown slightly silty very sandy fine to coarse GRAVEL.



Classification	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Cobbles	Boulders
	SILT			SAND			Gravel				

Classification	% of each
SILT (including CLAY)	3
SAND	37
GRAVEL	60
COBBLES	0
BOULDERS	0

Size	% Finer
125 mm	100
100 mm	100
75 mm	100
63 mm	100
50 mm	94
37.5 mm	82
20 mm	64
14 mm	56
10 mm	52
5 mm	47
2 mm	40
1.18 mm	38
600 µm	31
300 µm	21
150 µm	9
63 µm	3

Size	% Finer

Uniformity Coefficient	
109.10	
Sieving Method	
Wet sieve	
Fine Particle Analysis	
Method	
Pre-treated with	
% loss on Pre-treatment	
Particle Density	

Remarks Test performed in accordance with BS 1377:Part 2:1990

10/02/2016



LABORATORY RESULTS - Particle Size Distribution

Project: STOCKPORT BUS STATION

Hole: BH105

Sample Depth: 2.00-2.50m

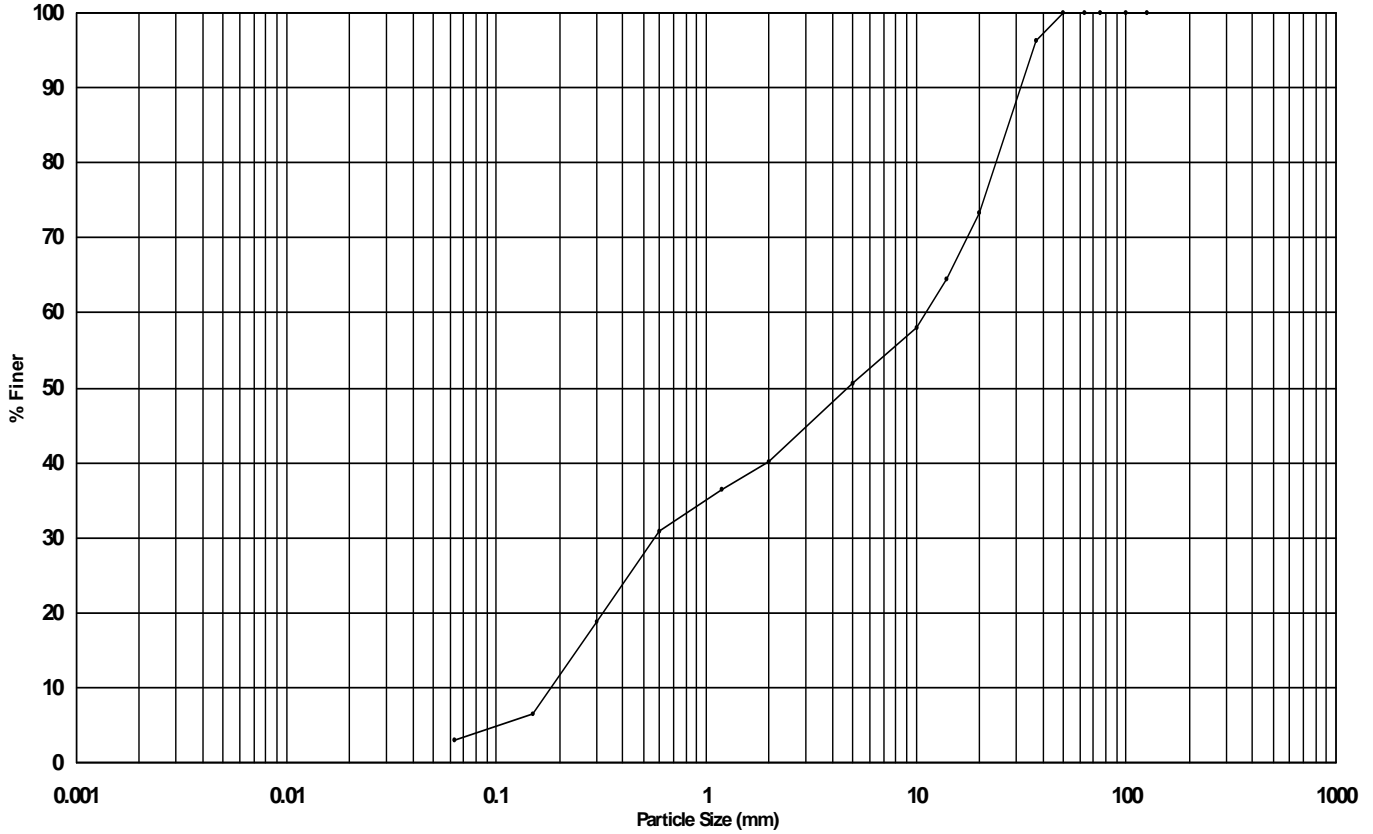
Project No: PN153428

Sample Type: B

Sample Ref: N61703

Sample Description

Yellowish brown very sandy fine to coarse GRAVEL.



Classification	CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Cobbles	Boulders
		SILT			SAND			Gravel				

Classification	% of each
SILT (including CLAY)	3
SAND	37
GRAVEL	60
COBBLES	0
BOULDERS	0

Size	% Finer
125 mm	100
100 mm	100
75 mm	100
63 mm	100
50 mm	100
37.5 mm	96
20 mm	73
14 mm	65
10 mm	58
5 mm	51
2 mm	40
1.18 mm	37
600 µm	31
300 µm	19
150 µm	6
63 µm	3

Size	% Finer

Uniformity Coefficient	
60.83	
Sieving Method	
Wet sieve	
Fine Particle Analysis	
Method	
Pre-treated with	
% loss on Pre-treatment	
Particle Density	

Remarks: Test performed in accordance with BS 1377:Part 2:1990

10/02/2016



LABORATORY RESULTS - Particle Size Distribution

Project: STOCKPORT BUS STATION

Hole: BH107

Sample Depth: 1.20-1.31m

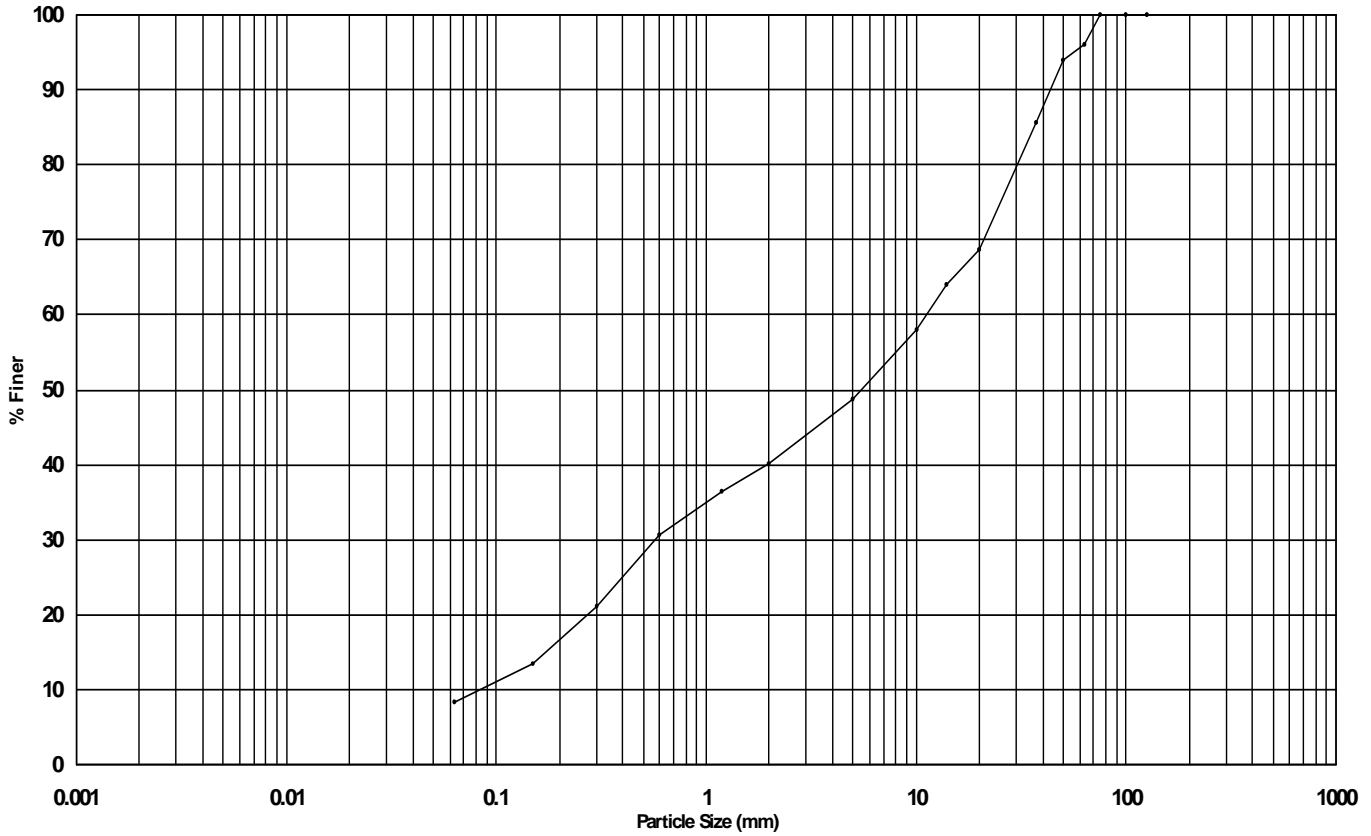
Project No: PN153428

Sample Type: B

Sample Ref: N61707

Sample Description

Yellowish brown silty very sandy fine to coarse GRAVEL with a low cobble content.



Classification	CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Cobbles	Boulders
		SILT			SAND			Gravel				

Classification	% of each
SILT (including CLAY)	8
SAND	32
GRAVEL	56
COBBLES	4
BOULDERS	0

Size	% Finer
125 mm	100
100 mm	100
75 mm	100
63 mm	96
50 mm	94
37.5 mm	86
20 mm	69
14 mm	64
10 mm	58
5 mm	49
2 mm	40
1.18 mm	36
600 μm	31
300 μm	21
150 μm	14
63 μm	8

Size	% Finer

Uniformity Coefficient	
135.64	
Sieving Method	
Wet sieve	
Fine Particle Analysis	
Method	
Pre-treated with	
% loss on Pre-treatment	
Particle Density	

Remarks Test performed in accordance with BS 1377:Part 2:1990

10/02/2016



LABORATORY RESULTS - Particle Size Distribution

Project: STOCKPORT BUS STATION

Hole: BH112

Sample Depth: 3.00-3.50m

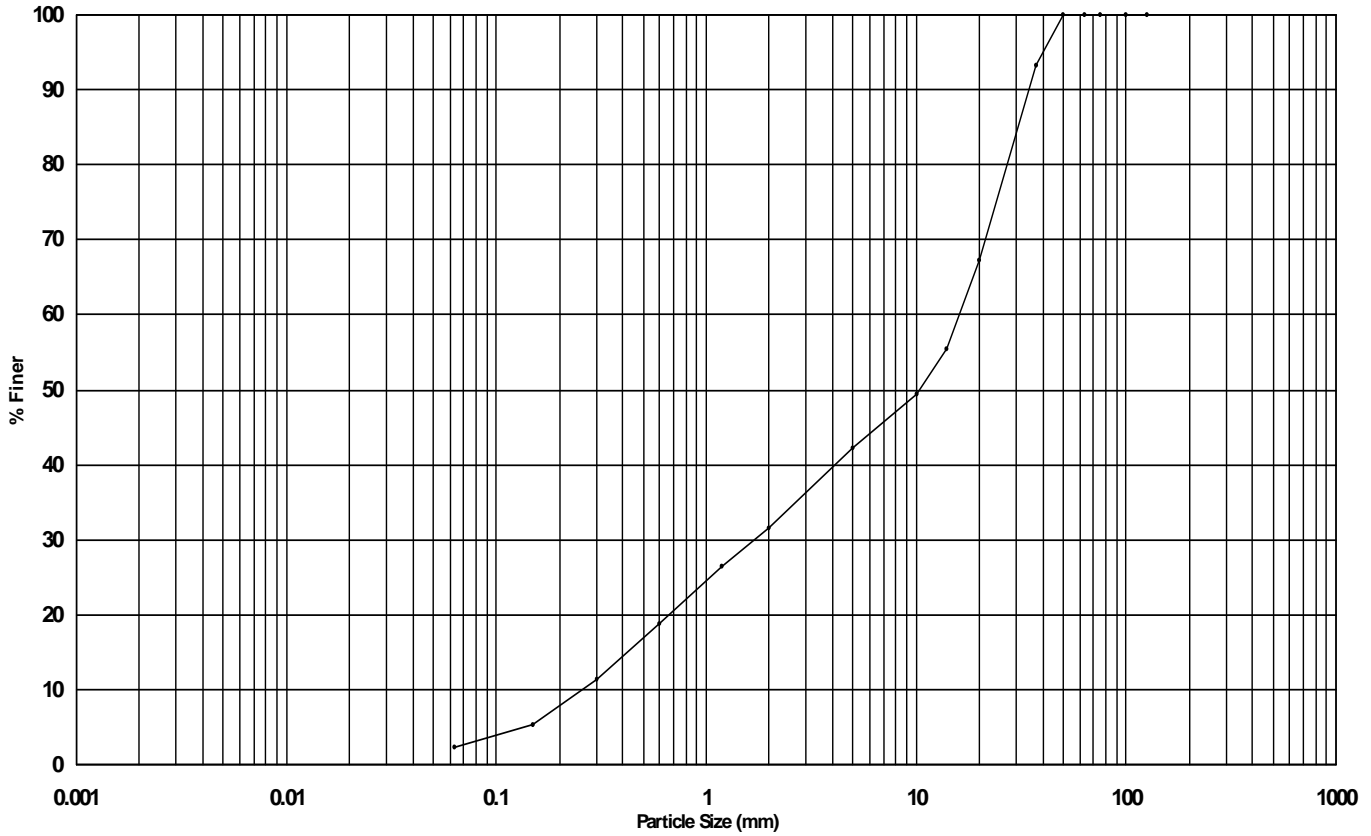
Project No: PN153428

Sample Type: B

Sample Ref: N61669

Sample Description

Yellowish brown very sandy fine to coarse GRAVEL.




Classification	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Cobbles	Boulders
CLAY	SILT			SAND			Gravel				

Classification	% of each
SILT (including CLAY)	2
SAND	30
GRAVEL	68
COBBLES	0
BOULDERS	0

Size	% Finer
125 mm	100
100 mm	100
75 mm	100
63 mm	100
50 mm	100
37.5 mm	93
20 mm	67
14 mm	55
10 mm	49
5 mm	42
2 mm	32
1.18 mm	26
600 µm	19
300 µm	11
150 µm	5
63 µm	2

Size	% Finer
------	---------

Uniformity Coefficient	
63.29	
Sieving Method	
Wet sieve	
Fine Particle Analysis	
Method	
Pre-treated with	
% loss on Pre-treatment	
Particle Density	

Remarks:  Test performed in accordance with BS 1377:Part 2:1990

10/02/2016



LABORATORY RESULTS - Particle Size Distribution

Project: STOCKPORT BUS STATION

Hole: WS204

Sample Depth: 1.20-2.00m

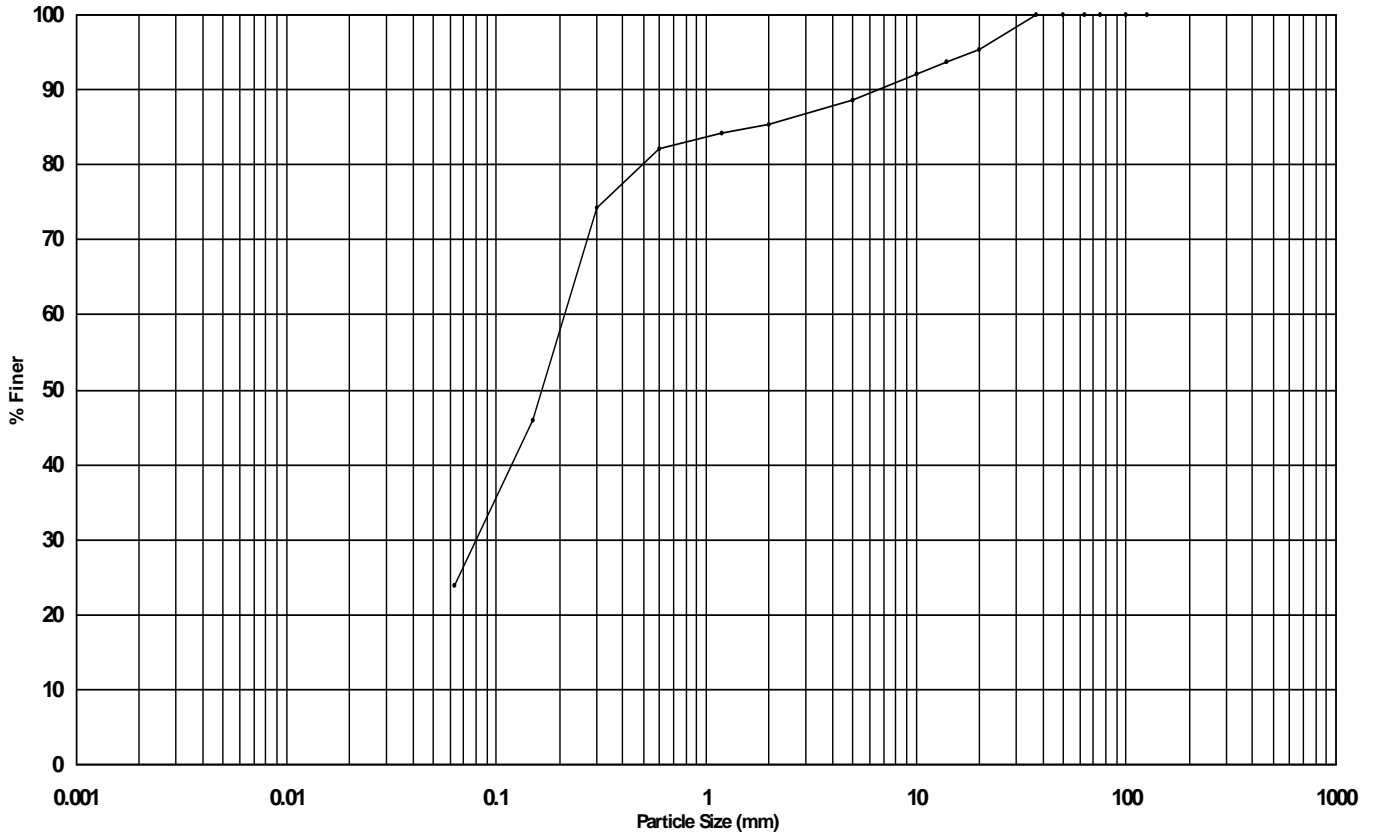
Sample Type: B

Sample Ref: N61795

Project No: PN153428

Sample Description

MADE GROUND: Orangish brown and grey gravelly fine to coarse sand with clay inclusions and brick fragments.



Classification	CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Cobbles	Boulders
		SILT			SAND			Gravel				

Classification	% of each
SILT (including CLAY)	24
SAND	61
GRAVEL	15
COBBLES	0
BOULDERS	0

Size	% Finer
125 mm	100
100 mm	100
75 mm	100
63 mm	100
50 mm	100
37.5 mm	100
20 mm	95
14 mm	94
10 mm	92
5 mm	89
2 mm	85
1.18 mm	84
600 µm	82
300 µm	74
150 µm	46
63 µm	24

Size	% Finer

Uniformity Coefficient	
Not Available	
Sieving Method	
Wet sieve	
Fine Particle Analysis	
Method	
Pre-treated with	
% loss on Pre-treatment	
Particle Density	

Remarks: Test performed in accordance with BS 1377:Part 2:1990

10/02/2016



LABORATORY RESULTS - Particle Size Distribution

Project: STOCKPORT BUS STATION

Hole: WS208

Sample Depth: 2.40-2.80m

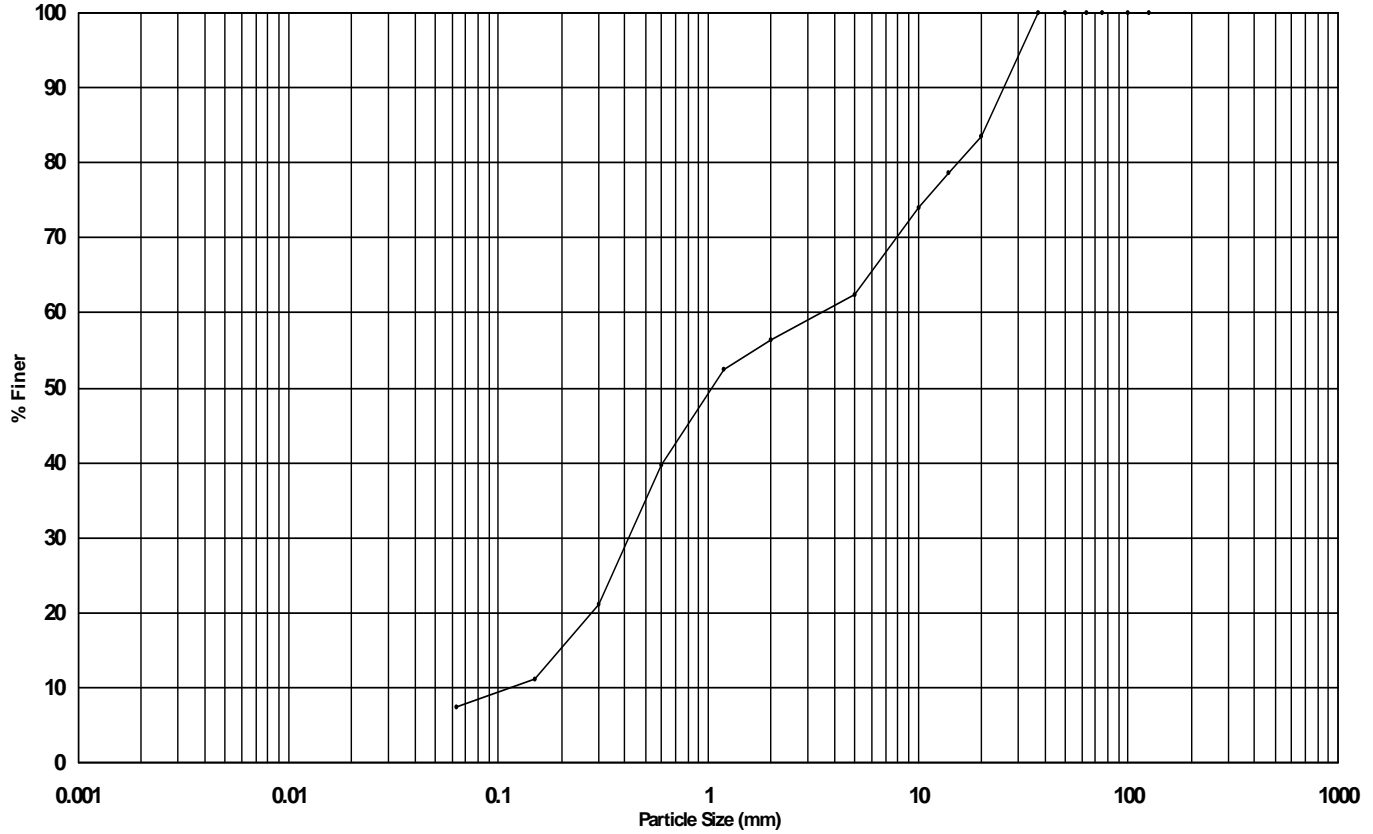
Project No: PN153428

Sample Type: B

Sample Ref: N61672

Sample Description

Light brown and reddish brown silty SAND and GRAVEL.




Classification	CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Cobbles	Boulders
		SILT			SAND			Gravel				

Classification	% of each
SILT (including CLAY)	7
SAND	49
GRAVEL	44
COBBLES	0
BOULDERS	0

Size	% Finer
125 mm	100
100 mm	100
75 mm	100
63 mm	100
50 mm	100
37.5 mm	100
20 mm	83
14 mm	79
10 mm	74
5 mm	62
2 mm	56
1.18 mm	52
600 µm	40
300 µm	21
150 µm	11
63 µm	7

Size	% Finer

Uniformity Coefficient	
30.28	
Sieving Method	
Wet sieve	
Fine Particle Analysis	
Method	
Pre-treated with	
% loss on Pre-treatment	
Particle Density	

Remarks  Test performed in accordance with BS 1377:Part 2:1990

10/02/2016



LABORATORY RESULTS - Particle Size Distribution

Project: STOCKPORT BUS STATION

Hole: WS210

Sample Depth: 2.00-3.00m

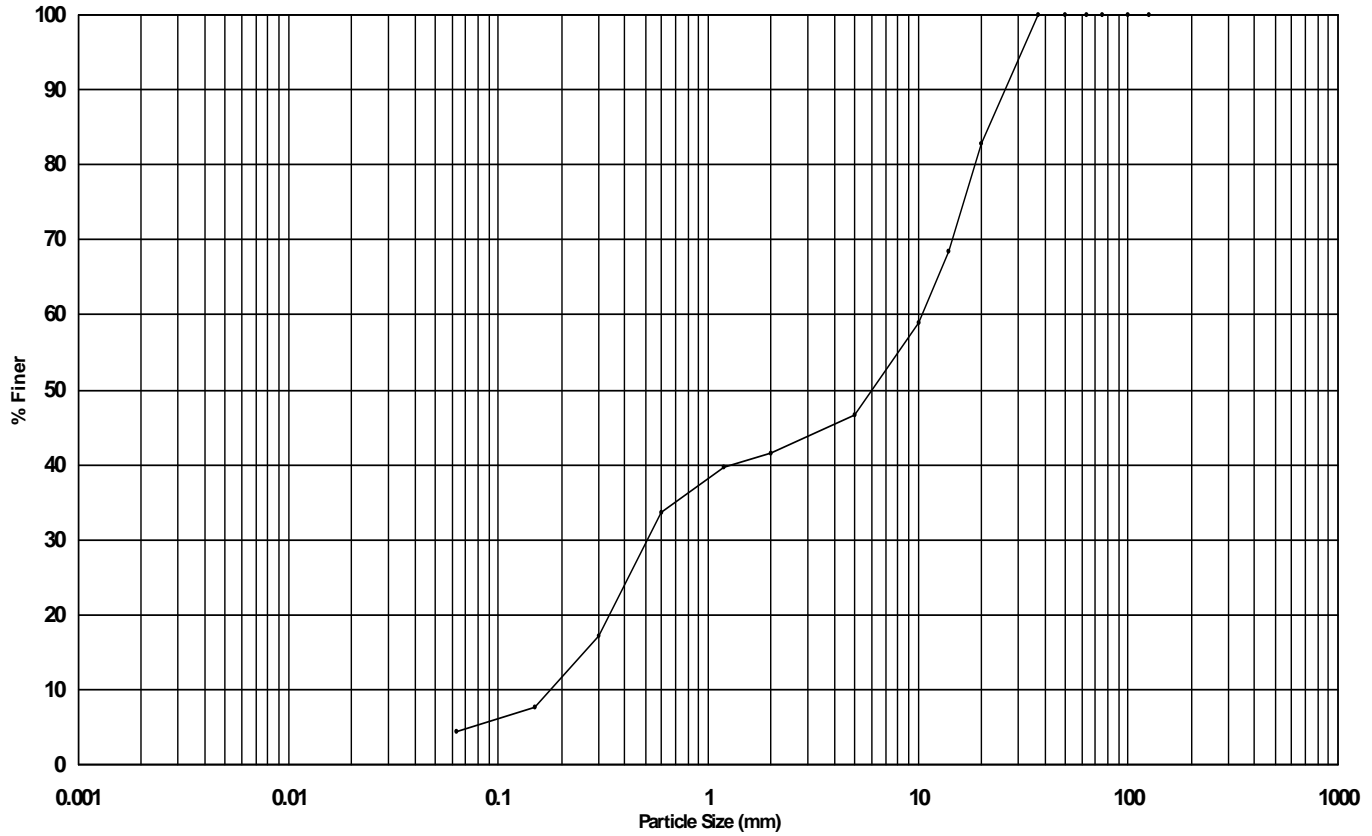
Project No: PN153428

Sample Type: B

Sample Ref: N61794

Sample Description

MADE GROUND: Dark brown and greyish orange slightly silty very sandy fine to coarse gravel with brick fragments.



Classification	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Cobbles	Boulders
CLAY	SILT			SAND			Gravel				

Classification	% of each
SILT (including CLAY)	4
SAND	38
GRAVEL	58
COBBLES	0
BOULDERS	0

Size	% Finer
125 mm	100
100 mm	100
75 mm	100
63 mm	100
50 mm	100
37.5 mm	100
20 mm	83
14 mm	68
10 mm	59
5 mm	47
2 mm	42
1.18 mm	40
600 μm	34
300 μm	17
150 μm	8
63 μm	4

Size	% Finer

Uniformity Coefficient	
58.07	
Sieving Method	
Wet sieve	
Fine Particle Analysis	
Method	
Pre-treated with	
% loss on Pre-treatment	
Particle Density	

Remarks: Test performed in accordance with BS 1377:Part 2:1990

10/02/2016



LABORATORY RESULTS - Particle Size Distribution

Project: STOCKPORT BUS STATION

Hole: WS210

Project No: PN153428

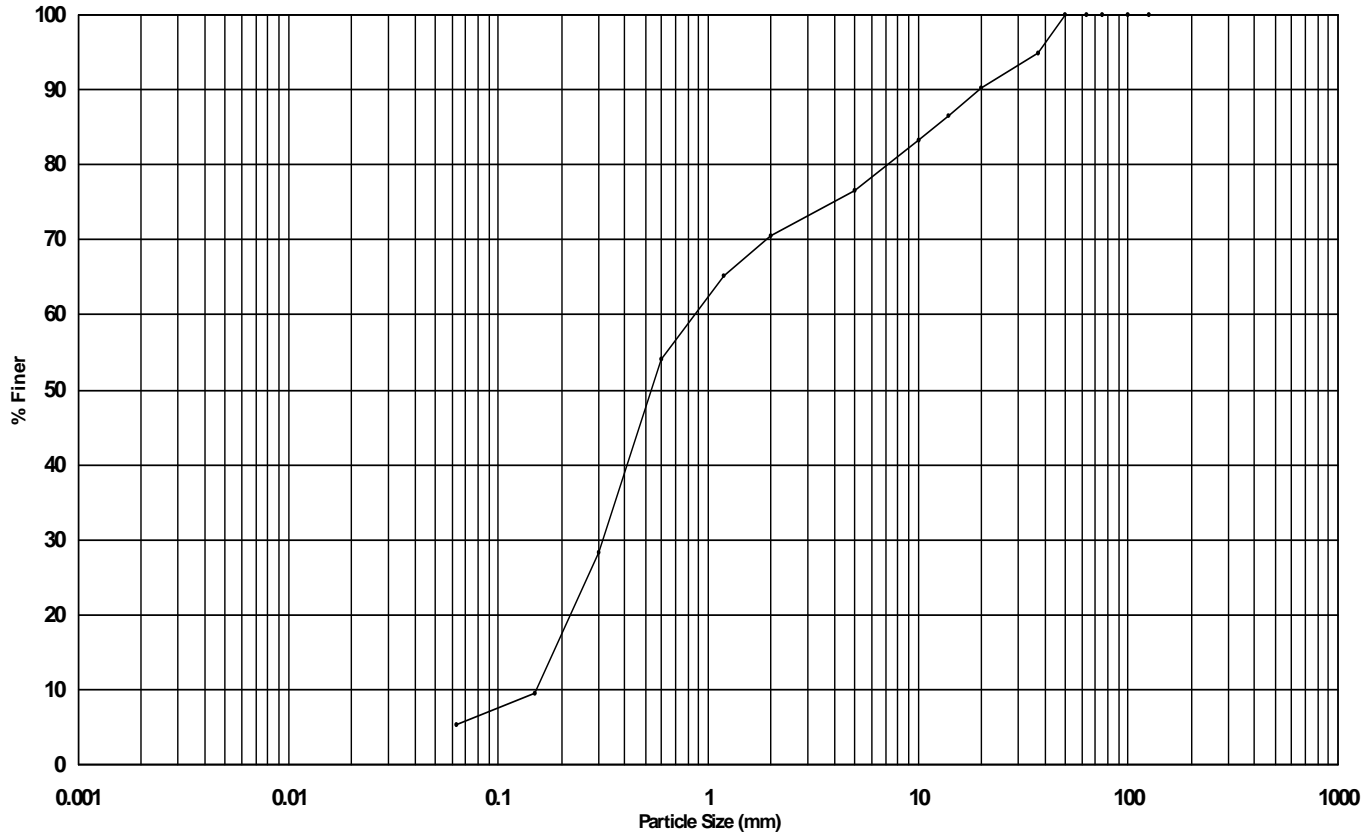
Sample Depth: 4.00-5.00m

Sample Type: B

Sample Ref: N61668

Sample Description

Greyish orange silty very gravelly fine to coarse SAND.



Classification	CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Cobbles	Boulders
		SILT			SAND			Gravel				

Classification	% of each
SILT (including CLAY)	5
SAND	66
GRAVEL	29
COBBLES	0
BOULDERS	0

Size	% Finer
125 mm	100
100 mm	100
75 mm	100
63 mm	100
50 mm	100
37.5 mm	95
20 mm	90
14 mm	87
10 mm	83
5 mm	77
2 mm	71
1.18 mm	65
600 µm	54
300 µm	28
150 µm	9
63 µm	5

Size	% Finer

Uniformity Coefficient	
5.62	
Sieving Method	
Wet sieve	
Fine Particle Analysis	
Method	
Pre-treated with	
% loss on Pre-treatment	
Particle Density	

Remarks Test performed in accordance with BS 1377:Part 2:1990

10/02/2016



LABORATORY RESULTS - Particle Size Distribution

Project: STOCKPORT BUS STATION

Hole: WS214

Sample Depth: 2.40-3.00m

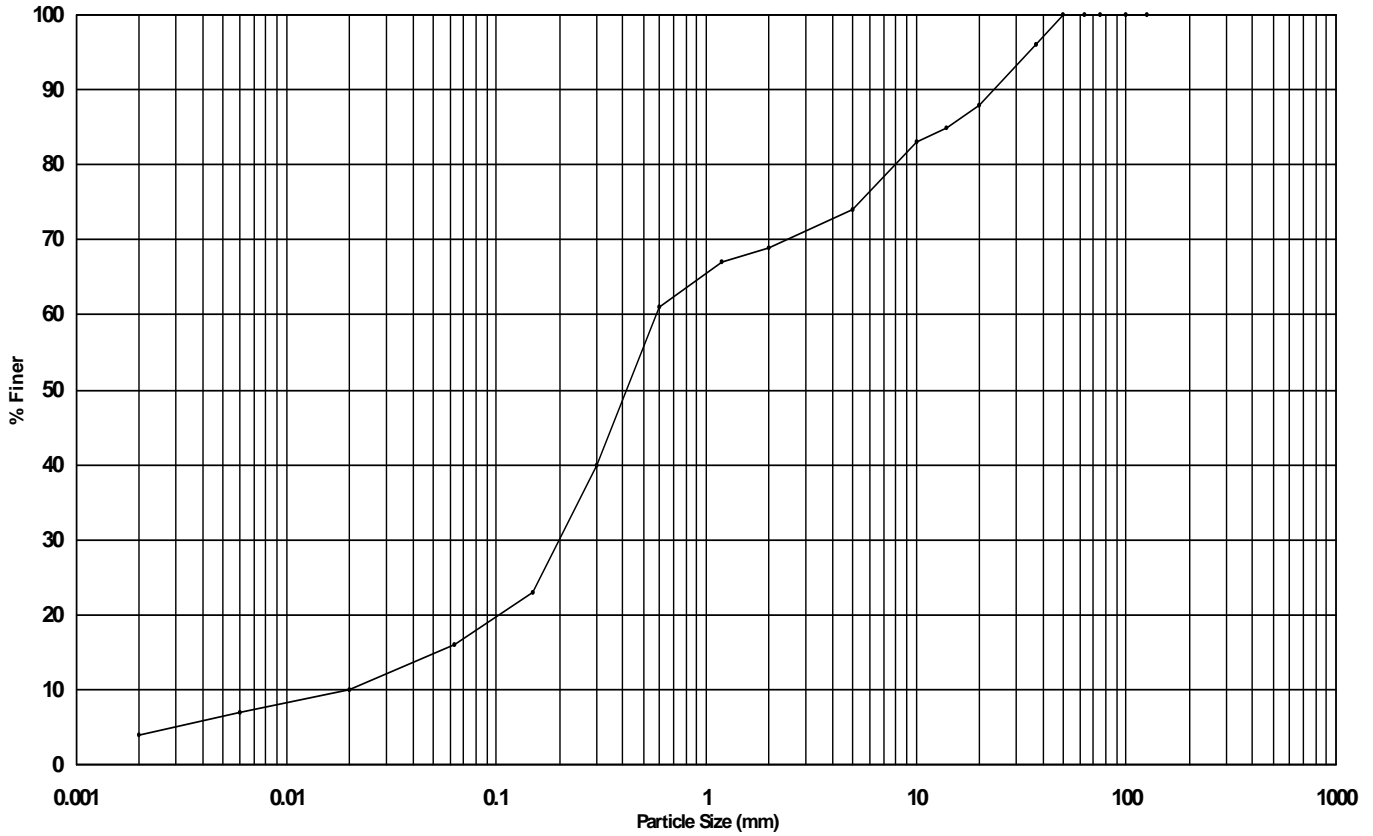
Project No: PN153428

Sample Type: B

Sample Ref: N61710

Sample Description

Reddish brown clayey very gravelly fine to coarse SAND.



Classification	CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Cobbles	Boulders
		SILT			SAND			Gravel				

Classification	% of each
CLAY	4
SILT	12
SAND	53
GRAVEL	31
COBBLES	0
BOULDERS	0

Size	% Finer
125 mm	100
100 mm	100
75 mm	100
63 mm	100
50 mm	100
37.5 mm	96
20 mm	88
14 mm	85
10 mm	83
5 mm	74
2 mm	69
1.18 mm	67
600 μm	61
300 μm	40
150 μm	23
63 μm	16

Size	% Finer
20 μm	10
6 μm	7
2 μm	4

Uniformity Coefficient	
31.83	
Sieving Method	
Wet sieve	
Fine Particle Analysis	
Method	Pipette
Pre-treated with	Hydrogen Peroxide
% loss on Pre-treatment	0.00
Particle Density	2.65 (Assumed)

Remarks Test performed in accordance with BS 1377:Part 2:1990

10/02/2016



LABORATORY RESULTS - Particle Size Distribution

Project: STOCKPORT BUS STATION

Hole: WS223

Sample Depth: 2.50-3.00m

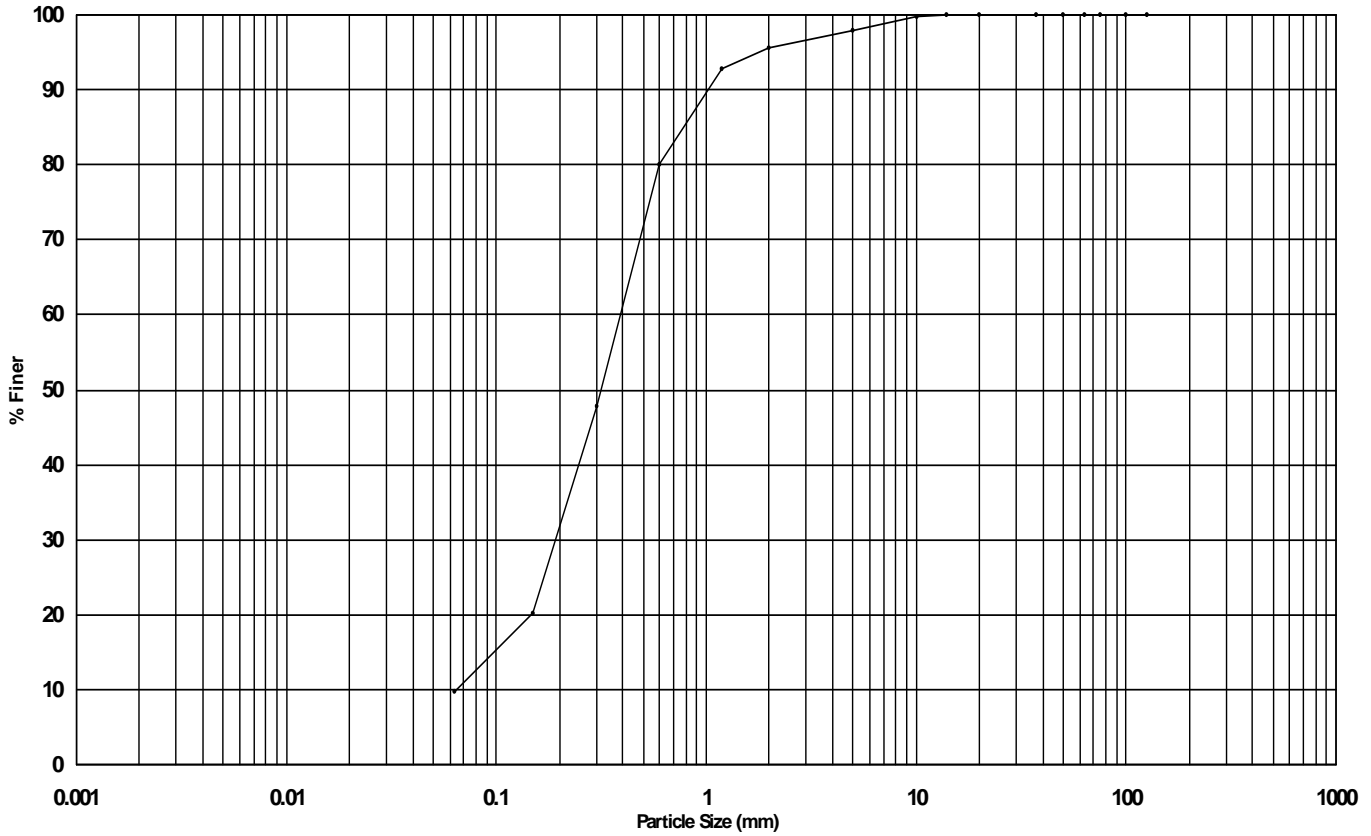
Project No: PN153428

Sample Type: B

Sample Ref: N61705

Sample Description

Greyish orange silty slightly gravelly fine to coarse SAND.



Classification	CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Cobbles	Boulders
		SILT			SAND			Gravel				

Classification	% of each
SILT (including CLAY)	10
SAND	86
GRAVEL	4
COBBLES	0
BOULDERS	0

Size	% Finer
125 mm	100
100 mm	100
75 mm	100
63 mm	100
50 mm	100
37.5 mm	100
20 mm	100
14 mm	100
10 mm	100
5 mm	98
2 mm	96
1.18 mm	93
600 μm	80
300 μm	48
150 μm	20
63 μm	10

Size	% Finer

Uniformity Coefficient	
6.04	
Sieving Method	
Wet sieve	
Fine Particle Analysis	
Method	
Pre-treated with	
% loss on Pre-treatment	
Particle Density	

Remarks: Test performed in accordance with BS 1377:Part 2:1990

10/02/2016




LABORATORY RESULTS - MCV, Compaction, CBR

Project STOCKPORT BUS STATION

Project No: PN153428

Sample					MCV		Compaction					CBR					
Hole	Depth (Specimen Depth) m	Type	Sample Ref	Description	MCV	w %	Type	w (Opt) %	ρ_d Mg/m ³	γ_b Mg/m ³	γ_d (Max) Mg/m ³	Type	Top		Bottom		
													CBR %	w %	CBR %	w %	
BH106	1.20- 1.70 (1.20- 1.70)	B	N61702	Yellowish brown sandy fine to coarse GRAVEL.			2.5kg	(5.0) 6.4* 2.8 5.1 8.6 11.2	2.65a	*2.20 2.05 2.19 2.02 1.95	(2.10) *2.07 2.00 2.09 1.86 1.75						

Remarks  Particle Density - a=assumed, m=measured * = at natural moisture content
 NST - Not suitable for Test
 Water Content Test performed in accordance with BS EN ISO 17892 - 1: 2014
 All other Tests performed in accordance with BS1377: 1990



LABORATORY RESULTS - Compaction

Project: STOCKPORT BUS STATION

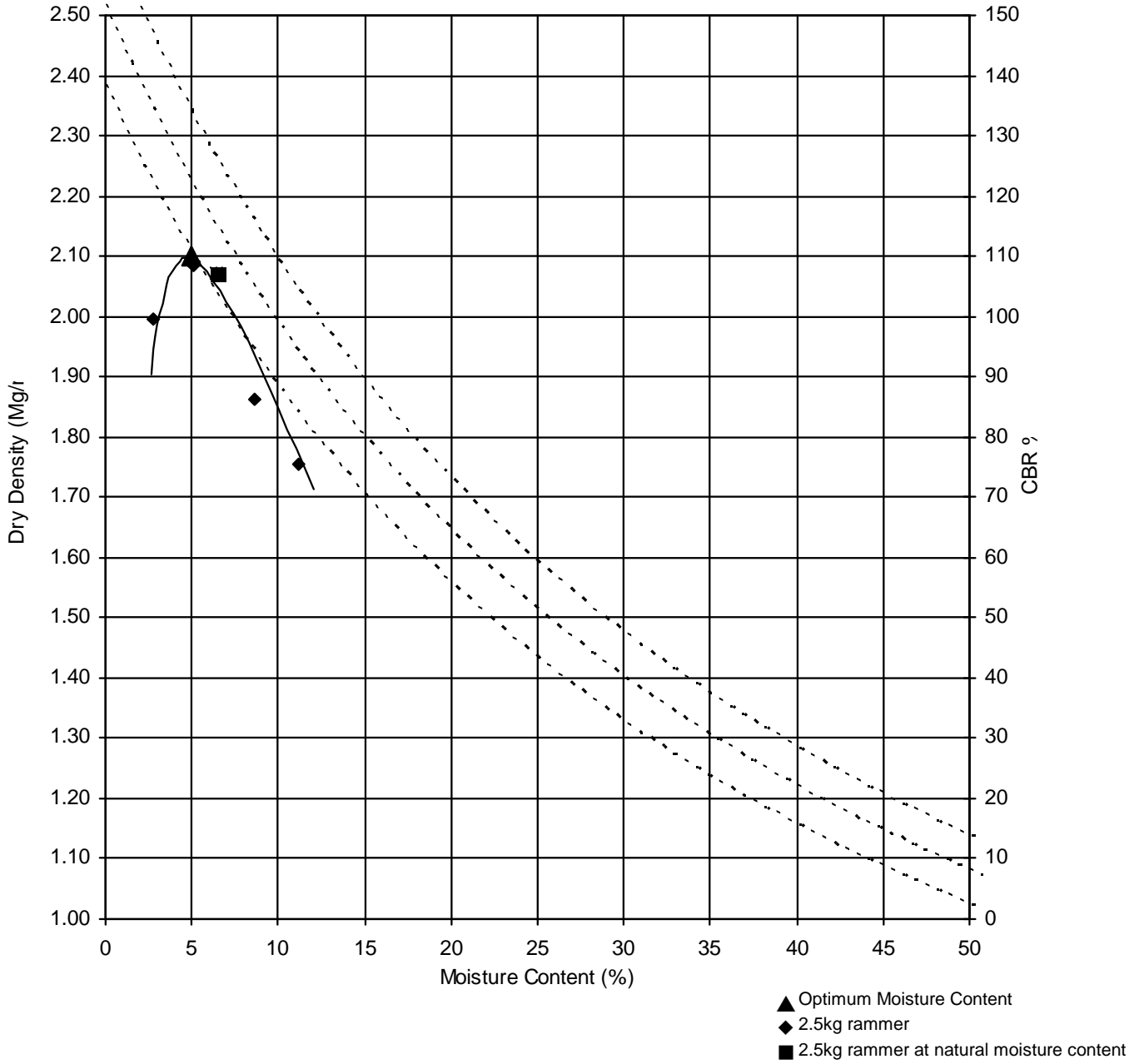
Hole: BH106

Sample Depth: 1.20-1.70m

Project No: PN153428

Sample Type: B

Sample Ref: N61702



Optimum Moisture Content 5.0
Maximum Dry Density 2.10 Mg/m³

Particle Density 2.65 (Assumed)
 Preparation 2.5kg

Gravel retained on
 37.5mm sieve 10 %
 20mm sieve 18 %

Description Yellowish brown sandy fine to coarse GRAVEL.

Remarks BS1377 Part 4 1990 : Clause 3.3 and 3.4

09/02/2016



LABORATORY RESULTS - ISRM Suggested Method for Point Load Strength Determination

Project STOCKPORT BUS STATION

Project No: PN153428

Sample					w %	W mm	D mm	Fail Load kN	Test Type/ Direction	De mm	De ² mm ²	Is MN/m ²	F	Is ₅₀ MN/m ²
Hole	Depth (Specimen Depth) m	Type	Sample Ref	Description										
BH101	6.40- 6.55 (6.40- 6.55)	C	N61764	Very weak reddish brown fine to coarse grained SANDSTONE.	9.8	83 82	82 72	0.37 0.67	D/PL A/PD	82.00 86.70	6724 7517	0.056 0.089	1.249 1.281	0.069 0.114
BH101	7.80- 7.94 (7.80- 7.94)	C	N61765	Extremely weak to very weak reddish brown fine to coarse grained SANDSTONE.	11.2	83 81	81 71	0.16 0.64	D/PL A/PD	81.00 85.57	6561 7322	0.024 0.088	1.243 1.274	0.030 0.112
BH102	5.17- 5.26 (5.17- 5.26)	C	N61770	Extremely weak to very weak reddish brown SANDSTONE.	9.7	85 83	83 61	0.17 0.63	D/PL A/PD	83.00 80.29	6889 6446	0.025 0.097	1.256 1.238	0.032 0.121
BH102	11.60- 11.70 (11.60- 11.70)	C	N61766	Very weak reddish brown SANDSTONE.	11.0	85 85	85 48	0.48 0.69	D/PL A/PD	85.00 72.08	7225 5195	0.067 0.133	1.270 1.179	0.085 0.157
BH103	6.70- 6.86 (6.70- 6.86)	C	N61771	Very weak reddish brown fine to coarse grained SANDSTONE.	12.5	85 83	83 61	0.38 0.35	D/PL A/PD	83.00 80.29	6889 6446	0.055 0.054	1.256 1.238	0.070 0.066
BH103	13.20- 13.39 (13.20- 13.39)	C	N62023	Very weak reddish brown fine to coarse grained SANDSTONE.	13.1	85 84 84	84 61 49	0.29 0.58 0.33	D/PL A/PD A/PD	84.00 80.77 72.39	7056 6524 5241	0.041 0.089 0.064	1.263 1.241 1.181	0.052 0.110 0.075
BH104	6.00- 6.10 (6.00- 6.10)	C	N61768	Extremely weak reddish brown fine to coarse grained SANDSTONE.	8.1	85 85	85 59	0.09 0.20	D/PL A/PD	85.00 79.91	7225 6385	0.012 0.032	1.270 1.235	0.016 0.039
BH104	8.50- 8.65 (8.50- 8.65)	C	N61769	Extremely weak to very weak reddish brown fine to coarse grained SANDSTONE.	16.7	84 84	84 69	0.16 0.37	D/PL A/PD	84.00 85.91	7056 7380	0.022 0.050	1.263 1.276	0.028 0.064
BH104	12.10- 12.20 (12.10- 12.20)	C	N61767	Very weak reddish brown fine to coarse grained SANDSTONE.	10.1	84 83	83 57	0.30 0.41	D/PL A/PD	83.00 77.61	6889 6024	0.043 0.069	1.256 1.219	0.054 0.084
BH105	7.10- 7.29 (7.10- 7.29)	C	N62024	Very weak reddish brown fine to coarse grained SANDSTONE.	9.6	84	67	0.31	A/PD	84.65	7166	0.044	1.267	0.056
BH105	13.00- 13.34 (13.00- 13.34)	C	N62025	Extremely weak to very weak reddish brown fine to coarse grained SANDSTONE.	5.9	84 83 83	83 64 50	0.15 0.81 0.69	D/PL A/PD A/PD	83.00 82.24 72.69	6889 6763 5284	0.022 0.120 0.131	1.256 1.251 1.183	0.028 0.150 0.155

Remarks Test Type D-Diametral, A-Axial, I-Lump or Irregular Test
 Direction PL-parallel to planes of weakness, PD - perpendicular to planes of weakness,
 R-Random or unknown orientation
 Fail Load UF-unacceptable failure

LABORATORY RESULTS - ISRM Suggested Method for Point Load Strength Determination

Project STOCKPORT BUS STATION

Project No: PN153428

Sample					w %	W mm	D mm	Fail Load kN	Test Type/ Direction	De mm	De ² mm ²	Is MN/m ²	F	Is ₅₀ MN/m ²
Hole	Depth (Specimen Depth) m	Type	Sample Ref	Description										
BH106	3.70- 3.80 (3.70- 3.80)	C	N61758	Very weak reddish brown fine to coarse grained SANDSTONE.	7.8	85 85	85 48	0.24 0.63	D/PL A/PD	85.00 72.08	7225 5195	0.033 0.122	1.270 1.179	0.043 0.144
BH106	10.80- 10.90 (10.80- 10.90)	C	N61759	Extremely weak to very weak reddish brown fine to coarse grained SANDSTONE.	11.7	85 84	84 63	0.18 0.75	D/PL A/PD	84.00 82.09	7056 6738	0.026 0.112	1.263 1.250	0.033 0.139
BH108	11.80- 14.80 (11.80- 14.80)	C	N61762	Very weak reddish brown medium grained SANDSTONE.	13.4	85 85	85 71	0.25 0.33	D/PL A/PD	85.00 87.66	7225 7684	0.035 0.042	1.270 1.287	0.044 0.055
BH108	14.35- 14.61 (14.35- 14.61)	C	N62026	Very weak to weak reddish brown medium grained SANDSTONE.	7.7	85 84 84	84 64 61	0.46 1.53 1.46	D/PL A/PD A/PD	84.00 82.73 80.77	7056 6845 6524	0.065 0.224 0.223	1.263 1.254 1.241	0.082 0.281 0.277
BH108	15.30- 15.38 (15.30- 15.38)	C	N61763	Very weak to weak reddish brown medium grained SANDSTONE.	11.8	85 85	85 78	0.72 1.56	D/PL A/PD	85.00 91.88	7225 8442	0.100 0.185	1.270 1.315	0.127 0.243
BH108	17.30- 17.58 (17.30- 17.58)	C	N62027	Very weak reddish brown medium grained SANDSTONE.	11.3	85 85 85	85 61 52	0.51 0.68 0.57	D/PL A/PD A/PD	85.00 81.25 75.02	7225 6602 5628	0.070 0.103 0.101	1.270 1.244 1.200	0.089 0.128 0.122
BH109	9.40- 9.60 (9.40- 9.60)	C	N62028	Very weak reddish brown fine to coarse grained SANDSTONE.	10.4	85 85 85	85 61 60	0.36 0.56 0.57	D/PL A/PD A/PD	85.00 81.25 80.58	7225 6602 6494	0.050 0.085 0.087	1.270 1.244 1.240	0.064 0.105 0.108
BH109	12.30- 12.62 (12.30- 12.62)	C	N62029	Very weak reddish brown fine to coarse grained SANDSTONE.	13.8	80	69	0.65	A/PD	83.83	7028	0.093	1.262	0.117
BH109	13.90- 14.15 (13.90- 14.15)	C	N61760	Very weak reddish brown fine to coarse grained SANDSTONE.	15.5	85 84	84 82	0.26 0.75	D/PL A/PD	84.00 93.65	7056 8770	0.037 0.085	1.263 1.326	0.046 0.113
BH109	19.40- 19.60 (19.40- 19.60)	C	N61761	Extremely weak to very weak reddish brown fine to coarse grained SANDSTONE.	14.0	85 83	83 60	0.14 0.53	D/PL A/PD	83.00 79.63	6889 6341	0.020 0.084	1.256 1.233	0.026 0.104
BH109	19.70- 19.90 (19.70- 19.90)	C	N62030	Very weak reddish brown fine to coarse grained SANDSTONE.	11.6	85 84 84	84 69 79	0.53 0.74 0.81	D/PL A/PD A/PD	84.00 85.91 91.92	7056 7380 8449	0.075 0.101 0.096	1.263 1.276 1.315	0.094 0.129 0.126

Remarks Test Type D-Diametral, A-Axial, I-Lump or Irregular Test
 Direction PL-parallel to planes of weakness, PD - perpendicular to planes of weakness,
 R-Random or unknown orientation
 Fail Load UF-unacceptable failure




LABORATORY RESULTS - ISRM Suggested Method for Point Load Strength Determination

Project STOCKPORT BUS STATION

Project No: PN153428

Sample					w %	W mm	D mm	Fail Load kN	Test Type/ Direction	De mm	De ² mm ²	Is MN/m ²	F	Is ₅₀ MN/m ²
Hole	Depth (Specimen Depth) m	Type	Sample Ref	Description										
BH112	6.50-	C	N62032	Extremely weak to very weak reddish brown fine to coarse grained SANDSTONE.	12.1	85	80	0.13	D/PL	80.00	6400	0.021	1.236	0.026
	6.80					80	71	0.50	A/PD	85.04	7232	0.069	1.270	0.087
	(6.50- 6.80)					80	57	0.57	A/PD	76.20	5806	0.099	1.209	0.119
BH112	9.60-	C	N62031	Very weak reddish brown fine to coarse grained SANDSTONE.	5.6	85	85	0.92	D/PL	85.00	7225	0.128	1.270	0.162
	9.80					85	89	1.45	A/PD	98.14	9632	0.151	1.355	0.204
	(9.60- 9.80)					85	76	1.32	A/PD	90.69	8225	0.161	1.307	0.210

Remarks  Test Type D-Diametral, A-Axial, I-Lump or Irregular Test
 Direction PL-parallel to planes of weakness, PD - perpendicular to planes of weakness,
 R-Random or unknown orientation
 Fail Load UF-unacceptable failure




LABORATORY RESULTS - Test Remarks

Project STOCKPORT BUS STATION

Project No: PN153428

Sample				Laboratory Remark
Hole	Depth (Specimen Depth) m	Type	Sample Ref	
WS220	1.30- 1.70 (1.30- 1.70)	D	N61793	Atterberg Limit Test - 1-point cone

Remarks 





Jones Environmental Laboratory

Registered Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA. UK

Unit 3 Deeside Point
Zone 3
Deeside Industrial Park
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Geotechnics
Unit 1B
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River Lane
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Cheshire
CH4 8RJ

Tel: +44 (0) 1244 833780
Fax: +44 (0) 1244 833781



Attention :

Date : 14th January, 2016

Your reference : PN153428

Our reference : Test Report 16/3162 Batch 1

Location : Stockport Bus Station

Date samples received : 8th January, 2016

Status : Final report

Issue : 1

Twenty two samples were received for analysis on 8th January, 2016 of which twenty 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.

Compiled By:

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:
JE Job No.: 16/3162

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	1	2	3	4	5	6	7	8	9	10	Please see attached notes for all abbreviations and acronyms					
Sample ID	103	106	107	109	111	BH108	BH108	BH112	CT4	CT5						
Depth	1.00-1.20	0.40-0.60	0.35-0.55	1.00-1.20	0.50-0.70	0.80	3.80	0.80	2.20-2.65	1.25-1.65						
COC No / misc																
Containers	B	B	B	B	B	B	B	B	B	B						
Sample Date	<>	<>	<>	<>	<>	<>	<>	<>	<>	<>						
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil						
Batch Number	1	1	1	1	1	1	1	1	1	1						
Date of Receipt	08/01/2016	08/01/2016	08/01/2016	08/01/2016	08/01/2016	08/01/2016	08/01/2016	08/01/2016	08/01/2016	08/01/2016						
														LOD/LOR	Units	Method No.
Total Sulphate BRE	0.02	0.01	0.03	0.14	0.01	0.12	0.05	0.08	<0.01	0.14	<0.01	%	TM50/PM29			
Sulphate as SO4 (2:1 Ext) ^{#M}	0.0577	0.0168	0.0456	0.1415	0.0252	0.0453	0.0285	0.0671	0.0101	0.0394	<0.0015	g/l	TM38/PM20			
Organic Matter	1.1	<0.2	<0.2	1.9	1.3	14.6	0.7	<0.2	0.3	9.7	<0.2	%	TM21/PM24			
pH ^{#M}	9.09	10.93	11.98	8.49	8.16	8.41	9.16	11.44	8.41	8.71	<0.01	pH units	TM73/PM11			
Sample Type	Clayey Sand	Sand	Sand	Sand	Clay	Clayey Sand	Sand	Sand	Clayey Sand	Clay		None	PM13/PM0			
Sample Colour	Medium Brown	Light Brown	Medium Grey	Medium Brown	Dark Brown	Dark Brown	Medium Brown	Light Brown	Medium Brown	Dark Brown		None	PM13/PM0			
Other Items	stones, loam	stones	stones	stones, brick	stones, brick	loam, sand, brick	brick, stones	stones	stones	stones, sand		None	PM13/PM0			

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact:
 JE Job No.: 16/3162

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	11	12	13	14	15	16	17	18	19	20	Please see attached notes for all abbreviations and acronyms		
Sample ID	CT6B	CT7	CT8	104	BH101	WS201	WS205	WS208	WS211	WS212			
Depth	1.20-1.65	3.00-3.45	1.20-1.65	0.40-0.60	1.00-1.20	1.00-1.20	2.00-2.38	1.20-1.30	1.20-1.65	1.50-1.70			
COC No / misc													
Containers	B	B	B	B	B	B	B	B	B	B			
Sample Date	<>	<>	<>	<>	<>	<>	<>	<>	<>	<>			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	08/01/2016	08/01/2016	08/01/2016	08/01/2016	08/01/2016	08/01/2016	08/01/2016	08/01/2016	08/01/2016	08/01/2016			
Total Sulphate BRE	0.03	0.04	0.15	0.02	<0.01	0.05	<0.01	0.06	0.07	2.26 ^{AA}	<0.01	%	TM50/PM29
Sulphate as SO4 (2:1 Ext) ^{#M}	0.0146	0.0211	0.0380	0.0372	0.0175	0.0134	0.1181	0.1543	0.1833	1.7608	<0.0015	g/l	TM38/PM20
Organic Matter	3.8	6.5	18.3	0.2	<0.2	14.1	<0.2	9.3	9.5	56.5	<0.2	%	TM21/PM24
pH ^{#M}	8.96	8.50	8.54	11.72	8.87	8.81	9.49	8.05	8.21	7.86	<0.01	pH units	TM73/PM11
Sample Type	Sand	Clay	Clayey Sand	Sand	Clay	Clay	Sand	Clayey Loam	Clay	Loam		None	PM13/PM0
Sample Colour	Light Brown	Dark Brown	Dark Brown	Medium Grey	Medium Brown	Dark Brown	Medium Brown	Dark Brown	Dark Brown	Dark Brown		None	PM13/PM0
Other Items	stones	sand, stones	stones, brick	stones	stones, sand	stones, clinker, brick	stones	stones, sand, brick	stones	stones, sand		None	PM13/PM0

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

JE Job No.: 16/3162

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. 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.

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.

WATERS

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

ISO17025 (UKAS) accreditation applies to surface water and groundwater and 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

Samples must be received in a condition appropriate to the requested analyses. All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. If this is not the case you will be informed and any test results that may be compromised highlighted on your deviating samples report.

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.

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.

Please include all sections of this report if it is reproduced

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS) accredited - UK.
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.
++	Result outside calibration range, results should be considered as indicative only and are not accredited.
*	Analysis subcontracted to a Jones Environmental 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
AA	x10 Dilution

JE Job No: 16/3162

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM13	A visual examination of the solid sample is carried out to ascertain sample make up, colour and any other inclusions. This is not a geotechnical description.	PM0	No preparation is required.			AR	
TM21	Modified USEPA 415.1. Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.			AD	Yes
TM38	Soluble Ion analysis using the Thermo Aquakem Photometric Automatic Analyser. Modified US EPA methods 325.2, 375.4, 365.2, 353.1, 354.1	PM20	Extraction of dried and ground samples with deionised water in a 2:1 water to solid ratio for anions. Extraction of as received samples with deionised water in a 2:1 water to solid ratio for ammoniacal nitrogen. Samples are extracted using an orbital shaker.	Yes	Yes	AD	Yes
TM50	Acid soluble sulphate analysed by ICP-OES	PM29	Dried and ground solid sample is boiled with dilute hydrochloric acid, the resulting liquor is then analysed.			AD	Yes
TM73	Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes	Yes	AR	No



Jones Environmental Laboratory

Registered Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA. UK

Unit 3 Deeside Point
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Attention :

Date : 14th January, 2016
Your reference : PN153428
Our reference : Test Report 16/3162 Batch 2
Location : Stockport Bus Station
Date samples received : 11th January, 2016
Status : Final report
Issue : 1

Thirteen samples were received for analysis on 11th January, 2016 of which thirteen 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.

Compiled By:

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:
JE Job No.: 16/3162

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	23	24	25	26	27	28	29	30	31	32	Please see attached notes for all abbreviations and acronyms		
Sample ID	BH102	BH105	WS203	WS204	WS206	WS209	WS211	WS214	WS214	WS219			
Depth	0.10-0.15	0.70-0.80	0.20-0.50	0.50-1.00	0.50-1.00	0.60-1.00	0.20-0.50	0.50-1.00	0.50-1.00	0.50-0.90			
COC No / misc								LIGHT	DARK				
Containers	B	B	B	B	B	B	B	B	B	B			
Sample Date	<>	<>	<>	<>	<>	<>	<>	<>	<>	<>			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	2	2	2	2	2	2	2	2	2	2			
Date of Receipt	11/01/2016	11/01/2016	11/01/2016	11/01/2016	11/01/2016	11/01/2016	11/01/2016	11/01/2016	11/01/2016	11/01/2016	LOD/LOR	Units	Method No.
Total Sulphate BRE	0.26	0.18	0.02	0.06	0.04	0.04	0.06	0.03	0.03	0.02	<0.01	%	TM50/PM29
Sulphate as SO ₄ (2:1 Ext) ^{#M}	<0.0015	0.0149	0.0185	0.0269	0.0622	0.0500	0.0917	0.0504	0.0302	0.0415	<0.0015	g/l	TM38/PM20
Organic Matter	<0.2	<0.2	3.0	4.4	2.9	14.8	30.9	12.1	15.1	<0.2	<0.2	%	TM21/PM24
pH ^{#M}	12.13	12.40	8.74	8.68	8.66	9.14	8.43	8.79	8.74	11.47	<0.01	pH units	TM73/PM11
Sample Type	Sand	Sand	Loamy Sand	Loamy Sand	Loamy Sand	Loamy Sand	Loamy Sand	Loamy Sand	Loamy Sand	Sand		None	PM13/PM0
Sample Colour	Light Brown	Light Brown	Dark Brown	Medium Brown	Dark Brown	Dark Brown	Dark Brown	Dark Brown	Dark Brown	Light Brown		None	PM13/PM0
Other Items	stones	stones	stones	stones	stones	stones	stones	stones	stones	stones		None	PM13/PM0

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:
JE Job No.: 16/3162

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	33	34	35																																						
Sample ID	WS220	WS223	WS224																																						
Depth	0.20-0.50	0.50-1.00	0.50-1.00																																						
COC No / misc																																									
Containers	B	B	B																																						
Sample Date	<>	<>	<>																																						
Sample Type	Soil	Soil	Soil																																						
Batch Number	2	2	2																																						
Date of Receipt	11/01/2016	11/01/2016	11/01/2016																																						
Total Sulphate BRE	0.26	0.09	0.03																																						
Sulphate as SO4 (2:1 Ext) ^{#M}	0.3102	0.0346	0.0210																																						
Organic Matter	5.2	<0.2	2.4																																						
pH ^{#M}	11.84	12.26	8.52																																						
Sample Type	Loamy Sand	Sand	Loam																																						
Sample Colour	Dark Brown	Light Brown	Dark Brown																																						
Other Items	stones	stones	stones																																						

Please see attached notes for all abbreviations and acronyms

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

JE Job No.: 16/3162

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. 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.

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.

WATERS

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

ISO17025 (UKAS) accreditation applies to surface water and groundwater and 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

Samples must be received in a condition appropriate to the requested analyses. All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. If this is not the case you will be informed and any test results that may be compromised highlighted on your deviating samples report.

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.

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.

Please include all sections of this report if it is reproduced

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS) accredited - UK.
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.
++	Result outside calibration range, results should be considered as indicative only and are not accredited.
*	Analysis subcontracted to a Jones Environmental 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

JE Job No: 16/3162

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM13	A visual examination of the solid sample is carried out to ascertain sample make up, colour and any other inclusions. This is not a geotechnical description.	PM0	No preparation is required.			AR	
TM21	Modified USEPA 415.1. Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.			AD	Yes
TM38	Soluble Ion analysis using the Thermo Aquakem Photometric Automatic Analyser. Modified US EPA methods 325.2, 375.4, 365.2, 353.1, 354.1	PM20	Extraction of dried and ground samples with deionised water in a 2:1 water to solid ratio for anions. Extraction of as received samples with deionised water in a 2:1 water to solid ratio for ammoniacal nitrogen. Samples are extracted using an orbital shaker.	Yes	Yes	AD	Yes
TM50	Acid soluble sulphate analysed by ICP-OES	PM29	Dried and ground solid sample is boiled with dilute hydrochloric acid, the resulting liquor is then analysed.			AD	Yes
TM73	Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes	Yes	AR	No



Jones Environmental Laboratory

Registered Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA. UK

Unit 3 Deeside Point
Zone 3
Deeside Industrial Park
Deeside
CH5 2UA

Geotechnics
Unit 1B
Borders Industrial Park
River Lane
Chester
Cheshire
CH4 8RJ

Tel: +44 (0) 1244 833780
Fax: +44 (0) 1244 833781

Attention :

Date : 3rd February, 2016
Your reference : PN153428
Our reference : Test Report 16/3162 Batch 4
Location : Stockport Bus Station
Date samples received : 27th January, 2016
Status : Final report
Issue : 1

One sample were received for analysis on 27th January, 2016 of which one 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.

Compiled By:

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact:
 JE Job No.: 16/3162

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	76																			
Sample ID	BH112																			
Depth	1.80																			
COC No / misc																				
Containers	T																			
Sample Date	27/01/2016																			
Sample Type	Soil																			
Batch Number	4																			
Date of Receipt	27/01/2016																			
											Please see attached notes for all abbreviations and acronyms									
Organic Matter	21.7																LOD/LOR	Units	Method No.	
																	<0.2	%	TM21/PM24	
Sample Type	Clay																		None	PM13/PM0
Sample Colour	Dark Brown																		None	PM13/PM0
Other Items	vegetation, sand																		None	PM13/PM0

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

JE Job No.: 16/3162

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. 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.

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.

WATERS

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

ISO17025 (UKAS) accreditation applies to surface water and groundwater and 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

Samples must be received in a condition appropriate to the requested analyses. All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. If this is not the case you will be informed and any test results that may be compromised highlighted on your deviating samples report.

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.

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.

Please include all sections of this report if it is reproduced

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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.
++	Result outside calibration range, results should be considered as indicative only and are not accredited.
*	Analysis subcontracted to a Jones Environmental approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
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ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range

JE Job No: 16/3162

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM13	A visual examination of the solid sample is carried out to ascertain sample make up, colour and any other inclusions. This is not a geotechnical description.	PM0	No preparation is required.			AR	
TM21	Modified USEPA 415.1. Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.			AD	Yes

Geotechnics Limited,
The Geotechnical Centre,
Unit 1 Borders Ind. Est
River Lane, SALTNEY,
Chester,
CH4 8RJ

Date: 12 February 2016
Test Report Ref: STR 447282

Order No: AUTH-ON14007
Page 1 of 2

Contract: PN153428 - Stockport Bus Staion

LABORATORY TEST REPORT

TEST REQUIREMENTS: To determine the Uniaxial Compressive Strength in accordance with
ISRM Guidelines

SAMPLE DETAILS:

Certificate of sampling received:	No
Laboratory Ref. No:	S56524
Client Ref. :	BH105 - 13-13.34
Date and Time of Sampling:	Unknown
Date of Receipt at Lab:	13/01/2016
Date of Start of Test:	10/02/2016
Sampling Location:	13-13.34
Name of Source:	Unknown
Method of Sampling:	Unknown
Sampled By:	Client
Material Description:	Rock Core
Target Specification:	N/A

RESULTS:

See attached

Certificate
Prepared by:-

Approved by: -

Job Coordinator

Technical Manager

Test Report Ref: STR 447282 - Page 2 of 2

BH	Core Diameter (mm)	Height/ Diameter Ratio	Uniaxial compressive strength (MPa)	Mode of Failure	EN ISO 14689-1 Term	Water content (%)
BH105 13.0-13.34	84.5	2:1	12	N	Weak	11.9
BH108 14.35-14.62	85	1.2:1	11	N	Weak	12.7
BH108 17.3-17.58	84	1.1:1	5	N	Weak	14.1
BH108 19.0-19.4	85.7	1.8:1	4	N	Very Weak	12.6
BH109 9.4-9.6	84.9	1.4:1	4	N	Very Weak	14
BH109 12.3-12.65	85	1.1:1	6	N	Weak	16.1
BH109 19.7-19.9	84.7	1.4:1	8	N	Weak	15.6
BH112 6.5-6.8	85	1.12:1	9	N	Weak	11.7
BH112 9.6-9.8	85.2	1.2:1	4	N	Very Weak	12.2

Comments

- 1) The uniaxial compressive strength was carried out in accordance with ISRM guidelines.
- 2) Stress Rate: 0.7Mpa/s.

3)

EN ISO 14689-1 : 2003 Rock Strength Terms	
Compressive Strength mpa	Term
<1.0	Extremely Weak
1 to 5	Very Weak
5 to 25	Weak
25 to 50	Medium Strong
50 to 100	Strong
100 to 250	Very Strong
> 250	Extremely Strong

Geotechnics Limited,
The Geotechnical Centre,
Unit 1 Borders Ind. Est
River Lane, SALTNEY,
Chester,
CH4 8RJ

Date: 16th February 2016
Test Report Ref.: STR: 447280

Page 1 of 2

Order No:

LABORATORY TEST REPORT

TEST REQUIREMENTS: To determine the Point Load Index of Rock in accordance with
ISRM Guidelines

SAMPLE DETAILS:

Certificate of sampling received:	No
Laboratory Ref. No.:	S56524
Client Ref. No.:	BH103 - 13.2-13.39
Date and Time of Sampling:	Unknown
Date of Receipt at Lab.:	13/1/2016
Date of Start of Test.:	13/1/2016
Sampling Location:	BH103 - 13.2-13.39
Name of Source:	Unknown
Method of Sampling:	Unknown
Sampled By:	Client
Material Description:	Rock Core
Target Specification:	N/A

RESULTS:

See Attached

COMMENTS/ DEPARTURE FROM SPECIFIED PROCEDURE

The specimens were perpendicular to the axis of loading with respect to the existing planes of anisotropy.

– Assistant Laboratory Manager

Key :-

D	Always distance between platen contact points	D*D	= 4A/pi for axial (a) and irregular block (b) tests
W	Smallest width perpendicular to loading direction ie core diameter for axial tests. W = (W1 + W2)/2 for irregular blocks.	P	Load failure in KN
A	W*D minimum x-sectional area For axial or irregular block test 0.3W < D < W	Is	Uncorrected strength index
D*D	= D*D for diametral (d) tests	Is (50)	Point load strength index
		F	Size correction factor
		#	Test perpendicular to fabric
		//	Test parallel to fabric

Sample no	Sample type	Test type	D mm	W mm	P KN	A =W*D	D*D	Is	F	Is (50)	Approx. Compressive Strength (MPa)
*	*	*	*	*	*						
Axial, Block or Lump Tests											
1	Core	a	60	85	0.3	5100	6494	0.05	1.24	0.06	1.4
2											
3											
4											
5											
6											
7											
8											
9											
10											
										Mean	1.4

Geotechnics Limited,
The Geotechnical Centre,
Unit 1 Borders Ind. Est
River Lane, SALTNEY,
Chester,
CH4 8RJ

Date: 16th February 2016
Test Report Ref.: STR: 447281

Page 1 of 2

Order No:

LABORATORY TEST REPORT

TEST REQUIREMENTS: To determine the Point Load Index of Rock in accordance with
ISRM Guidelines

SAMPLE DETAILS:

Certificate of sampling received:	No
Laboratory Ref. No.:	S56524
Client Ref. No.:	BH105 - 7.1-7.29
Date and Time of Sampling:	Unknown
Date of Receipt at Lab.:	13/1/2016
Date of Start of Test.:	13/1/2016
Sampling Location:	BH105 - 7.1-7.29
Name of Source:	Unknown
Method of Sampling:	Unknown
Sampled By:	Client
Material Description:	Rock Core
Target Specification:	N/A

RESULTS:

See Attached

COMMENTS/ DEPARTURE FROM SPECIFIED PROCEDURE

The specimens were perpendicular to the axis of loading with respect to the existing planes of anisotropy.

– Assistant Laboratory Manager

Key :-

D	Always distance between platen contact points	D*D	= $4A/\pi$ for axial (a) and irregular block (b) tests
W	Smallest width perpendicular to loading direction ie core diameter for axial tests.	P	Load failure in KN
	W = $(W1 + W2)/2$ for irregular blocks.	Is	Uncorrected strength index
A	W*D minimum x-sectional area For axial or irregular block test $0.3W < D < W$	Is (50)	Point load strength index
D*D	= D*D for diametral (d) tests	F	Size correction factor
		#	Test perpendicular to fabric
		//	Test parallel to fabric

Sample no *	Sample type *	Test type *	D mm *	W mm *	P KN *	A =W*D	D*D	Is	F	Is (50)	Approx. Compressive Strength (MPa)
Axial, Block or Lump Tests											
1	Core	a	41	85	0.1	3485	4437	0.02	1.14	0.03	0.6
2											
3											
4											
5											
6											
7											
8											
9											
10											
										Mean	0.6

APPENDIX 12

Laboratory Test Results - Contamination



Jones Environmental Laboratory

Registered Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA. UK

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Unit 1B
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Cheshire
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Tel: +44 (0) 1244 833780
Fax: +44 (0) 1244 833781



Attention :

Date : 21st December, 2015

Your reference : PN153428

Our reference : Test Report 15/17326 Batch 1

Location : Stockport Bus Station

Date samples received : 3rd December, 2015

Status : Final report

Issue : 1

Twenty six samples were received for analysis on 3rd December, 2015 of which nine 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.

Compiled By:

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact:
 JE Job No.: 15/17326

Report : Solid
 Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	4-6	19-21	25-27	31-33	40-42	49-51	52-54	55-57	64-66			
Sample ID	BH101	BH102	WS219	WS201	BH104	BH112	BH112	WS208	WS206			
Depth	0.50-0.70	2.00	1.00	0.50	1.00-1.20	0.50	1.00	0.50	0.50			
COC No / misc												
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	30/11/2015	30/11/2015	01/12/2015	30/11/2015	02/12/2015	02/12/2015	02/12/2015	01/12/2015	02/12/2015			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1			
Date of Receipt	03/12/2015	03/12/2015	03/12/2015	03/12/2015	03/12/2015	03/12/2015	03/12/2015	03/12/2015	03/12/2015			
										LOD/LOR	Units	Method No.
Arsenic ^{#M}	1.5	1.9	1.2	NDP	5.3	1.2	NDP	2.5	NDP	<0.5	mg/kg	TM30/PM15
Arsenic	-	-	-	8.7	-	-	13.4	-	9.2	<0.5	mg/kg	TM30/PM62
Cadmium ^{#M}	25.0	4.2	9.6	NDP	0.4	5.7	NDP	0.4	NDP	<0.1	mg/kg	TM30/PM15
Cadmium	-	-	-	1.7	-	-	2.5	-	2.8	<0.1	mg/kg	TM30/PM62
Chromium ^{#M}	11.5	31.8	10.7	NDP	62.0	15.3	NDP	16.9	NDP	<0.5	mg/kg	TM30/PM15
Chromium	-	-	-	11.6	-	-	15.5	-	11.2	<0.5	mg/kg	TM30/PM62
Copper ^{#M}	17	13	13	NDP	15	13	NDP	13	NDP	<1	mg/kg	TM30/PM15
Copper	-	-	-	45	-	-	41	-	61	<1	mg/kg	TM30/PM62
Lead ^{#M}	73	39	40	NDP	28	29	NDP	23	NDP	<5	mg/kg	TM30/PM15
Lead	-	-	-	106	-	-	89	-	128	<5	mg/kg	TM30/PM62
Mercury ^{#M}	<0.1	<0.1	<0.1	NDP	<0.1	<0.1	NDP	<0.1	NDP	<0.1	mg/kg	TM30/PM15
Mercury	-	-	-	0.2	-	-	0.2	-	0.1	<0.1	mg/kg	TM30/PM62
Nickel ^{#M}	4.8	10.9	5.1	NDP	15.9	5.7	NDP	6.6	NDP	<0.7	mg/kg	TM30/PM15
Nickel	-	-	-	15.0	-	-	17.0	-	20.7	<0.7	mg/kg	TM30/PM62
Selenium ^{#M}	<1	<1	<1	NDP	<1	<1	NDP	<1	NDP	<1	mg/kg	TM30/PM15
Selenium	-	-	-	<1	-	-	<1	-	<1	<1	mg/kg	TM30/PM62
Vanadium	4	17	3	NDP	16	5	NDP	11	NDP	<1	mg/kg	TM30/PM15
Vanadium	-	-	-	16	-	-	22	-	24	<1	mg/kg	TM30/PM62
Water Soluble Boron ^{#M}	0.2	0.3	0.1	NDP	0.4	0.1	NDP	0.2	NDP	<0.1	mg/kg	TM74/PM32
Water Soluble Boron	-	-	-	0.2	-	-	0.7	-	0.5	<0.1	mg/kg	TM74/PM61
Zinc ^{#M}	50	44	44	NDP	82	26	NDP	35	NDP	<5	mg/kg	TM30/PM15
Zinc	-	-	-	157	-	-	55	-	168	<5	mg/kg	TM30/PM62
PAH MS												
Naphthalene ^{#M}	<0.04	-	<0.04	13.80 _{AA}	11.56 _{AA}	-	-	0.87	-	<0.04	mg/kg	TM4/PM8
Acenaphthylene	<0.03	-	<0.03	8.02 _{AA}	0.57 _{AA}	-	-	0.50	-	<0.03	mg/kg	TM4/PM8
Acenaphthene ^{#M}	<0.05	-	<0.05	11.58 _{AA}	11.61 _{AA}	-	-	1.38	-	<0.05	mg/kg	TM4/PM8
Fluorene ^{#M}	<0.04	-	<0.04	10.47 _{AA}	9.05 _{AA}	-	-	1.38	-	<0.04	mg/kg	TM4/PM8
Phenanthrene ^{#M}	<0.03	-	<0.03	70.79 _{AA}	63.86 _{AA}	-	-	8.30	-	<0.03	mg/kg	TM4/PM8
Anthracene #	<0.04	-	<0.04	23.29 _{AA}	14.68 _{AA}	-	-	3.03	-	<0.04	mg/kg	TM4/PM8
Fluoranthene ^{#M}	<0.03	-	<0.03	86.90 _{AA}	56.83 _{AA}	-	-	13.08	-	<0.03	mg/kg	TM4/PM8
Pyrene #	<0.03	-	<0.03	76.18 _{AA}	53.50 _{AA}	-	-	12.04	-	<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	<0.06	-	<0.06	35.32 _{AA}	22.09 _{AA}	-	-	5.66	-	<0.06	mg/kg	TM4/PM8
Chrysene ^{#M}	<0.02	-	<0.02	37.00 _{AA}	23.02 _{AA}	-	-	6.12	-	<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene ^{#M}	<0.07	-	<0.07	53.01 _{AA}	27.17 _{AA}	-	-	8.59	-	<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	<0.04	-	<0.04	37.68 _{AA}	19.40 _{AA}	-	-	5.45	-	<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene ^{#M}	<0.04	-	<0.04	21.16 _{AA}	9.29 _{AA}	-	-	3.35	-	<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	<0.04	-	<0.04	4.90 _{AA}	2.35 _{AA}	-	-	0.77	-	<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	<0.04	-	<0.04	19.26 _{AA}	9.17 _{AA}	-	-	3.12	-	<0.04	mg/kg	TM4/PM8
PAH 16 Total	<0.6	-	<0.6	509.4 _{AA}	334.2 _{AA}	-	-	73.6	-	<0.6	mg/kg	TM4/PM8
Benzo(b)fluoranthene	<0.05	-	<0.05	38.17 _{AA}	19.56 _{AA}	-	-	6.18	-	<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	<0.02	-	<0.02	14.84 _{AA}	7.61 _{AA}	-	-	2.41	-	<0.02	mg/kg	TM4/PM8
PAH Surrogate % Recovery	112	-	114	113 _{AA}	118 _{AA}	-	-	103	-	<0	%	TM4/PM8

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact:
 JE Job No.: 15/17326

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	4-6	19-21	25-27	31-33	40-42	49-51	52-54	55-57	64-66			
Sample ID	BH101	BH102	WS219	WS201	BH104	BH112	BH112	WS208	WS206			
Depth	0.50-0.70	2.00	1.00	0.50	1.00-1.20	0.50	1.00	0.50	0.50			
COC No / misc												
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	30/11/2015	30/11/2015	01/12/2015	30/11/2015	02/12/2015	02/12/2015	02/12/2015	01/12/2015	02/12/2015			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1			
Date of Receipt	03/12/2015	03/12/2015	03/12/2015	03/12/2015	03/12/2015	03/12/2015	03/12/2015	03/12/2015	03/12/2015			
										LOD/LOR	Units	Method No.
Methyl Tertiary Butyl Ether ^{#M}	-	<6	-	-	-	<6	<6	-	<6	<6	ug/kg	TM15/PM10
Benzene ^{#M}	-	<5	-	-	-	<5	<5	-	<5	<5	ug/kg	TM15/PM10
Toluene ^{#M}	-	<3	-	-	-	<3	<3	-	<3	<3	ug/kg	TM15/PM10
Ethylbenzene ^{#M}	-	<3	-	-	-	<3	<3	-	<3	<3	ug/kg	TM15/PM10
p/m-Xylene ^{#M}	-	<4	-	-	-	<4	<4	-	<4	<4	ug/kg	TM15/PM10
o-Xylene ^{#M}	-	<4	-	-	-	<4	<4	-	<4	<4	ug/kg	TM15/PM10
Surrogate Recovery Toluene D8	-	112	-	-	-	115	105	-	97	<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	-	127	-	-	-	136	95	-	97	<0	%	TM15/PM10
TPH CWG												
Aliphatics												
>C5-C6 ^{#M}	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C6-C8 ^{#M}	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C8-C10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	0.2	<0.1	<0.1	mg/kg	TM36/PM12
>C10-C12 ^{#M}	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM16
>C12-C16 ^{#M}	<4	<4	<4	<4	<4	<4	<4	6	<4	<4	mg/kg	TM5/PM16
>C16-C21 ^{#M}	<7	<7	<7	10	<7	<7	<7	19	<7	<7	mg/kg	TM5/PM16
>C21-C35 ^{#M}	<7	<7	<7	42	<7	<7	<7	105	42	<7	mg/kg	TM5/PM16
>C35-C44	<7	<7	<7	<7	<7	<7	<7	11	<7	<7	mg/kg	TM5/PM16
Total aliphatics C5-44	<26	<26	<26	52	<26	<26	<26	141	42	<26	mg/kg	TM5/TM36/PM16
Aromatics												
>C5-EC7	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC7-EC8	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC8-EC10 ^{#M}	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	<0.1	<0.1	mg/kg	TM36/PM12
>EC10-EC12	<0.2	<0.2	<0.2	3.7	<0.2	<0.2	<0.2	<0.2	0.6	<0.2	mg/kg	TM5/PM16
>EC12-EC16	<4	<4	<4	46	9	<4	6	14	13	<4	mg/kg	TM5/PM16
>EC16-EC21	<7	<7	<7	351	50	<7	35	110	113	<7	mg/kg	TM5/PM16
>EC21-EC35	<7	<7	<7	824	107	31	74	281	340	<7	mg/kg	TM5/PM16
>EC35-EC44	<7	<7	<7	92	11	<7	9	32	34	<7	mg/kg	TM5/PM16
Total aromatics C5-44	<26	<26	<26	1317	177	31	124	437	501	<26	mg/kg	TM5/TM36/PM16
Total aliphatics and aromatics(C5-44)	<52	<52	<52	1369	177	<52	124	578	543	<52	mg/kg	TM5/TM36/PM16
MTBE [#]	<5	-	<5	<5	<5	-	-	<5	-	<5	ug/kg	TM31/PM12
Benzene [#]	<5	-	<5	<5	30	-	-	35	-	<5	ug/kg	TM31/PM12
Toluene [#]	<5	-	<5	<5	<5	-	-	42	-	<5	ug/kg	TM31/PM12
Ethylbenzene [#]	<5	-	<5	<5	<5	-	-	22	-	<5	ug/kg	TM31/PM12
m/p-Xylene [#]	<5	-	<5	<5	<5	-	-	93	-	<5	ug/kg	TM31/PM12
o-Xylene [#]	<5	-	<5	<5	<5	-	-	70	-	<5	ug/kg	TM31/PM12
PCB 28 [#]	-	-	-	-	-	-	<5	-	<50 _{AB}	<5	ug/kg	TM17/PM8
PCB 52 [#]	-	-	-	-	-	-	<5	-	<50 _{AB}	<5	ug/kg	TM17/PM8
PCB 101 [#]	-	-	-	-	-	-	<5	-	<50 _{AB}	<5	ug/kg	TM17/PM8
PCB 118 [#]	-	-	-	-	-	-	<5	-	<50 _{AB}	<5	ug/kg	TM17/PM8
PCB 138 [#]	-	-	-	-	-	-	<5	-	<50 _{AB}	<5	ug/kg	TM17/PM8

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:
JE Job No.: 15/17326

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	4-6	19-21	25-27	31-33	40-42	49-51	52-54	55-57	64-66				
Sample ID	BH101	BH102	WS219	WS201	BH104	BH112	BH112	WS208	WS206				
Depth	0.50-0.70	2.00	1.00	0.50	1.00-1.20	0.50	1.00	0.50	0.50				
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T				
Sample Date	30/11/2015	30/11/2015	01/12/2015	30/11/2015	02/12/2015	02/12/2015	02/12/2015	01/12/2015	02/12/2015				
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil				
Batch Number	1	1	1	1	1	1	1	1	1				
Date of Receipt	03/12/2015	03/12/2015	03/12/2015	03/12/2015	03/12/2015	03/12/2015	03/12/2015	03/12/2015	03/12/2015				
											LOD/LOR	Units	Method No.
PCB 153 #	-	-	-	-	-	-	<5	-	<50 _{AB}		<5	ug/kg	TM17/PM8
PCB 180 #	-	-	-	-	-	-	<5	-	<50 _{AB}		<5	ug/kg	TM17/PM8
Total 7 PCBs #	-	-	-	-	-	-	<35	-	<350 _{AB}		<35	ug/kg	TM17/PM8
2-Chlorophenol	<10	<10	<10	<10	<10	-	<10	<10	<10		<10	ug/kg	TM16/PM8
Natural Moisture Content	4.3	10.4	2.1	NDP	9.3	2.6	NDP	4.0	NDP		<0.1	%	PM4/PM0
2-Methylphenol	<10	<10	<10	<10	146	-	<10	<10	<10		<10	ug/kg	TM16/PM8
2-Nitrophenol	<10	<10	<10	<10	<10	-	<10	<10	<10		<10	ug/kg	TM16/PM8
2,4-Dichlorophenol	<10	<10	<10	<10	<10	-	<10	<10	<10		<10	ug/kg	TM16/PM8
2,4-Dimethylphenol	<10	<10	<10	179	320	-	<10	<10	<10		<10	ug/kg	TM16/PM8
2,4,5-Trichlorophenol	<10	<10	<10	<10	<10	-	<10	<10	<10		<10	ug/kg	TM16/PM8
2,4,6-Trichlorophenol	<10	<10	<10	<10	<10	-	<10	<10	<10		<10	ug/kg	TM16/PM8
4-Chloro-3-methylphenol	<10	<10	<10	<10	<10	-	<10	<10	<10		<10	ug/kg	TM16/PM8
4-Methylphenol	<10	<10	<10	426	357	-	<10	<10	<10		<10	ug/kg	TM16/PM8
4-Nitrophenol	<10	<10	<10	<10	<10	-	<10	<10	<10		<10	ug/kg	TM16/PM8
Pentachlorophenol	<10	<10	<10	<10	<10	-	<10	<10	<10		<10	ug/kg	TM16/PM8
Phenol	<10	<10	<10	<10	198	-	<10	<10	<10		<10	ug/kg	TM16/PM8
Total Speciated Phenols MS	<10	<10	<10	605	1021	-	<10	<10	<10		<10	ug/kg	TM16/PM8
Total Cyanide #M	<0.5	<0.5	<0.5	1.8	<0.5	-	-	<0.5	<0.5		<0.5	mg/kg	TM89/PM45
Total Organic Carbon #	<0.02	0.24	0.07	NDP	0.87	-	-	0.78	-		<0.02	%	TM21/PM24
pH #M	9.42	9.38	9.90	8.79	9.77	11.23	8.48	10.50	8.79		<0.01	pH units	TM73/PM11
Sample Type	Clayey Sand	Clayey Sand	Sand	Clayey Sand	Sandy Loam	Sand	Clay	Loam	Loam			None	PM13/PM0
Sample Colour	Red	Medium Brown	Red	Medium Brown	Medium Brown	Light Brown	Dark Brown	Dark Brown	Dark Brown			None	PM13/PM0
Other Items	stones	stones	stones	stones and brick fragments	stones and brick fragments	stones	stones and brick fragments	stones	stones and brick fragments			None	PM13/PM0

Please see attached notes for all abbreviations and acronyms

Jones Environmental Laboratory

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact:
 JE Job No.: 15/17326

Report : CEN 10:1 1 Batch

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	19-21	52-54	64-66								Please see attached notes for all abbreviations and acronyms			
Sample ID	BH102	BH112	WS206											
Depth	2.00	1.00	0.50											
COC No / misc														
Containers	V J T	V J T	V J T											
Sample Date	30/11/2015	02/12/2015	02/12/2015											
Sample Type	Soil	Soil	Soil											
Batch Number	1	1	1											
Date of Receipt	03/12/2015	03/12/2015	03/12/2015									LOD/LOR	Units	Method No.
PCB 28	-	<0.1	<0.1									<0.1	ug/l	TM17/PM30
PCB 52	-	<0.1	<0.1									<0.1	ug/l	TM17/PM30
PCB 101	-	<0.1	<0.1									<0.1	ug/l	TM17/PM30
PCB 118	-	<0.1	<0.1									<0.1	ug/l	TM17/PM30
PCB 138	-	<0.1	<0.1									<0.1	ug/l	TM17/PM30
PCB 153	-	<0.1	<0.1									<0.1	ug/l	TM17/PM30
PCB 180	-	<0.1	<0.1									<0.1	ug/l	TM17/PM30
Total 7 PCBs	-	<0.7	<0.7									<0.7	ug/l	TM17/PM30
2-Chlorophenol	<0.5	<0.5	<0.5									<0.5	ug/l	TM16/PM30
2-Methylphenol	<0.5	<0.5	<0.5									<0.5	ug/l	TM16/PM30
2-Nitrophenol	<0.5	<0.5	<0.5									<0.5	ug/l	TM16/PM30
2,4-Dichlorophenol	<0.5	<0.5	<0.5									<0.5	ug/l	TM16/PM30
2,4-Dimethylphenol	<0.5	<0.5	<0.5									<0.5	ug/l	TM16/PM30
2,4,5-Trichlorophenol	<0.5	<0.5	<0.5									<0.5	ug/l	TM16/PM30
2,4,6-Trichlorophenol	<0.5	<0.5	<0.5									<0.5	ug/l	TM16/PM30
4-Chloro-3-methylphenol	<0.5	<0.5	<0.5									<0.5	ug/l	TM16/PM30
4-Methylphenol	<0.5	<0.5	<0.5									<0.5	ug/l	TM16/PM30
4-Nitrophenol	<0.5	<0.5	<0.5									<0.5	ug/l	TM16/PM30
Pentachlorophenol	<0.5	<0.5	<0.5									<0.5	ug/l	TM16/PM30
Phenol	<0.5	<0.5	<0.5									<0.5	ug/l	TM16/PM30
Total Speciated Phenols MS	<6	<6	<6									<6	ug/l	TM16/PM30
Total Cyanide #	<0.01	-	<0.01									<0.01	mg/l	TM89/PM0
Mass of raw test portion	0.0995	-	-										kg	NONE/PM17
Leachant Volume	0.89	-	-										l	NONE/PM17
Dissolved Organic Carbon	3	-	-									<2	mg/l	TM60/PM0
pH	9.49	8.26	8.59									<0.01	pH units	TM73/PM0

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:
JE Job No.: 15/17326

SVOC Report : Solid

J E Sample No.	19-21	52-54	64-66										
Sample ID	BH102	BH112	WS206										
Depth	2.00	1.00	0.50										
COC No / misc Containers	V J T	V J T	V J T										
Sample Date	30/11/2015	02/12/2015	02/12/2015										
Sample Type	Soil	Soil	Soil										
Batch Number	1	1	1										
Date of Receipt	03/12/2015	03/12/2015	03/12/2015										
											LOD/LOR	Units	Method No.
SVOC MS													
Phenols													
2-Chlorophenol ^{#M}	<10	<10	<10								<10	ug/kg	TM16/PM8
2-Methylphenol	<10	<10	<10								<10	ug/kg	TM16/PM8
2-Nitrophenol	<10	<10	<10								<10	ug/kg	TM16/PM8
2,4-Dichlorophenol ^{#M}	<10	<10	<10								<10	ug/kg	TM16/PM8
2,4-Dimethylphenol	<10	<10	<10								<10	ug/kg	TM16/PM8
2,4,5-Trichlorophenol	<10	<10	<10								<10	ug/kg	TM16/PM8
2,4,6-Trichlorophenol	<10	<10	<10								<10	ug/kg	TM16/PM8
4-Chloro-3-methylphenol	<10	<10	<10								<10	ug/kg	TM16/PM8
4-Methylphenol	<10	<10	<10								<10	ug/kg	TM16/PM8
4-Nitrophenol	<10	<10	<10								<10	ug/kg	TM16/PM8
Pentachlorophenol	<10	<10	<10								<10	ug/kg	TM16/PM8
Phenol ^{#M}	<10	<10	<10								<10	ug/kg	TM16/PM8
PAHs													
2-Chloronaphthalene ^{#M}	<10	<10	<10								<10	ug/kg	TM16/PM8
2-Methylnaphthalene ^{#M}	<10	176	2203								<10	ug/kg	TM16/PM8
Naphthalene	<10	284	3127								<10	ug/kg	TM16/PM8
Acenaphthylene	27	134	1644								<10	ug/kg	TM16/PM8
Acenaphthene	<10	495	2706								<10	ug/kg	TM16/PM8
Fluorene	<10	378	2715								<10	ug/kg	TM16/PM8
Phenanthrene ^{#M}	31	2855	16134								<10	ug/kg	TM16/PM8
Anthracene	13	982	4654								<10	ug/kg	TM16/PM8
Fluoranthene ^{#M}	40	4987	14340								<10	ug/kg	TM16/PM8
Pyrene ^{#M}	36	4930	20566								<10	ug/kg	TM16/PM8
Benzo(a)anthracene	49	2150	12171								<10	ug/kg	TM16/PM8
Chrysene	24	2446	10683								<10	ug/kg	TM16/PM8
Benzo(b)fluoranthene	60	3725	17494								<10	ug/kg	TM16/PM8
Benzo(a)pyrene	21	1942	9613								<10	ug/kg	TM16/PM8
Indeno(123cd)pyrene	<10	950	4953								<10	ug/kg	TM16/PM8
Dibenzo(ah)anthracene	<10	496	2124								<10	ug/kg	TM16/PM8
Benzo(ghi)perylene	16	1090	5790								<10	ug/kg	TM16/PM8
Benzo(b)fluoranthene	43	2682	12596								<10	ug/kg	TM16/PM8
Benzo(k)fluoranthene	17	1043	4898								<10	ug/kg	TM16/PM8
Phthalates													
Bis(2-ethylhexyl) phthalate	<100	<100	<100								<100	ug/kg	TM16/PM8
Butylbenzyl phthalate	<100	<100	<100								<100	ug/kg	TM16/PM8
Di-n-butyl phthalate	<100	<100	<100								<100	ug/kg	TM16/PM8
Di-n-Octyl phthalate	<100	<100	<100								<100	ug/kg	TM16/PM8
Diethyl phthalate	<100	<100	<100								<100	ug/kg	TM16/PM8
Dimethyl phthalate ^{#M}	<100	<100	<100								<100	ug/kg	TM16/PM8

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:
JE Job No.: 15/17326

SVOC Report : Solid

J E Sample No.				19-21	52-54	64-66										
Sample ID	BH102	BH112	WS206													
Depth	2.00	1.00	0.50													
COC No / misc Containers	V J T	V J T	V J T													
Sample Date	30/11/2015	02/12/2015	02/12/2015													
Sample Type	Soil	Soil	Soil													
Batch Number	1	1	1													
Date of Receipt	03/12/2015	03/12/2015	03/12/2015													
	LOD/LOR	Units	Method No.													
SVOC MS																
Other SVOCs																
1,2-Dichlorobenzene	<10	<10	<10								<10	ug/kg	TM16/PM8			
1,2,4-Trichlorobenzene #M	<10	<10	<10								<10	ug/kg	TM16/PM8			
1,3-Dichlorobenzene	<10	<10	<10								<10	ug/kg	TM16/PM8			
1,4-Dichlorobenzene	<10	<10	<10								<10	ug/kg	TM16/PM8			
2-Nitroaniline	<10	<10	<10								<10	ug/kg	TM16/PM8			
2,4-Dinitrotoluene	<10	<10	<10								<10	ug/kg	TM16/PM8			
2,6-Dinitrotoluene	<10	<10	<10								<10	ug/kg	TM16/PM8			
3-Nitroaniline	<10	<10	<10								<10	ug/kg	TM16/PM8			
4-Bromophenylphenylether #M	<10	<10	<10								<10	ug/kg	TM16/PM8			
4-Chloroaniline	<10	<10	<10								<10	ug/kg	TM16/PM8			
4-Chlorophenylphenylether	<10	<10	<10								<10	ug/kg	TM16/PM8			
4-Nitroaniline	<10	<10	<10								<10	ug/kg	TM16/PM8			
Azobenzene	<10	<10	<10								<10	ug/kg	TM16/PM8			
Bis(2-chloroethoxy)methane	<10	<10	<10								<10	ug/kg	TM16/PM8			
Bis(2-chloroethyl)ether	<10	<10	<10								<10	ug/kg	TM16/PM8			
Carbazole	<10	221	1095								<10	ug/kg	TM16/PM8			
Dibenzofuran #M	<10	272	1770								<10	ug/kg	TM16/PM8			
Hexachlorobenzene	<10	<10	<10								<10	ug/kg	TM16/PM8			
Hexachlorobutadiene #M	<10	<10	<10								<10	ug/kg	TM16/PM8			
Hexachlorocyclopentadiene	<10	<10	<10								<10	ug/kg	TM16/PM8			
Hexachloroethane	<10	<10	<10								<10	ug/kg	TM16/PM8			
Isophorone #M	<10	<10	<10								<10	ug/kg	TM16/PM8			
N-nitrosodi-n-propylamine #M	<10	<10	<10								<10	ug/kg	TM16/PM8			
Nitrobenzene #M	<10	<10	<10								<10	ug/kg	TM16/PM8			
Surrogate Recovery 2-Fluorobiphenyl	89	96	105								<0	%	TM16/PM8			
Surrogate Recovery p-Terphenyl-d14	107	112	109								<0	%	TM16/PM8			

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact:
 JE Job No.: 15/17326

SVOC Report : CEN 10:1 1 Batch

J E Sample No.	19-21	52-54	64-66											
Sample ID	BH102	BH112	WS206											
Depth	2.00	1.00	0.50											
COC No / misc														
Containers	V J T	V J T	V J T											
Sample Date	30/11/2015	02/12/2015	02/12/2015											
Sample Type	Soil	Soil	Soil											
Batch Number	1	1	1											
Date of Receipt	03/12/2015	03/12/2015	03/12/2015											
											LOD/LOR	Units	Method No.	
SVOC MS														
Phenols														
2-Chlorophenol	<1	<1	<1								<1	ug/l	TM16/PM30	
2-Methylphenol	<0.5	<0.5	<0.5								<0.5	ug/l	TM16/PM30	
2-Nitrophenol	<0.5	<0.5	<0.5								<0.5	ug/l	TM16/PM30	
2,4-Dichlorophenol	<0.5	<0.5	<0.5								<0.5	ug/l	TM16/PM30	
2,4-Dimethylphenol	<1	<1	<1								<1	ug/l	TM16/PM30	
2,4,5-Trichlorophenol	<0.5	<0.5	<0.5								<0.5	ug/l	TM16/PM30	
2,4,6-Trichlorophenol	<1	<1	<1								<1	ug/l	TM16/PM30	
4-Chloro-3-methylphenol	<0.5	<0.5	<0.5								<0.5	ug/l	TM16/PM30	
4-Methylphenol	<1	<1	<1								<1	ug/l	TM16/PM30	
4-Nitrophenol	<10	<10	<10								<10	ug/l	TM16/PM30	
Pentachlorophenol	<1	<1	<1								<1	ug/l	TM16/PM30	
Phenol	<1	<1	<1								<1	ug/l	TM16/PM30	
PAHs														
2-Chloronaphthalene	<1	<1	<1								<1	ug/l	TM16/PM30	
2-Methylnaphthalene	<1	<1	<1								<1	ug/l	TM16/PM30	
Naphthalene	<1	<1	<1								<1	ug/l	TM16/PM30	
Acenaphthylene	<0.5	<0.5	<0.5								<0.5	ug/l	TM16/PM30	
Acenaphthene	<1	<1	<1								<1	ug/l	TM16/PM30	
Fluorene	<0.5	<0.5	<0.5								<0.5	ug/l	TM16/PM30	
Phenanthrene	<0.5	<0.5	<0.5								<0.5	ug/l	TM16/PM30	
Anthracene	<0.5	<0.5	<0.5								<0.5	ug/l	TM16/PM30	
Fluoranthene	<0.5	<0.5	<0.5								<0.5	ug/l	TM16/PM30	
Pyrene	<0.5	<0.5	<0.5								<0.5	ug/l	TM16/PM30	
Benzo(a)anthracene	<0.5	<0.5	<0.5								<0.5	ug/l	TM16/PM30	
Chrysene	<0.5	<0.5	<0.5								<0.5	ug/l	TM16/PM30	
Benzo(bk)fluoranthene	<1	<1	<1								<1	ug/l	TM16/PM30	
Benzo(a)pyrene	<1	<1	<1								<1	ug/l	TM16/PM30	
Indeno(123cd)pyrene	<1	<1	<1								<1	ug/l	TM16/PM30	
Dibenzo(ah)anthracene	<0.5	<0.5	<0.5								<0.5	ug/l	TM16/PM30	
Benzo(ghi)perylene	<0.5	<0.5	<0.5								<0.5	ug/l	TM16/PM30	
Phthalates														
Bis(2-ethylhexyl) phthalate	<5	<5	<5								<5	ug/l	TM16/PM30	
Butylbenzyl phthalate	<1	<1	<1								<1	ug/l	TM16/PM30	
Di-n-butyl phthalate	<1.5	<1.5	<1.5								<1.5	ug/l	TM16/PM30	
Di-n-Octyl phthalate	<1	<1	<1								<1	ug/l	TM16/PM30	
Diethyl phthalate	<1	<1	<1								<1	ug/l	TM16/PM30	
Dimethyl phthalate	<1	<1	<1								<1	ug/l	TM16/PM30	

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact:
 JE Job No.: 15/17326

VOC Report : CEN 10:1 1 Batch

J E Sample No.	19-21	52-54	64-66											Please see attached notes for all abbreviations and acronyms		
Sample ID	BH102	BH112	WS206											LOD/LOR	Units	Method No.
Depth	2.00	1.00	0.50													
COC No / misc Containers	V J T	V J T	V J T													
Sample Date	30/11/2015	02/12/2015	02/12/2015													
Sample Type	Soil	Soil	Soil													
Batch Number	1	1	1													
Date of Receipt	03/12/2015	03/12/2015	03/12/2015													
VOC MS																
Dichlorodifluoromethane	<2	<2	<2											<2	ug/l	TM15/PM69
Methyl Tertiary Butyl Ether	<1	<1	<1											<1	ug/l	TM15/PM69
Chloromethane	<3	<3	<3											<3	ug/l	TM15/PM69
Vinyl Chloride	<0.1	<0.1	<0.1											<0.1	ug/l	TM15/PM69
Bromomethane	<1	<1	<1											<1	ug/l	TM15/PM69
Chloroethane	<3	<3	<3											<3	ug/l	TM15/PM69
Trichlorofluoromethane	<3	<3	<3											<3	ug/l	TM15/PM69
1,1-Dichloroethene (1,1 DCE)	<3	<3	<3											<3	ug/l	TM15/PM69
Dichloromethane (DCM)	<3	<3	<3											<3	ug/l	TM15/PM69
trans-1-2-Dichloroethene	<3	<3	<3											<3	ug/l	TM15/PM69
1,1-Dichloroethane	<3	<3	<3											<3	ug/l	TM15/PM69
cis-1-2-Dichloroethene	<3	<3	<3											<3	ug/l	TM15/PM69
2,2-Dichloropropane	<1	<1	<1											<1	ug/l	TM15/PM69
Bromochloromethane	<2	<2	<2											<2	ug/l	TM15/PM69
Chloroform	<2	<2	<2											<2	ug/l	TM15/PM69
1,1,1-Trichloroethane	<2	<2	<2											<2	ug/l	TM15/PM69
1,1-Dichloropropene	<3	<3	<3											<3	ug/l	TM15/PM69
Carbon tetrachloride	<2	<2	<2											<2	ug/l	TM15/PM69
1,2-Dichloroethane	<2	<2	<2											<2	ug/l	TM15/PM69
Benzene	<1	<1	<1											<1	ug/l	TM15/PM69
Trichloroethene (TCE)	<3	<3	<3											<3	ug/l	TM15/PM69
1,2-Dichloropropane	<2	<2	<2											<2	ug/l	TM15/PM69
Dibromomethane	<3	<3	<3											<3	ug/l	TM15/PM69
Bromodichloromethane	<2	<2	<2											<2	ug/l	TM15/PM69
cis-1-3-Dichloropropene	<2	<2	<2											<2	ug/l	TM15/PM69
Toluene	<2	<2	<2											<2	ug/l	TM15/PM69
trans-1-3-Dichloropropene	<2	<2	<2											<2	ug/l	TM15/PM69
1,1,2-Trichloroethane	<2	<2	<2											<2	ug/l	TM15/PM69
Tetrachloroethene (PCE)	<3	<3	<3											<3	ug/l	TM15/PM69
1,3-Dichloropropane	<2	<2	<2											<2	ug/l	TM15/PM69
Dibromochloromethane	<2	<2	<2											<2	ug/l	TM15/PM69
1,2-Dibromoethane	<2	<2	<2											<2	ug/l	TM15/PM69
Chlorobenzene	<2	<2	<2											<2	ug/l	TM15/PM69
1,1,1,2-Tetrachloroethane	<2	<2	<2											<2	ug/l	TM15/PM69
Ethylbenzene	<2	<2	<2											<2	ug/l	TM15/PM69
p/m-Xylene	<3	<3	<3											<3	ug/l	TM15/PM69
o-Xylene	<2	<2	<2											<2	ug/l	TM15/PM69
Styrene	<2	<2	<2											<2	ug/l	TM15/PM69
Bromoform	<2	<2	<2											<2	ug/l	TM15/PM69
Isopropylbenzene	<3	<3	<3											<3	ug/l	TM15/PM69
1,1,2,2-Tetrachloroethane	<4	<4	<4											<4	ug/l	TM15/PM69
Bromobenzene	<2	<2	<2											<2	ug/l	TM15/PM69
1,2,3-Trichloropropane	<3	<3	<3											<3	ug/l	TM15/PM69
Propylbenzene	<3	<3	<3											<3	ug/l	TM15/PM69
2-Chlorotoluene	<3	<3	<3											<3	ug/l	TM15/PM69
1,3,5-Trimethylbenzene	<3	<3	<3											<3	ug/l	TM15/PM69
4-Chlorotoluene	<3	<3	<3											<3	ug/l	TM15/PM69
tert-Butylbenzene	<3	<3	<3											<3	ug/l	TM15/PM69
1,2,4-Trimethylbenzene	<3	<3	<3											<3	ug/l	TM15/PM69
sec-Butylbenzene	<3	<3	<3											<3	ug/l	TM15/PM69
4-Isopropyltoluene	<3	<3	<3											<3	ug/l	TM15/PM69
1,3-Dichlorobenzene	<3	<3	<3											<3	ug/l	TM15/PM69
1,4-Dichlorobenzene	<3	<3	<3											<3	ug/l	TM15/PM69
n-Butylbenzene	<3	<3	<3											<3	ug/l	TM15/PM69
1,2-Dichlorobenzene	<3	<3	<3											<3	ug/l	TM15/PM69
1,2-Dibromo-3-chloropropane	<2	<2	<2											<2	ug/l	TM15/PM69
1,2,4-Trichlorobenzene	<3	<3	<3											<3	ug/l	TM15/PM69
Hexachlorobutadiene	<3	<3	<3											<3	ug/l	TM15/PM69
Naphthalene	<2	<2	<2											<2	ug/l	TM15/PM69
1,2,3-Trichlorobenzene	<3	<3	<3											<3	ug/l	TM15/PM69
Surrogate Recovery Toluene D8	108	108	109											<0	%	TM15/PM69
Surrogate Recovery 4-Bromofluorobenzene	88	90	88											<0	%	TM15/PM69

Please include all sections of this report if it is reproduced

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:

Note:

Analysis was carried out in accordance with our documented in-house methods PM042 and TM065 and HSG 248 by Stereo and Polarised Light Microscopy using Dispersion Staining Techniques and is covered by our UKAS accreditation. Samples are retained for not less than 6 months from the date of analysis unless specifically requested.

Opinions lie outside the scope of our UKAS accreditation.

Where the sample is not taken by a Jones Environmental Laboratory consultant, Jones Environmental Laboratory cannot be responsible for inaccurate or unrepresentative sampling.

Any questionable sample will automatically be assumed to have breached the Waste Limit and further testing may be required.

Signed on behalf of Jones Environmental Laboratory:

Asbestos Team Leader

J E Job No.	Batch	Sample ID	Depth	J E Sample No.	Date Of Analysis	Analysis	Result
15/17326	1	BH101	0.50-0.70	5	11/12/2015	Mass of Dry Sample	51.4 (g)
					15/12/2015	General Description (Bulk Analysis)	Soil-Silt/Brick/Stone
					15/12/2015	Asbestos Containing Material	None
					15/12/2015	Asbestos Containing Material (2)	None
					15/12/2015	Asbestos Screen	NAD
					15/12/2015	Asbestos Screen (2)	NAD
					15/12/2015	Asbestos Level	NAD
					15/12/2015	Waste Limit	<0.1%
15/17326	1	BH102	2.00	20	11/12/2015	Mass of Dry Sample	53.2 (g)
					15/12/2015	General Description (Bulk Analysis)	Soil-Silt/Clay/Brick/Stone
					15/12/2015	Asbestos Containing Material	None
					15/12/2015	Asbestos Containing Material (2)	None
					15/12/2015	Asbestos Screen	NAD
					15/12/2015	Asbestos Screen (2)	NAD
					15/12/2015	Asbestos Level	NAD
					15/12/2015	Waste Limit	<0.1%
15/17326	1	WS201	0.50	32	11/12/2015	Mass of Dry Sample	47.5 (g)
					15/12/2015	General Description (Bulk Analysis)	Soil-Silt/Clay/Brick/Stone
					15/12/2015	Asbestos Containing Material	Fibre Bundles
					15/12/2015	Asbestos Screen	Chrysotile
					15/12/2015	Asbestos Level	Quantifiable
					15/12/2015	Waste Limit	<0.1%
15/17326	1	BH112	1.00	53	11/12/2015	Mass of Dry Sample	48.9 (g)
					15/12/2015	General Description (Bulk Analysis)	Soil-Silt/Clay/Brick/Stone
					15/12/2015	Asbestos Containing Material	Fibre Bundles
					15/12/2015	Asbestos Screen	Chrysotile
					15/12/2015	Asbestos Level	Quantifiable
					15/12/2015	Waste Limit	<0.1%
15/17326	1	WS208	0.50	56	11/12/2015	Mass of Dry Sample	57.3 (g)
					15/12/2015	General Description (Bulk Analysis)	Soil-Silt/Sand/Brick/Stone
					15/12/2015	Asbestos Containing Material	None
					15/12/2015	Asbestos Containing Material (2)	None
					15/12/2015	Asbestos Screen	NAD
					15/12/2015	Asbestos Screen (2)	NAD
					15/12/2015	Asbestos Level	NAD

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact:

J E Job No.	Batch	Sample ID	Depth	J E Sample No.	Date Of Analysis	Analysis	Result
15/17326	1	WS208	0.50	56	15/12/2015	Waste Limit	<0.1%
15/17326	1	WS206	0.50	65	11/12/2015	Mass of Dry Sample	55.1 (g)
					15/12/2015	General Description (Bulk Analysis)	Soil-Silt/Clay/Brick/Stone
					15/12/2015	Asbestos Containing Material	Fibre Bundles
					15/12/2015	Asbestos Screen	Chrysotile
					15/12/2015	Asbestos Level	Quantifiable
					15/12/2015	Waste Limit	<0.1%

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

JE Job No.: 15/17326

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. 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.

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.

WATERS

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

ISO17025 (UKAS) accreditation applies to surface water and groundwater and 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

Samples must be received in a condition appropriate to the requested analyses. All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. If this is not the case you will be informed and any test results that may be compromised highlighted on your deviating samples report.

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.

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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ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS) accredited - UK.
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.
++	Result outside calibration range, results should be considered as indicative only and are not accredited.
*	Analysis subcontracted to a Jones Environmental 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
AA	x5 Dilution
AB	x10 Dilution

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.				
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes	Yes	AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	Yes
TM5/TM36	TM005: Modified USEPA 8015B. Determination of solvent Extractable Petroleum Hydrocarbons (EPH) including column fractionation in the carbon range of C10-35 into aliphatic and aromatic fractions by GC-FID. TM036: Modified USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-10 by headspace GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5/TM36	TM005: Modified USEPA 8015B. Determination of solvent Extractable Petroleum Hydrocarbons (EPH) including column fractionation in the carbon range of C10-35 into aliphatic and aromatic fractions by GC-FID. TM036: Modified USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-10 by headspace GC-FID.	PM30/PM69	PM030: Eluate samples are extracted with solvent using a magnetic stirrer to create a vortex.PM069: One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM13	A visual examination of the solid sample is carried out to ascertain sample make up, colour and any other inclusions. This is not a geotechnical description.	PM0	No preparation is required.			AR	
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM69	Modified BS EN 12457 method. One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM69	Modified BS EN 12457 method. One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	Yes
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes
TM17	Modified US EPA method 8270. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM17	Modified US EPA method 8270. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM21	Modified USEPA 415.1. Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.	Yes		AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM14	Analysis of waters and leachates for metals by ICP OES. Samples are filtered for dissolved metals and acidified if required.	Yes		AR	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes	Yes	AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM62	Acid digestion of as received solid samples using Aqua Regia refluxed at 112.5 °C.			AR	Yes
TM31	Modified USEPA 8015B. Determination of Methylterbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM31	Modified USEPA 8015B. Determination of Methylterbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM69	Modified BS EN 12457 method. One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	Yes
TM60	Modified USEPA 9060. Determination of TOC by calculation from Total Carbon and Inorganic Carbon using a TOC analyser, the carbon in the sample is converted to CO2 and then passed through a non-dispersive infrared gas analyser (NDIR).	PM0	No preparation is required.			AR	Yes
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.			AR	
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.	Yes		AR	
TM73	Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.	PM0	No preparation is required.			AR	Yes
TM73	Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes	Yes	AR	No
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM32	Hot water soluble boron is extracted from dried and ground samples using a 20:1 ratio.	Yes	Yes	AD	Yes
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM61	As received solid samples are extracted with hot water in a 20:1 ratio of water to soil ready for analysis by ICP.			AR	Yes
TM89	Modified USEPA method OIA-1667. Determination of cyanide by Flow Injection Analyser.	PM0	No preparation is required.	Yes		AR	Yes
TM89	Modified USEPA method OIA-1667. Determination of cyanide by Flow Injection Analyser.	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide and Thiocyanate analysis.	Yes	Yes	AR	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
NONE	No Method Code	PM17	Modified method EN12457-2 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.				
NONE	No Method Code	PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.			AR	



Jones Environmental Laboratory

Registered Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA. UK

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Attention :

Date : 21st December, 2015

Your reference : PN153428

Our reference : Test Report 15/17326 Batch 2

Location : Stockport Bus Station

Date samples received : 4th December, 2015

Status : Final report

Issue : 1

Sixteen samples were received for analysis on 4th December, 2015 of which three 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.

Compiled By:

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact:
 JE Job No.: 15/17326

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	106-108	115-117	121-123								Please see attached notes for all abbreviations and acronyms		
Sample ID	WS204	WS220	WS220										
Depth	0.20	0.20	1.00										
COC No / misc													
Containers	V J T	V J T	V J T										
Sample Date	03/12/2015	03/12/2015	03/12/2015										
Sample Type	Soil	Soil	Soil										
Batch Number	2	2	2										
Date of Receipt	04/12/2015	04/12/2015	04/12/2015										
Arsenic ^{#M}	10.0	6.3	39.2								<0.5	mg/kg	TM30/PM15
Cadmium ^{#M}	0.5	0.2	0.1								<0.1	mg/kg	TM30/PM15
Chromium ^{#M}	36.2	41.8	53.7								<0.5	mg/kg	TM30/PM15
Copper ^{#M}	125	15	57								<1	mg/kg	TM30/PM15
Lead ^{#M}	188	68	148								<5	mg/kg	TM30/PM15
Mercury ^{#M}	<0.1	<0.1	<0.1								<0.1	mg/kg	TM30/PM15
Nickel ^{#M}	21.9	4.7	20.6								<0.7	mg/kg	TM30/PM15
Selenium ^{#M}	1	<1	1								<1	mg/kg	TM30/PM15
Vanadium	23	6	27								<1	mg/kg	TM30/PM15
Water Soluble Boron ^{#M}	0.2	<0.1	0.8								<0.1	mg/kg	TM74/PM32
Zinc ^{#M}	147	34	85								<5	mg/kg	TM30/PM15
PAH MS													
Naphthalene ^{#M}	0.61 ^{AA}	<0.04	0.09								<0.04	mg/kg	TM4/PM8
Acenaphthylene	0.53 ^{AA}	<0.03	0.10								<0.03	mg/kg	TM4/PM8
Acenaphthene ^{#M}	<0.50 ^{AA}	<0.05	<0.05								<0.05	mg/kg	TM4/PM8
Fluorene ^{#M}	<0.40 ^{AA}	<0.04	<0.04								<0.04	mg/kg	TM4/PM8
Phenanthrene ^{#M}	2.59 ^{AA}	0.06	0.17								<0.03	mg/kg	TM4/PM8
Anthracene [#]	0.89 ^{AA}	<0.04	0.10								<0.04	mg/kg	TM4/PM8
Fluoranthene ^{#M}	6.98 ^{AA}	0.14	0.37								<0.03	mg/kg	TM4/PM8
Pyrene [#]	6.34 ^{AA}	0.14	0.37								<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene [#]	3.67 ^{AA}	0.11	0.32								<0.06	mg/kg	TM4/PM8
Chrysene ^{#M}	4.02 ^{AA}	0.10	0.37								<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene ^{#M}	5.76 ^{AA}	0.15	0.69								<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene [#]	3.61 ^{AA}	0.10	0.41								<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene ^{#M}	2.73 ^{AA}	0.08	0.47								<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene [#]	0.69 ^{AA}	<0.04	0.08								<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene [#]	2.13 ^{AA}	0.08	0.41								<0.04	mg/kg	TM4/PM8
PAH 16 Total	40.6 ^{AA}	1.0	4.0								<0.6	mg/kg	TM4/PM8
Benzo(b)fluoranthene	4.15 ^{AA}	0.11	0.50								<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	1.61 ^{AA}	0.04	0.19								<0.02	mg/kg	TM4/PM8
PAH Surrogate % Recovery	122 ^{AA}	111	112								<0	%	TM4/PM8
Methyl Tertiary Butyl Ether ^{#M}	<6	<6	<6								<6	ug/kg	TM15/PM10
Benzene ^{#M}	<5	<5	<5								<5	ug/kg	TM15/PM10
Toluene ^{#M}	<3	<3	<3								<3	ug/kg	TM15/PM10
Ethylbenzene ^{#M}	<3	<3	<3								<3	ug/kg	TM15/PM10
p/m-Xylene ^{#M}	<4	<4	<4								<4	ug/kg	TM15/PM10
o-Xylene ^{#M}	<4	<4	<4								<4	ug/kg	TM15/PM10
Surrogate Recovery Toluene D8	100	107	114								<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	99	121	111								<0	%	TM15/PM10

Jones Environmental Laboratory

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:
JE Job No.: 15/17326

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

J E Sample No.	106-108	115-117	121-123									
Sample ID	WS204	WS220	WS220									
Depth	0.20	0.20	1.00									
COC No / misc												
Containers	V J T	V J T	V J T									
Sample Date	03/12/2015	03/12/2015	03/12/2015									
Sample Type	Soil	Soil	Soil									
Batch Number	2	2	2									
Date of Receipt	04/12/2015	04/12/2015	04/12/2015									
										LOD/LOR	Units	Method No.
TPH CWG												
Aliphatics												
>C5-C6 ^{#M}	<0.1	<0.1	<0.1							<0.1	mg/kg	TM36/PM12
>C6-C8 ^{#M}	<0.1	<0.1	<0.1							<0.1	mg/kg	TM36/PM12
>C8-C10	<0.1	<0.1	<0.1							<0.1	mg/kg	TM36/PM12
>C10-C12 ^{#M}	<0.2	<0.2	<0.2							<0.2	mg/kg	TM5/PM16
>C12-C16 ^{#M}	<4	<4	<4							<4	mg/kg	TM5/PM16
>C16-C21 ^{#M}	10	<7	<7							<7	mg/kg	TM5/PM16
>C21-C35 ^{#M}	97	<7	<7							<7	mg/kg	TM5/PM16
>C35-C44	<7	<7	<7							<7	mg/kg	TM5/PM16
Total aliphatics C5-44	107	<26	<26							<26	mg/kg	TM5/TM36/PM16
Aromatics												
>C5-EC7	<0.1	<0.1	<0.1							<0.1	mg/kg	TM36/PM12
>EC7-EC8	<0.1	<0.1	<0.1							<0.1	mg/kg	TM36/PM12
>EC8-EC10 ^{#M}	<0.1	<0.1	<0.1							<0.1	mg/kg	TM36/PM12
>EC10-EC12	<0.2	<0.2	<0.2							<0.2	mg/kg	TM5/PM16
>EC12-EC16	<4	<4	<4							<4	mg/kg	TM5/PM16
>EC16-EC21	68	<7	<7							<7	mg/kg	TM5/PM16
>EC21-EC35	349	<7	<7							<7	mg/kg	TM5/PM16
>EC35-EC44	39	<7	<7							<7	mg/kg	TM5/PM16
Total aromatics C5-44	456	<26	<26							<26	mg/kg	TM5/TM36/PM16
Total aliphatics and aromatics(C5-44)	563	<52	<52							<52	mg/kg	TM5/TM36/PM16
PCB 28 #	<50 ^{AA}	<5	<5							<5	ug/kg	TM17/PM8
PCB 52 #	<50 ^{AA}	<5	<5							<5	ug/kg	TM17/PM8
PCB 101 #	<50 ^{AA}	<5	<5							<5	ug/kg	TM17/PM8
PCB 118 #	<50 ^{AA}	<5	<5							<5	ug/kg	TM17/PM8
PCB 138 #	<50 ^{AA}	<5	<5							<5	ug/kg	TM17/PM8
PCB 153 #	<50 ^{AA}	<5	<5							<5	ug/kg	TM17/PM8
PCB 180 #	<50 ^{AA}	<5	<5							<5	ug/kg	TM17/PM8
Total 7 PCBs #	<350 ^{AA}	<35	<35							<35	ug/kg	TM17/PM8
2-Chlorophenol	<100 ^{AA}	<10	<10							<10	ug/kg	TM16/PM8
Natural Moisture Content	8.9	10.6	14.6							<0.1	%	PM4/PM0
2-Methylphenol	<100 ^{AA}	<10	<10							<10	ug/kg	TM16/PM8
2-Nitrophenol	<100 ^{AA}	<10	<10							<10	ug/kg	TM16/PM8
2,4-Dichlorophenol	<100 ^{AA}	<10	<10							<10	ug/kg	TM16/PM8
2,4-Dimethylphenol	<100 ^{AA}	<10	<10							<10	ug/kg	TM16/PM8
2,4,5-Trichlorophenol	<100 ^{AA}	<10	<10							<10	ug/kg	TM16/PM8
2,4,6-Trichlorophenol	<100 ^{AA}	<10	<10							<10	ug/kg	TM16/PM8
4-Chloro-3-methylphenol	<100 ^{AA}	<10	<10							<10	ug/kg	TM16/PM8
4-Methylphenol	<100 ^{AA}	<10	<10							<10	ug/kg	TM16/PM8

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact:
 JE Job No.: 15/17326

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	106-108	115-117	121-123								LOD/LOR	Units	Method No.
Sample ID	WS204	WS220	WS220										
Depth	0.20	0.20	1.00										
COC No / misc													
Containers	V J T	V J T	V J T										
Sample Date	03/12/2015	03/12/2015	03/12/2015										
Sample Type	Soil	Soil	Soil										
Batch Number	2	2	2										
Date of Receipt	04/12/2015	04/12/2015	04/12/2015										
4-Nitrophenol	<100 ^{AA}	<10	<10								<10	ug/kg	TM16/PM8
Pentachlorophenol	<100 ^{AA}	<10	<10								<10	ug/kg	TM16/PM8
Phenol	<100 ^{AA}	<10	<10								<10	ug/kg	TM16/PM8
Total Speciated Phenols MS	<100 ^{AA}	<10	<10								<10	ug/kg	TM16/PM8
Total Organic Carbon #	5.87	0.30	1.40								<0.02	%	TM21/PM24
pH ^{##}	8.70	9.10	8.60								<0.01	pH units	TM73/PM11
Sample Type	Sandy Loam	Sandy Loam	Loam									None	PM13/PM0
Sample Colour	Medium Brown	Medium Brown	Dark Brown									None	PM13/PM0
Other Items	stones	stones	stones									None	PM13/PM0

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact:
 JE Job No.: 15/17326

Report : CEN 10:1 1 Batch

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	106-108	115-117	121-123							Please see attached notes for all abbreviations and acronyms					
Sample ID	WS204	WS220	WS220												
Depth	0.20	0.20	1.00												
COC No / misc															
Containers	V J T	V J T	V J T												
Sample Date	03/12/2015	03/12/2015	03/12/2015												
Sample Type	Soil	Soil	Soil												
Batch Number	2	2	2												
Date of Receipt	04/12/2015	04/12/2015	04/12/2015										LOD/LOR	Units	Method No.
Dissolved Arsenic #	7.2	12.4	79.1										<2.5	ug/l	TM30/PM14
Dissolved Boron #	<12	<12	28							<12	ug/l	TM30/PM14			
Dissolved Cadmium #	<0.5	<0.5	<0.5							<0.5	ug/l	TM30/PM14			
Dissolved Chromium #	<1.5	3.9	11.9							<1.5	ug/l	TM30/PM14			
Dissolved Copper #	<7	<7	<7							<7	ug/l	TM30/PM14			
Dissolved Lead #	7	<5	<5							<5	ug/l	TM30/PM14			
Dissolved Mercury #	<1	<1	<1							<1	ug/l	TM30/PM14			
Dissolved Nickel #	<2	<2	<2							<2	ug/l	TM30/PM14			
Dissolved Selenium #	<3	<3	<3							<3	ug/l	TM30/PM14			
Dissolved Vanadium #	3.7	1.7	9.4							<1.5	ug/l	TM30/PM14			
Dissolved Zinc #	6	4	6							<3	ug/l	TM30/PM14			
PAH MS															
Naphthalene	<0.1	0.1	<0.1							<0.1	ug/l	TM4/PM30			
Acenaphthylene	0.050	0.040	0.030							<0.013	ug/l	TM4/PM30			
Acenaphthene	0.020	0.020	0.060							<0.013	ug/l	TM4/PM30			
Fluorene	0.020	0.020	0.050							<0.014	ug/l	TM4/PM30			
Phenanthrene	0.120	0.070	0.110							<0.011	ug/l	TM4/PM30			
Anthracene	0.040	<0.013	0.050							<0.013	ug/l	TM4/PM30			
Fluoranthene	0.330	0.040	0.180							<0.012	ug/l	TM4/PM30			
Pyrene	0.360	0.040	0.160							<0.013	ug/l	TM4/PM30			
Benzo(a)anthracene	0.200	0.020	0.150							<0.015	ug/l	TM4/PM30			
Chrysene	0.240	0.020	0.190							<0.011	ug/l	TM4/PM30			
Benzo(bk)fluoranthene	0.500	0.020	0.380							<0.018	ug/l	TM4/PM30			
Benzo(a)pyrene	0.310	<0.016	0.230							<0.016	ug/l	TM4/PM30			
Indeno(123cd)pyrene	0.190	<0.011	0.100							<0.011	ug/l	TM4/PM30			
Dibenzo(ah)anthracene	<0.01	<0.01	<0.01							<0.01	ug/l	TM4/PM30			
Benzo(ghi)perylene	0.150	<0.011	0.080							<0.011	ug/l	TM4/PM30			
PAH 16 Total	2.530	0.390	1.770							<0.195	ug/l	TM4/PM30			
Benzo(b)fluoranthene	0.36	0.01	0.27							<0.01	ug/l	TM4/PM30			
Benzo(k)fluoranthene	0.14	<0.01	0.11							<0.01	ug/l	TM4/PM30			
PAH Surrogate % Recovery	93	78	82							<0	%	TM4/PM30			
Methyl Tertiary Butyl Ether	<1	<1	<1							<1	ug/l	TM15/PM69			
Benzene	<1	<1	<1							<1	ug/l	TM15/PM69			
Toluene	<2	<2	<2							<2	ug/l	TM15/PM69			
Ethylbenzene	<2	<2	<2							<2	ug/l	TM15/PM69			
p/m-Xylene	<3	<3	<3							<3	ug/l	TM15/PM69			
o-Xylene	<2	<2	<2							<2	ug/l	TM15/PM69			
Surrogate Recovery Toluene D8	91	82	84							<0	%	TM15/PM69			
Surrogate Recovery 4-Bromofluorobenzene	103	102	103							<0	%	TM15/PM69			

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:
JE Job No.: 15/17326

SVOC Report : Solid

J E Sample No.	106-108	115-117	121-123																
Sample ID	WS204	WS220	WS220																
Depth	0.20	0.20	1.00																
COC No / misc																			
Containers	V J T	V J T	V J T																
Sample Date	03/12/2015	03/12/2015	03/12/2015																
Sample Type	Soil	Soil	Soil																
Batch Number	2	2	2																
Date of Receipt	04/12/2015	04/12/2015	04/12/2015																
SVOC MS											LOD/LOR	Units	Method No.						
Please see attached notes for all abbreviations and acronyms																			
Phenols																			
2-Chlorophenol ^{#M}	<100 ^{AA}	<10	<10										<10	ug/kg	TM16/PM8				
2-Methylphenol	<100 ^{AA}	<10	<10										<10	ug/kg	TM16/PM8				
2-Nitrophenol	<100 ^{AA}	<10	<10										<10	ug/kg	TM16/PM8				
2,4-Dichlorophenol ^{#M}	<100 ^{AA}	<10	<10										<10	ug/kg	TM16/PM8				
2,4-Dimethylphenol	<100 ^{AA}	<10	<10										<10	ug/kg	TM16/PM8				
2,4,5-Trichlorophenol	<100 ^{AA}	<10	<10										<10	ug/kg	TM16/PM8				
2,4,6-Trichlorophenol	<100 ^{AA}	<10	<10										<10	ug/kg	TM16/PM8				
4-Chloro-3-methylphenol	<100 ^{AA}	<10	<10										<10	ug/kg	TM16/PM8				
4-Methylphenol	<100 ^{AA}	<10	<10										<10	ug/kg	TM16/PM8				
4-Nitrophenol	<100 ^{AA}	<10	<10										<10	ug/kg	TM16/PM8				
Pentachlorophenol	<100 ^{AA}	<10	<10										<10	ug/kg	TM16/PM8				
Phenol ^{#M}	<100 ^{AA}	<10	<10										<10	ug/kg	TM16/PM8				
PAHs																			
2-Chloronaphthalene ^{#M}	<100 ^{AA}	<10	<10										<10	ug/kg	TM16/PM8				
2-Methylnaphthalene ^{#M}	<100 ^{AA}	<10	14										<10	ug/kg	TM16/PM8				
Phthalates																			
Bis(2-ethylhexyl) phthalate	<1000 ^{AA}	<100	<100										<100	ug/kg	TM16/PM8				
Butylbenzyl phthalate	<1000 ^{AA}	<100	<100										<100	ug/kg	TM16/PM8				
Di-n-butyl phthalate	<1000 ^{AA}	<100	<100										<100	ug/kg	TM16/PM8				
Di-n-Octyl phthalate	<1000 ^{AA}	<100	<100										<100	ug/kg	TM16/PM8				
Diethyl phthalate	<1000 ^{AA}	<100	<100										<100	ug/kg	TM16/PM8				
Dimethyl phthalate ^{#M}	<1000 ^{AA}	<100	<100										<100	ug/kg	TM16/PM8				
Other SVOCs																			
1,2-Dichlorobenzene	<100 ^{AA}	<10	<10										<10	ug/kg	TM16/PM8				
1,2,4-Trichlorobenzene ^{#M}	<100 ^{AA}	<10	<10										<10	ug/kg	TM16/PM8				
1,3-Dichlorobenzene	<100 ^{AA}	<10	<10										<10	ug/kg	TM16/PM8				
1,4-Dichlorobenzene	<100 ^{AA}	<10	<10										<10	ug/kg	TM16/PM8				
2-Nitroaniline	<100 ^{AA}	<10	<10										<10	ug/kg	TM16/PM8				
2,4-Dinitrotoluene	<100 ^{AA}	<10	<10										<10	ug/kg	TM16/PM8				
2,6-Dinitrotoluene	<100 ^{AA}	<10	<10										<10	ug/kg	TM16/PM8				
3-Nitroaniline	<100 ^{AA}	<10	<10										<10	ug/kg	TM16/PM8				
4-Bromophenyphenylether ^{#M}	<100 ^{AA}	<10	<10										<10	ug/kg	TM16/PM8				
4-Chloroaniline	<100 ^{AA}	<10	<10										<10	ug/kg	TM16/PM8				
4-Chlorophenyphenylether	<100 ^{AA}	<10	<10										<10	ug/kg	TM16/PM8				
4-Nitroaniline	<100 ^{AA}	<10	<10										<10	ug/kg	TM16/PM8				
Azobenzene	<100 ^{AA}	<10	<10										<10	ug/kg	TM16/PM8				
Bis(2-chloroethoxy)methane	<100 ^{AA}	<10	<10										<10	ug/kg	TM16/PM8				
Bis(2-chloroethyl)ether	<100 ^{AA}	<10	<10										<10	ug/kg	TM16/PM8				
Carbazole	352 ^{AA}	<10	16										<10	ug/kg	TM16/PM8				
Dibenzofuran ^{#M}	136 ^{AA}	<10	13										<10	ug/kg	TM16/PM8				
Hexachlorobenzene	<100 ^{AA}	<10	<10										<10	ug/kg	TM16/PM8				
Hexachlorobutadiene ^{#M}	<100 ^{AA}	<10	<10										<10	ug/kg	TM16/PM8				
Hexachlorocyclopentadiene	<100 ^{AA}	<10	<10										<10	ug/kg	TM16/PM8				
Hexachloroethane	<100 ^{AA}	<10	<10										<10	ug/kg	TM16/PM8				
Isophorone ^{#M}	<100 ^{AA}	<10	<10										<10	ug/kg	TM16/PM8				
N-nitrosodi-n-propylamine ^{#M}	<100 ^{AA}	<10	<10										<10	ug/kg	TM16/PM8				
Nitrobenzene ^{#M}	<100 ^{AA}	<10	<10										<10	ug/kg	TM16/PM8				
Surrogate Recovery 2-Fluorobiphenyl	97 ^{AA}	70	91										<0	%	TM16/PM8				
Surrogate Recovery p-Terphenyl-d14	95 ^{AA}	80	109										<0	%	TM16/PM8				

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact:
 JE Job No.: 15/17326

SVOC Report : CEN 10:1 1 Batch

J E Sample No.	106-108	115-117	121-123							Please see attached notes for all abbreviations and acronyms		
Sample ID	WS204	WS220	WS220							LOD/LOR	Units	Method No.
Depth	0.20	0.20	1.00									
COC No / misc												
Containers	V J T	V J T	V J T									
Sample Date	03/12/2015	03/12/2015	03/12/2015									
Sample Type	Soil	Soil	Soil									
Batch Number	2	2	2									
Date of Receipt	04/12/2015	04/12/2015	04/12/2015									
SVOC MS												
Phenols												
2-Chlorophenol	<1	<1	<1							<1	ug/l	TM16/PM30
2-Methylphenol	<0.5	<0.5	<0.5							<0.5	ug/l	TM16/PM30
2-Nitrophenol	<0.5	<0.5	<0.5							<0.5	ug/l	TM16/PM30
2,4-Dichlorophenol	<0.5	<0.5	<0.5							<0.5	ug/l	TM16/PM30
2,4-Dimethylphenol	<1	<1	<1							<1	ug/l	TM16/PM30
2,4,5-Trichlorophenol	<0.5	<0.5	<0.5							<0.5	ug/l	TM16/PM30
2,4,6-Trichlorophenol	<1	<1	<1							<1	ug/l	TM16/PM30
4-Chloro-3-methylphenol	<0.5	<0.5	<0.5							<0.5	ug/l	TM16/PM30
4-Methylphenol	<1	<1	<1							<1	ug/l	TM16/PM30
4-Nitrophenol	<10	<10	<10							<10	ug/l	TM16/PM30
Pentachlorophenol	<1	<1	<1							<1	ug/l	TM16/PM30
Phenol	<1	<1	<1							<1	ug/l	TM16/PM30
PAHs												
2-Chloronaphthalene	<1	<1	<1							<1	ug/l	TM16/PM30
2-Methylnaphthalene	<1	<1	<1							<1	ug/l	TM16/PM30
Phthalates												
Bis(2-ethylhexyl) phthalate	<5	<5	<5							<5	ug/l	TM16/PM30
Butylbenzyl phthalate	<1	<1	<1							<1	ug/l	TM16/PM30
Di-n-butyl phthalate	<1.5	<1.5	<1.5							<1.5	ug/l	TM16/PM30
Di-n-Octyl phthalate	<1	<1	<1							<1	ug/l	TM16/PM30
Diethyl phthalate	<1	<1	<1							<1	ug/l	TM16/PM30
Dimethyl phthalate	<1	<1	<1							<1	ug/l	TM16/PM30
Other SVOCs												
1,2-Dichlorobenzene	<1	<1	<1							<1	ug/l	TM16/PM30
1,2,4-Trichlorobenzene	<1	<1	<1							<1	ug/l	TM16/PM30
1,3-Dichlorobenzene	<1	<1	<1							<1	ug/l	TM16/PM30
1,4-Dichlorobenzene	<1	<1	<1							<1	ug/l	TM16/PM30
2-Nitroaniline	<1	<1	<1							<1	ug/l	TM16/PM30
2,4-Dinitrotoluene	<0.5	<0.5	<0.5							<0.5	ug/l	TM16/PM30
2,6-Dinitrotoluene	<1	<1	<1							<1	ug/l	TM16/PM30
3-Nitroaniline	<1	<1	<1							<1	ug/l	TM16/PM30
4-Bromophenyphenylether	<1	<1	<1							<1	ug/l	TM16/PM30
4-Chloroaniline	<1	<1	<1							<1	ug/l	TM16/PM30
4-Chlorophenyphenylether	<1	<1	<1							<1	ug/l	TM16/PM30
4-Nitroaniline	<0.5	<0.5	<0.5							<0.5	ug/l	TM16/PM30
Azobenzene	<0.5	<0.5	<0.5							<0.5	ug/l	TM16/PM30
Bis(2-chloroethoxy)methane	<0.5	<0.5	<0.5							<0.5	ug/l	TM16/PM30
Bis(2-chloroethyl)ether	<1	<1	<1							<1	ug/l	TM16/PM30
Carbazole	<0.5	<0.5	<0.5							<0.5	ug/l	TM16/PM30
Dibenzofuran	<0.5	<0.5	<0.5							<0.5	ug/l	TM16/PM30
Hexachlorobenzene	<1	<1	<1							<1	ug/l	TM16/PM30
Hexachlorobutadiene	<1	<1	<1							<1	ug/l	TM16/PM30
Hexachlorocyclopentadiene	<1	<1	<1							<1	ug/l	TM16/PM30
Hexachloroethane	<1	<1	<1							<1	ug/l	TM16/PM30
Isophorone	<0.5	<0.5	<0.5							<0.5	ug/l	TM16/PM30
N-nitrosodi-n-propylamine	<0.5	<0.5	<0.5							<0.5	ug/l	TM16/PM30
Nitrobenzene	<1	<1	<1							<1	ug/l	TM16/PM30
Surrogate Recovery 2-Fluorobiphenyl	80	80	78							<0	%	TM16/PM30
Surrogate Recovery p-Terphenyl-d14	86	87	86							<0	%	TM16/PM30

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact:
 JE Job No.: 15/17326

VOC Report : CEN 10:1 1 Batch

J E Sample No.	106-108	115-117	121-123										LOD/LOR	Units	Method No.
Sample ID	WS204	WS220	WS220												
Depth	0.20	0.20	1.00												
COC No / misc Containers	V J T	V J T	V J T												
Sample Date	03/12/2015	03/12/2015	03/12/2015												
Sample Type	Soil	Soil	Soil												
Batch Number	2	2	2												
Date of Receipt	04/12/2015	04/12/2015	04/12/2015												
VOC MS															
Dichlorodifluoromethane	<2	<2	<2										<2	ug/l	TM15/PM69
Methyl Tertiary Butyl Ether	<1	<1	<1										<1	ug/l	TM15/PM69
Chloromethane	<3	<3	<3										<3	ug/l	TM15/PM69
Vinyl Chloride	<0.1	<0.1	<0.1										<0.1	ug/l	TM15/PM69
Bromomethane	<1	<1	<1										<1	ug/l	TM15/PM69
Chloroethane	<3	<3	<3										<3	ug/l	TM15/PM69
Trichlorofluoromethane	<3	<3	<3										<3	ug/l	TM15/PM69
1,1-Dichloroethene (1,1 DCE)	<3	<3	<3										<3	ug/l	TM15/PM69
Dichloromethane (DCM)	<3	<3	<3										<3	ug/l	TM15/PM69
trans-1-2-Dichloroethene	<3	<3	<3										<3	ug/l	TM15/PM69
1,1-Dichloroethane	<3	<3	<3										<3	ug/l	TM15/PM69
cis-1-2-Dichloroethene	<3	<3	<3										<3	ug/l	TM15/PM69
2,2-Dichloropropane	<1	<1	<1										<1	ug/l	TM15/PM69
Bromochloromethane	<2	<2	<2										<2	ug/l	TM15/PM69
Chloroform	<2	<2	<2										<2	ug/l	TM15/PM69
1,1,1-Trichloroethane	<2	<2	<2										<2	ug/l	TM15/PM69
1,1-Dichloropropene	<3	<3	<3										<3	ug/l	TM15/PM69
Carbon tetrachloride	<2	<2	<2										<2	ug/l	TM15/PM69
1,2-Dichloroethane	<2	<2	<2										<2	ug/l	TM15/PM69
Benzene	<1	<1	<1										<1	ug/l	TM15/PM69
Trichloroethene (TCE)	<3	<3	<3										<3	ug/l	TM15/PM69
1,2-Dichloropropane	<2	<2	<2										<2	ug/l	TM15/PM69
Dibromomethane	<3	<3	<3										<3	ug/l	TM15/PM69
Bromodichloromethane	<2	<2	<2										<2	ug/l	TM15/PM69
cis-1-3-Dichloropropene	<2	<2	<2										<2	ug/l	TM15/PM69
Toluene	<2	<2	<2										<2	ug/l	TM15/PM69
trans-1-3-Dichloropropene	<2	<2	<2										<2	ug/l	TM15/PM69
1,1,2-Trichloroethane	<2	<2	<2										<2	ug/l	TM15/PM69
Tetrachloroethene (PCE)	<3	<3	<3										<3	ug/l	TM15/PM69
1,3-Dichloropropane	<2	<2	<2										<2	ug/l	TM15/PM69
Dibromochloromethane	<2	<2	<2										<2	ug/l	TM15/PM69
1,2-Dibromoethane	<2	<2	<2										<2	ug/l	TM15/PM69
Chlorobenzene	<2	<2	<2										<2	ug/l	TM15/PM69
1,1,1,2-Tetrachloroethane	<2	<2	<2										<2	ug/l	TM15/PM69
Ethylbenzene	<2	<2	<2										<2	ug/l	TM15/PM69
p/m-Xylene	<3	<3	<3										<3	ug/l	TM15/PM69
o-Xylene	<2	<2	<2										<2	ug/l	TM15/PM69
Styrene	<2	<2	<2										<2	ug/l	TM15/PM69
Bromoform	<2	<2	<2										<2	ug/l	TM15/PM69
Isopropylbenzene	<3	<3	<3										<3	ug/l	TM15/PM69
1,1,2,2-Tetrachloroethane	<4	<4	<4										<4	ug/l	TM15/PM69
Bromobenzene	<2	<2	<2										<2	ug/l	TM15/PM69
1,2,3-Trichloropropane	<3	<3	<3										<3	ug/l	TM15/PM69
Propylbenzene	<3	<3	<3										<3	ug/l	TM15/PM69
2-Chlorotoluene	<3	<3	<3										<3	ug/l	TM15/PM69
1,3,5-Trimethylbenzene	<3	<3	<3										<3	ug/l	TM15/PM69
4-Chlorotoluene	<3	<3	<3										<3	ug/l	TM15/PM69
tert-Butylbenzene	<3	<3	<3										<3	ug/l	TM15/PM69
1,2,4-Trimethylbenzene	<3	<3	<3										<3	ug/l	TM15/PM69
sec-Butylbenzene	<3	<3	<3										<3	ug/l	TM15/PM69
4-Isopropyltoluene	<3	<3	<3										<3	ug/l	TM15/PM69
1,3-Dichlorobenzene	<3	<3	<3										<3	ug/l	TM15/PM69
1,4-Dichlorobenzene	<3	<3	<3										<3	ug/l	TM15/PM69
n-Butylbenzene	<3	<3	<3										<3	ug/l	TM15/PM69
1,2-Dichlorobenzene	<3	<3	<3										<3	ug/l	TM15/PM69
1,2-Dibromo-3-chloropropane	<2	<2	<2										<2	ug/l	TM15/PM69
1,2,4-Trichlorobenzene	<3	<3	<3										<3	ug/l	TM15/PM69
Hexachlorobutadiene	<3	<3	<3										<3	ug/l	TM15/PM69
Naphthalene	<2	<2	<2										<2	ug/l	TM15/PM69
1,2,3-Trichlorobenzene	<3	<3	<3										<3	ug/l	TM15/PM69
Surrogate Recovery Toluene D8	91	85	91										<0	%	TM15/PM69
Surrogate Recovery 4-Bromofluorobenzene	103	103	113										<0	%	TM15/PM69

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:

Note:

Analysis was carried out in accordance with our documented in-house methods PM042 and TM065 and HSG 248 by Stereo and Polarised Light Microscopy using Dispersion Staining Techniques and is covered by our UKAS accreditation. Samples are retained for not less than 6 months from the date of analysis unless specifically requested.

Opinions lie outside the scope of our UKAS accreditation.

Where the sample is not taken by a Jones Environmental Laboratory consultant, Jones Environmental Laboratory cannot be responsible for inaccurate or unrepresentative sampling.

Any questionable sample will automatically be assumed to have breached the Waste Limit and further testing may be required.

Signed on behalf of Jones Environmental Laboratory:

Asbestos Team Leader

J E Job No.	Batch	Sample ID	Depth	J E Sample No.	Date Of Analysis	Analysis	Result
15/17326	2	WS204	0.20	107	11/12/2015	Mass of Dry Sample	55.2 (g)
					15/12/2015	General Description (Bulk Analysis)	Soil-Silt/Clay/Brick/Stone
					15/12/2015	Asbestos Containing Material	None
					15/12/2015	Asbestos Containing Material (2)	None
					15/12/2015	Asbestos Screen	NAD
					15/12/2015	Asbestos Screen (2)	NAD
					15/12/2015	Asbestos Level	NAD
					15/12/2015	Waste Limit	<0.1%
15/17326	2	WS220	0.20	116	11/12/2015	Mass of Dry Sample	54.8 (g)
					15/12/2015	General Description (Bulk Analysis)	Soil-Silt/Clay/Brick/Stone
					15/12/2015	Asbestos Containing Material	None
					15/12/2015	Asbestos Containing Material (2)	None
					15/12/2015	Asbestos Screen	NAD
					15/12/2015	Asbestos Screen (2)	NAD
					15/12/2015	Asbestos Level	NAD
					15/12/2015	Waste Limit	<0.1%
15/17326	2	WS220	1.00	122	11/12/2015	Mass of Dry Sample	48.2 (g)
					15/12/2015	General Description (Bulk Analysis)	Soil-Silt/Clay/Brick/Stone
					15/12/2015	Asbestos Containing Material	None
					15/12/2015	Asbestos Containing Material (2)	None
					15/12/2015	Asbestos Screen	NAD
					15/12/2015	Asbestos Screen (2)	NAD
					15/12/2015	Asbestos Level	NAD
					15/12/2015	Waste Limit	<0.1%

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:

J E Job No.	Batch	Sample ID	Depth	J E Sample No.	Analysis	Reason
No deviating sample report results for job 15/17326						

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

JE Job No.: 15/17326

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. 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.

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.

WATERS

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

ISO17025 (UKAS) accreditation applies to surface water and groundwater and 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

Samples must be received in a condition appropriate to the requested analyses. All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. If this is not the case you will be informed and any test results that may be compromised highlighted on your deviating samples report.

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.

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.

Please include all sections of this report if it is reproduced

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS) accredited - UK.
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.
++	Result outside calibration range, results should be considered as indicative only and are not accredited.
*	Analysis subcontracted to a Jones Environmental 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
AA	x10 Dilution

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.				
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes	Yes	AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM5/TM36	TM005: Modified USEPA 8015B. Determination of solvent Extractable Petroleum Hydrocarbons (EPH) including column fractionation in the carbon range of C10-35 into aliphatic and aromatic fractions by GC-FID. TM036: Modified USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-10 by headspace GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5/TM36	TM005: Modified USEPA 8015B. Determination of solvent Extractable Petroleum Hydrocarbons (EPH) including column fractionation in the carbon range of C10-35 into aliphatic and aromatic fractions by GC-FID. TM036: Modified USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-10 by headspace GC-FID.	PM30/PM69	PM030: Eluate samples are extracted with solvent using a magnetic stirrer to create a vortex.PM069: One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	Yes
PM13	A visual examination of the solid sample is carried out to ascertain sample make up, colour and any other inclusions. This is not a geotechnical description.	PM0	No preparation is required.			AR	
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM69	Modified BS EN 12457 method. One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM69	Modified BS EN 12457 method. One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	Yes
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes
TM17	Modified US EPA method 8270. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	Yes
TM17	Modified US EPA method 8270. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM21	Modified USEPA 415.1. Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.	Yes		AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM14	Analysis of waters and leachates for metals by ICP OES. Samples are filtered for dissolved metals and acidified if required.	Yes		AR	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes	Yes	AD	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM69	Modified BS EN 12457 method. One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	Yes
TM60	Modified USEPA 9060. Determination of TOC by calculation from Total Carbon and Inorganic Carbon using a TOC analyser, the carbon in the sample is converted to CO2 and then passed through a non-dispersive infrared gas analyser (NDIR).	PM0	No preparation is required.			AR	Yes
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.			AR	
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.	Yes		AR	
TM73	Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.	PM0	No preparation is required.			AR	Yes
TM73	Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes	Yes	AR	No
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM32	Hot water soluble boron is extracted from dried and ground samples using a 20:1 ratio.	Yes	Yes	AD	Yes
NONE	No Method Code	PM17	Modified method EN12457-2 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.				
NONE	No Method Code	PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.			AR	



Jones Environmental Laboratory

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Attention :

Date : 7th January, 2016

Your reference : PN153428

Our reference : Test Report 15/17326 Batch 2 Schedule C

Location : Stockport Bus Station

Date samples received : 4th December, 2015

Status : Final report

Issue : 1

Sixteen samples were received for analysis on 4th December, 2015 of which four 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.

Compiled By:

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:
JE Job No.: 15/17326

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	79-81	91-93	100-102	103-105							Please see attached notes for all abbreviations and acronyms		
Sample ID	BH111	BH108	BH108	BH108							LOD/LOR	Units	Method No.
Depth	0.20-0.40	1.00	4.00	5.00									
COC No / misc													
Containers	V J T	V J T	V J T	V J T									
Sample Date	03/12/2015	03/12/2015	03/12/2015	03/12/2015									
Sample Type	Soil	Soil	Soil	Soil									
Batch Number	2	2	2	2									
Date of Receipt	04/12/2015	04/12/2015	04/12/2015	04/12/2015									
Arsenic #M	0.8	66.7	44.9	4.3							<0.5	mg/kg	TM30/PM15
Chromium #M	8.0	72.0	66.5	69.5							<0.5	mg/kg	TM30/PM15
Copper #M	4	180	54	6							<1	mg/kg	TM30/PM15
Lead #M	17	947	224	9							<5	mg/kg	TM30/PM15
Mercury #M	<0.1	1.2	0.7	<0.1							<0.1	mg/kg	TM30/PM15
Nickel #M	4.9	39.0	25.4	15.0							<0.7	mg/kg	TM30/PM15
Selenium #M	<1	1	<1	<1							<1	mg/kg	TM30/PM15
Vanadium	2	49	28	15							<1	mg/kg	TM30/PM15
Water Soluble Boron #M	0.1	0.6	0.5	0.3							<0.1	mg/kg	TM74/PM32
Zinc #M	34	495	53	23							<5	mg/kg	TM30/PM15
PAH MS													
Naphthalene #M	0.05	2.00	0.23	<0.04							<0.04	mg/kg	TM4/PM8
Acenaphthylene	0.03	0.19	0.07	<0.03							<0.03	mg/kg	TM4/PM8
Acenaphthene #M	<0.05	2.79	0.17	<0.05							<0.05	mg/kg	TM4/PM8
Fluorene #M	0.04	1.85	0.21	<0.04							<0.04	mg/kg	TM4/PM8
Phenanthrene #M	0.43	16.09	1.83	0.11							<0.03	mg/kg	TM4/PM8
Anthracene #	0.14	3.61	0.45	<0.04							<0.04	mg/kg	TM4/PM8
Fluoranthene #M	0.75	15.70	1.29	0.08							<0.03	mg/kg	TM4/PM8
Pyrene #	0.67	13.88	1.36	0.10							<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	0.30	5.43	0.60	<0.06							<0.06	mg/kg	TM4/PM8
Chrysene #M	0.35	6.34	0.72	0.05							<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #M	0.47	8.95	0.76	<0.07							<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	0.30	6.33	0.55	0.05							<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene #M	0.20	3.77	0.25	<0.04							<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	0.05	0.96	0.08	<0.04							<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	0.16	3.60	0.24	<0.04							<0.04	mg/kg	TM4/PM8
PAH 16 Total	3.9	91.5	8.8	<0.6							<0.6	mg/kg	TM4/PM8
Benzo(b)fluoranthene	0.34	6.44	0.55	<0.05							<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	0.13	2.51	0.21	<0.02							<0.02	mg/kg	TM4/PM8
PAH Surrogate % Recovery	112	129	111	118							<0	%	TM4/PM8
Methyl Tertiary Butyl Ether #M	<6	<6	<6	-							<6	ug/kg	TM15/PM10
Benzene #M	<5	<5	<5	-							<5	ug/kg	TM15/PM10
Toluene #M	<3	<3	<3	-							<3	ug/kg	TM15/PM10
Ethylbenzene #M	<3	<3	<3	-							<3	ug/kg	TM15/PM10
p/m-Xylene #M	<4	<4	<4	-							<4	ug/kg	TM15/PM10
o-Xylene #M	<4	<4	<4	-							<4	ug/kg	TM15/PM10
Surrogate Recovery Toluene D8	111	101	112	-							<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	115	83	123	-							<0	%	TM15/PM10

Jones Environmental Laboratory

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:
JE Job No.: 15/17326

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	79-81	91-93	100-102	103-105																						
Sample ID	BH111	BH108	BH108	BH108																						
Depth	0.20-0.40	1.00	4.00	5.00																						
COC No / misc																										
Containers	V J T	V J T	V J T	V J T																						
Sample Date	03/12/2015	03/12/2015	03/12/2015	03/12/2015																						
Sample Type	Soil	Soil	Soil	Soil																						
Batch Number	2	2	2	2																						
Date of Receipt	04/12/2015	04/12/2015	04/12/2015	04/12/2015																						
Please see attached notes for all abbreviations and acronyms																										
TPH CWG																										
Aliphatics																										
>C5-C6 ^{#M}	<0.1	<0.1	<0.1	<0.1																	<0.1	mg/kg		TM36/PM12		
>C6-C8 ^{#M}	<0.1	<0.1	<0.1	<0.1																	<0.1	mg/kg		TM36/PM12		
>C8-C10	<0.1	<0.1	<0.1	<0.1																	<0.1	mg/kg		TM36/PM12		
>C10-C12 ^{#M}	<0.2	<0.2	<0.2	<0.2																	<0.2	mg/kg		TM5/PM16		
>C12-C16 ^{#M}	<4	<4	<4	<4																	<4	mg/kg		TM5/PM16		
>C16-C21 ^{#M}	<7	27	<7	<7																	<7	mg/kg		TM5/PM16		
>C21-C35 ^{#M}	11	360	67	<7																	<7	mg/kg		TM5/PM16		
>C35-C44	<7	43	<7	<7																	<7	mg/kg		TM5/PM16		
Total aliphatics C5-44	<26	430	67	<26																	<26	mg/kg		TM5/TM36/PM16		
Aromatics																										
>C5-EC7	<0.1	<0.1	<0.1	<0.1																	<0.1	mg/kg		TM36/PM12		
>EC7-EC8	<0.1	<0.1	<0.1	<0.1																	<0.1	mg/kg		TM36/PM12		
>EC8-EC10 ^{#M}	<0.1	<0.1	<0.1	<0.1																	<0.1	mg/kg		TM36/PM12		
>EC10-EC12	<0.2	1.2	<0.2	<0.2																	<0.2	mg/kg		TM5/PM16		
>EC12-EC16	<4	37	6	<4																	<4	mg/kg		TM5/PM16		
>EC16-EC21	<7	229	33	<7																	<7	mg/kg		TM5/PM16		
>EC21-EC35	<7	543	98	<7																	<7	mg/kg		TM5/PM16		
>EC35-EC44	<7	99	10	<7																	<7	mg/kg		TM5/PM16		
Total aromatics C5-44	<26	909	147	<26																	<26	mg/kg		TM5/TM36/PM16		
Total aliphatics and aromatics(C5-44)	<52	1339	214	<52																	<52	mg/kg		TM5/TM36/PM16		
MTBE [#]	-	-	-	<5																	<5	ug/kg		TM31/PM12		
Benzene [#]	-	-	-	<5																	<5	ug/kg		TM31/PM12		
Toluene [#]	-	-	-	<5																	<5	ug/kg		TM31/PM12		
Ethylbenzene [#]	-	-	-	<5																	<5	ug/kg		TM31/PM12		
m/p-Xylene [#]	-	-	-	<5																	<5	ug/kg		TM31/PM12		
o-Xylene [#]	-	-	-	<5																	<5	ug/kg		TM31/PM12		
PCB 28 [#]	<5	<5	<50 ^{AA}	-																	<5	ug/kg		TM17/PM8		
PCB 52 [#]	<5	<5	<50 ^{AA}	-																	<5	ug/kg		TM17/PM8		
PCB 101 [#]	<5	<5	<50 ^{AA}	-																	<5	ug/kg		TM17/PM8		
PCB 118 [#]	<5	<5	<50 ^{AA}	-																	<5	ug/kg		TM17/PM8		
PCB 138 [#]	<5	<5	<50 ^{AA}	-																	<5	ug/kg		TM17/PM8		
PCB 153 [#]	<5	<5	<50 ^{AA}	-																	<5	ug/kg		TM17/PM8		
PCB 180 [#]	<5	<5	<50 ^{AA}	-																	<5	ug/kg		TM17/PM8		
Total 7 PCBs [#]	<35	<35	<350 ^{AA}	-																	<35	ug/kg		TM17/PM8		
2-Chlorophenol	<10	<100 ^{AA}	<10	<10																	<10	ug/kg		TM16/PM8		
Natural Moisture Content	0.9	20.2	13.5	19.3																	<0.1	%		PM4/PM0		
2-Methylphenol	<10	<100 ^{AA}	<10	<10																	<10	ug/kg		TM16/PM8		

Please include all sections of this report if it is reproduced

Jones Environmental Laboratory

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:
JE Job No.: 15/17326

Report : CEN 10:1 1 Batch

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	79-81	91-93	100-102																					
Sample ID	BH111	BH108	BH108																					
Depth	0.20-0.40	1.00	4.00																					
COC No / misc																								
Containers	V J T	V J T	V J T																					
Sample Date	03/12/2015	03/12/2015	03/12/2015																					
Sample Type	Soil	Soil	Soil																					
Batch Number	2	2	2																					
Date of Receipt	04/12/2015	04/12/2015	04/12/2015																					
Dissolved Arsenic #	3.2	24.7	41.5																		<2.5	ug/l	TM30/PM14	
Dissolved Boron #	<12	13	15																		<12	ug/l	TM30/PM14	
Dissolved Chromium #	6.0	25.4	7.9																		<1.5	ug/l	TM30/PM14	
Dissolved Copper #	<7	<7	<7																		<7	ug/l	TM30/PM14	
Dissolved Lead #	<5	23	<5																		<5	ug/l	TM30/PM14	
Dissolved Mercury #	<1	<1	<1																		<1	ug/l	TM30/PM14	
Dissolved Nickel #	4	6	5																		<2	ug/l	TM30/PM14	
Dissolved Selenium #	<3	<3	<3																		<3	ug/l	TM30/PM14	
Dissolved Zinc #	6	9	6																		<3	ug/l	TM30/PM14	
PAH MS																								
Naphthalene	<0.1	<0.1	<0.1																		<0.1	ug/l	TM4/PM30	
Acenaphthylene	0.060	0.050	0.050																		<0.013	ug/l	TM4/PM30	
Acenaphthene	0.080	0.110	0.070																		<0.013	ug/l	TM4/PM30	
Fluorene	0.090	0.090	0.050																		<0.014	ug/l	TM4/PM30	
Phenanthrene	0.120	0.190	0.180																		<0.011	ug/l	TM4/PM30	
Anthracene	0.050	0.090	0.060																		<0.013	ug/l	TM4/PM30	
Fluoranthene	0.060	0.210	0.160																		<0.012	ug/l	TM4/PM30	
Pyrene	0.050	0.200	0.160																		<0.013	ug/l	TM4/PM30	
Benzo(a)anthracene	0.050	0.110	0.060																		<0.015	ug/l	TM4/PM30	
Chrysene	0.050	0.130	0.070																		<0.011	ug/l	TM4/PM30	
Benzo(b)fluoranthene	0.070	0.210	0.050																		<0.018	ug/l	TM4/PM30	
Benzo(a)pyrene	0.030	0.140	0.020																		<0.016	ug/l	TM4/PM30	
Indeno(123cd)pyrene	0.020	0.080	<0.011																		<0.011	ug/l	TM4/PM30	
Dibenzo(ah)anthracene	0.02	0.03	<0.01																		<0.01	ug/l	TM4/PM30	
Benzo(ghi)perylene	0.020	0.090	<0.011																		<0.011	ug/l	TM4/PM30	
PAH 16 Total	0.770	1.730	0.930																		<0.195	ug/l	TM4/PM30	
Benzo(b)fluoranthene	0.05	0.15	0.04																		<0.01	ug/l	TM4/PM30	
Benzo(k)fluoranthene	0.02	0.06	0.01																		<0.01	ug/l	TM4/PM30	
PAH Surrogate % Recovery	77	77	74																		<0	%	TM4/PM30	
Methyl Tertiary Butyl Ether	<1	<1	<1																		<1	ug/l	TM15/PM69	
Benzene	<1	<1	<1																		<1	ug/l	TM15/PM69	
Toluene	<2	<2	<2																		<2	ug/l	TM15/PM69	
Ethylbenzene	<2	<2	<2																		<2	ug/l	TM15/PM69	
p/m-Xylene	<3	<3	<3																		<3	ug/l	TM15/PM69	
o-Xylene	<2	<2	<2																		<2	ug/l	TM15/PM69	
Surrogate Recovery Toluene D8	108	107	102																		<0	%	TM15/PM69	
Surrogate Recovery 4-Bromofluorobenzene	109	107	103																		<0	%	TM15/PM69	

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:
JE Job No.: 15/17326

Report : CEN 10:1 1 Batch

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	79-81	91-93	100-102								LOD/LOR	Units	Method No.
Sample ID	BH111	BH108	BH108										
Depth	0.20-0.40	1.00	4.00										
COC No / misc													
Containers	V J T	V J T	V J T										
Sample Date	03/12/2015	03/12/2015	03/12/2015										
Sample Type	Soil	Soil	Soil										
Batch Number	2	2	2										
Date of Receipt	04/12/2015	04/12/2015	04/12/2015										
Please see attached notes for all abbreviations and acronyms													
TPH CWG													
Aliphatics													
>C5-C6	<5	<5	<5								<5	ug/l	TM36/PM69
>C6-C8	<5	<5	<5								<5	ug/l	TM36/PM69
>C8-C10	<5	<5	<5								<5	ug/l	TM36/PM69
>C10-C12	<5	<5	<5								<5	ug/l	TM5/PM30
>C12-C16	<10	<10	<10								<10	ug/l	TM5/PM30
>C16-C21	<10	<10	<10								<10	ug/l	TM5/PM30
>C21-C35	<10	<10	<10								<10	ug/l	TM5/PM30
>C35-C44	<10	<10	<10								<10	ug/l	TM5/PM30
Total aliphatics C5-44	<10	<10	<10								<10	ug/l	TM5/PM30/PM69
Aromatics													
>C5-EC7	<5	<5	<5								<5	ug/l	TM36/PM69
>EC7-EC8	<5	<5	<5								<5	ug/l	TM36/PM69
>EC8-EC10	<5	<5	<5								<5	ug/l	TM36/PM69
>EC10-EC12	<5	<5	<5								<5	ug/l	TM5/PM30
>EC12-EC16	<10	<10	<10								<10	ug/l	TM5/PM30
>EC16-EC21	<10	<10	<10								<10	ug/l	TM5/PM30
>EC21-EC35	<10	<10	<10								<10	ug/l	TM5/PM30
>EC35-EC44	<10	<10	<10								<10	ug/l	TM5/PM30
Total aromatics C5-44	<10	<10	<10								<10	ug/l	TM5/PM30/PM69
Total aliphatics and aromatics(C5-44)	<10	<10	<10								<10	ug/l	TM5/PM30/PM69
PCB 28	<0.1	<0.1	<0.1								<0.1	ug/l	TM17/PM30
PCB 52	<0.1	<0.1	<0.1								<0.1	ug/l	TM17/PM30
PCB 101	<0.1	<0.1	<0.1								<0.1	ug/l	TM17/PM30
PCB 118	<0.1	<0.1	<0.1								<0.1	ug/l	TM17/PM30
PCB 138	<0.1	<0.1	<0.1								<0.1	ug/l	TM17/PM30
PCB 153	<0.1	<0.1	<0.1								<0.1	ug/l	TM17/PM30
PCB 180	<0.1	<0.1	<0.1								<0.1	ug/l	TM17/PM30
Total 7 PCBs	<0.7	<0.7	<0.7								<0.7	ug/l	TM17/PM30
2-Chlorophenol	<0.5	<0.5	<0.5								<0.5	ug/l	TM16/PM30
2-Methylphenol	<0.5	<0.5	<0.5								<0.5	ug/l	TM16/PM30
2-Nitrophenol	<0.5	<0.5	<0.5								<0.5	ug/l	TM16/PM30
2,4-Dichlorophenol	<0.5	<0.5	<0.5								<0.5	ug/l	TM16/PM30
2,4-Dimethylphenol	<0.5	<0.5	<0.5								<0.5	ug/l	TM16/PM30
2,4,5-Trichlorophenol	<0.5	<0.5	<0.5								<0.5	ug/l	TM16/PM30
2,4,6-Trichlorophenol	<0.5	<0.5	<0.5								<0.5	ug/l	TM16/PM30
4-Chloro-3-methylphenol	<0.5	<0.5	<0.5								<0.5	ug/l	TM16/PM30
4-Methylphenol	<0.5	<0.5	<0.5								<0.5	ug/l	TM16/PM30
4-Nitrophenol	<0.5	<0.5	<0.5								<0.5	ug/l	TM16/PM30
Pentachlorophenol	<0.5	<0.5	<0.5								<0.5	ug/l	TM16/PM30
Phenol	<0.5	<0.5	<0.5								<0.5	ug/l	TM16/PM30

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact:
 JE Job No.: 15/17326

SVOC Report : Solid

J E Sample No.	79-81	91-93	100-102							Please see attached notes for all abbreviations and acronyms		
Sample ID	BH111	BH108	BH108									
Depth	0.20-0.40	1.00	4.00									
COC No / misc Containers	V J T	V J T	V J T									
Sample Date	03/12/2015	03/12/2015	03/12/2015									
Sample Type	Soil	Soil	Soil									
Batch Number	2	2	2									
Date of Receipt	04/12/2015	04/12/2015	04/12/2015							LOD/LOR	Units	Method No.
SVOC MS												
Phenols												
2-Chlorophenol #M	<10	<100 _{AA}	<10							<10	ug/kg	TM16/PM8
2-Methylphenol	<10	<100 _{AA}	<10							<10	ug/kg	TM16/PM8
2-Nitrophenol	<10	<100 _{AA}	<10							<10	ug/kg	TM16/PM8
2,4-Dichlorophenol #M	<10	<100 _{AA}	<10							<10	ug/kg	TM16/PM8
2,4-Dimethylphenol	<10	<100 _{AA}	<10							<10	ug/kg	TM16/PM8
2,4,5-Trichlorophenol	<10	<100 _{AA}	<10							<10	ug/kg	TM16/PM8
2,4,6-Trichlorophenol	<10	<100 _{AA}	<10							<10	ug/kg	TM16/PM8
4-Chloro-3-methylphenol	<10	<100 _{AA}	<10							<10	ug/kg	TM16/PM8
4-Methylphenol	<10	<100 _{AA}	<10							<10	ug/kg	TM16/PM8
4-Nitrophenol	<10	<100 _{AA}	<10							<10	ug/kg	TM16/PM8
Pentachlorophenol	<10	<100 _{AA}	<10							<10	ug/kg	TM16/PM8
Phenol #M	<10	<100 _{AA}	<10							<10	ug/kg	TM16/PM8
PAHs												
2-Chloronaphthalene #M	<10	<100 _{AA}	<10							<10	ug/kg	TM16/PM8
2-Methylnaphthalene #M	<10	<100 _{AA}	112							<10	ug/kg	TM16/PM8
Phthalates												
Bis(2-ethylhexyl) phthalate	<100	<1000 _{AA}	<100							<100	ug/kg	TM16/PM8
Butylbenzyl phthalate	<100	<1000 _{AA}	<100							<100	ug/kg	TM16/PM8
Di-n-butyl phthalate	<100	<1000 _{AA}	<100							<100	ug/kg	TM16/PM8
Di-n-Octyl phthalate	<100	<1000 _{AA}	<100							<100	ug/kg	TM16/PM8
Diethyl phthalate	<100	<1000 _{AA}	<100							<100	ug/kg	TM16/PM8
Dimethyl phthalate #M	<100	<1000 _{AA}	<100							<100	ug/kg	TM16/PM8
Other SVOCs												
1,2-Dichlorobenzene	<10	<100 _{AA}	<10							<10	ug/kg	TM16/PM8
1,2,4-Trichlorobenzene #M	<10	<100 _{AA}	<10							<10	ug/kg	TM16/PM8
1,3-Dichlorobenzene	<10	<100 _{AA}	<10							<10	ug/kg	TM16/PM8
1,4-Dichlorobenzene	<10	<100 _{AA}	<10							<10	ug/kg	TM16/PM8
2-Nitroaniline	<10	<100 _{AA}	<10							<10	ug/kg	TM16/PM8
2,4-Dinitrotoluene	<10	<100 _{AA}	<10							<10	ug/kg	TM16/PM8
2,6-Dinitrotoluene	<10	<100 _{AA}	<10							<10	ug/kg	TM16/PM8
3-Nitroaniline	<10	<100 _{AA}	<10							<10	ug/kg	TM16/PM8
4-Bromophenylphenylether #M	<10	<100 _{AA}	<10							<10	ug/kg	TM16/PM8
4-Chloroaniline	<10	<100 _{AA}	<10							<10	ug/kg	TM16/PM8
4-Chlorophenylphenylether	<10	<100 _{AA}	<10							<10	ug/kg	TM16/PM8
4-Nitroaniline	<10	<100 _{AA}	<10							<10	ug/kg	TM16/PM8
Azobenzene	<10	<100 _{AA}	<10							<10	ug/kg	TM16/PM8
Bis(2-chloroethoxy)methane	<10	<100 _{AA}	<10							<10	ug/kg	TM16/PM8
Bis(2-chloroethyl)ether	<10	<100 _{AA}	<10							<10	ug/kg	TM16/PM8
Carbazole	<10	<100 _{AA}	184							<10	ug/kg	TM16/PM8
Dibenzofuran #M	<10	<100 _{AA}	97							<10	ug/kg	TM16/PM8
Hexachlorobenzene	<10	<100 _{AA}	<10							<10	ug/kg	TM16/PM8
Hexachlorobutadiene #M	<10	<100 _{AA}	<10							<10	ug/kg	TM16/PM8
Hexachlorocyclopentadiene	<10	<100 _{AA}	<10							<10	ug/kg	TM16/PM8
Hexachloroethane	<10	<100 _{AA}	<10							<10	ug/kg	TM16/PM8
Isophorone #M	<10	<100 _{AA}	<10							<10	ug/kg	TM16/PM8
N-nitrosodi-n-propylamine #M	<10	<100 _{AA}	<10							<10	ug/kg	TM16/PM8
Nitrobenzene #M	<10	<100 _{AA}	<10							<10	ug/kg	TM16/PM8

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact:
 JE Job No.: 15/17326

SVOC Report : CEN 10:1 1 Batch

J E Sample No.	79-81	91-93	100-102																						
Sample ID	BH111	BH108	BH108																						
Depth	0.20-0.40	1.00	4.00																						
COC No / misc Containers	V J T	V J T	V J T																						
Sample Date	03/12/2015	03/12/2015	03/12/2015																						
Sample Type	Soil	Soil	Soil																						
Batch Number	2	2	2																						
Date of Receipt	04/12/2015	04/12/2015	04/12/2015																						
											LOD/LOR	Units	Method No.												
SVOC MS																									
Phenols																									
2-Chlorophenol	<1	<1	<1																			<1	ug/l	TM16/PM30	
2-Methylphenol	<0.5	<0.5	<0.5																				<0.5	ug/l	TM16/PM30
2-Nitrophenol	<0.5	<0.5	<0.5																				<0.5	ug/l	TM16/PM30
2,4-Dichlorophenol	<0.5	<0.5	<0.5																				<0.5	ug/l	TM16/PM30
2,4-Dimethylphenol	<1	<1	<1																				<1	ug/l	TM16/PM30
2,4,5-Trichlorophenol	<0.5	<0.5	<0.5																				<0.5	ug/l	TM16/PM30
2,4,6-Trichlorophenol	<1	<1	<1																				<1	ug/l	TM16/PM30
4-Chloro-3-methylphenol	<0.5	<0.5	<0.5																				<0.5	ug/l	TM16/PM30
4-Methylphenol	<1	<1	<1																				<1	ug/l	TM16/PM30
4-Nitrophenol	<10	<10	<10																				<10	ug/l	TM16/PM30
Pentachlorophenol	<1	<1	<1																				<1	ug/l	TM16/PM30
Phenol	<1	<1	<1																				<1	ug/l	TM16/PM30
PAHs																									
2-Chloronaphthalene	<1	<1	<1																				<1	ug/l	TM16/PM30
2-Methylnaphthalene	<1	<1	<1																				<1	ug/l	TM16/PM30
Phthalates																									
Bis(2-ethylhexyl) phthalate	<5	<5	<5																				<5	ug/l	TM16/PM30
Butylbenzyl phthalate	<1	<1	<1																				<1	ug/l	TM16/PM30
Di-n-butyl phthalate	<1.5	<1.5	<1.5																				<1.5	ug/l	TM16/PM30
Di-n-Octyl phthalate	<1	<1	<1																				<1	ug/l	TM16/PM30
Diethyl phthalate	<1	<1	<1																				<1	ug/l	TM16/PM30
Dimethyl phthalate	<1	<1	<1																				<1	ug/l	TM16/PM30
Other SVOCs																									
1,2-Dichlorobenzene	<1	<1	<1																				<1	ug/l	TM16/PM30
1,2,4-Trichlorobenzene	<1	<1	<1																				<1	ug/l	TM16/PM30
1,3-Dichlorobenzene	<1	<1	<1																				<1	ug/l	TM16/PM30
1,4-Dichlorobenzene	<1	<1	<1																				<1	ug/l	TM16/PM30
2-Nitroaniline	<1	<1	<1																				<1	ug/l	TM16/PM30
2,4-Dinitrotoluene	<0.5	<0.5	<0.5																				<0.5	ug/l	TM16/PM30
2,6-Dinitrotoluene	<1	<1	<1																				<1	ug/l	TM16/PM30
3-Nitroaniline	<1	<1	<1																				<1	ug/l	TM16/PM30
4-Bromophenyphenylether	<1	<1	<1																				<1	ug/l	TM16/PM30
4-Chloroaniline	<1	<1	<1																				<1	ug/l	TM16/PM30
4-Chlorophenyphenylether	<1	<1	<1																				<1	ug/l	TM16/PM30
4-Nitroaniline	<0.5	<0.5	<0.5																				<0.5	ug/l	TM16/PM30
Azobenzene	<0.5	<0.5	<0.5																				<0.5	ug/l	TM16/PM30
Bis(2-chloroethoxy)methane	<0.5	<0.5	<0.5																				<0.5	ug/l	TM16/PM30
Bis(2-chloroethyl)ether	<1	<1	<1																				<1	ug/l	TM16/PM30
Carbazole	<0.5	<0.5	<0.5																				<0.5	ug/l	TM16/PM30
Dibenzofuran	<0.5	<0.5	<0.5																				<0.5	ug/l	TM16/PM30
Hexachlorobenzene	<1	<1	<1																				<1	ug/l	TM16/PM30
Hexachlorobutadiene	<1	<1	<1																				<1	ug/l	TM16/PM30
Hexachlorocyclopentadiene	<1	<1	<1																				<1	ug/l	TM16/PM30
Hexachloroethane	<1	<1	<1																				<1	ug/l	TM16/PM30
Isophorone	<0.5	<0.5	<0.5																				<0.5	ug/l	TM16/PM30
N-nitrosodi-n-propylamine	<0.5	<0.5	<0.5																				<0.5	ug/l	TM16/PM30
Nitrobenzene	<1	<1	<1																				<1	ug/l	TM16/PM30

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact:
 JE Job No.: 15/17326

VOC Report : Solid

J E Sample No.	79-81	91-93	100-102							Please see attached notes for all abbreviations and acronyms		
	Sample ID	BH111	BH108	BH108								
Depth	0.20-0.40	1.00	4.00									
COC No / misc												
Containers	V J T	V J T	V J T									
Sample Date	03/12/2015	03/12/2015	03/12/2015									
Sample Type	Soil	Soil	Soil									
Batch Number	2	2	2									
Date of Receipt	04/12/2015	04/12/2015	04/12/2015									
							LOD/LOR	Units	Method No.			
VOC MS												
Dichlorodifluoromethane	<2	<2	<2					<2	ug/kg	TM15/PM10		
Methyl Tertiary Butyl Ether #M	<6	<6	<6					<6	ug/kg	TM15/PM10		
Chloromethane #	<3	<3	<3					<3	ug/kg	TM15/PM10		
Vinyl Chloride	<2	<2	<2					<2	ug/kg	TM15/PM10		
Bromomethane	<1	<1	<1					<1	ug/kg	TM15/PM10		
Chloroethane #M	<6	<6	<6					<6	ug/kg	TM15/PM10		
Trichlorofluoromethane #M	<3	<3	<3					<3	ug/kg	TM15/PM10		
1,1-Dichloroethene (1,1 DCE) #M	<6	<6	<6					<6	ug/kg	TM15/PM10		
Dichloromethane (DCM) #	<7	100	32					<7	ug/kg	TM15/PM10		
trans-1-2-Dichloroethene #	<3	<3	<3					<3	ug/kg	TM15/PM10		
1,1-Dichloroethane #M	<6	<6	<6					<6	ug/kg	TM15/PM10		
cis-1-2-Dichloroethene #M	<7	<7	<7					<7	ug/kg	TM15/PM10		
2,2-Dichloropropane	<4	<4	<4					<4	ug/kg	TM15/PM10		
Bromochloromethane #M	<4	<4	<4					<4	ug/kg	TM15/PM10		
Chloroform #M	<5	<5	<5					<5	ug/kg	TM15/PM10		
1,1,1-Trichloroethane #M	<5	<5	<5					<5	ug/kg	TM15/PM10		
1,1-Dichloropropene #	<3	<3	<3					<3	ug/kg	TM15/PM10		
Carbon tetrachloride #M	<4	<4	<4					<4	ug/kg	TM15/PM10		
1,2-Dichloroethane #M	<5	<5	<5					<5	ug/kg	TM15/PM10		
Benzene #M	<5	<5	<5					<5	ug/kg	TM15/PM10		
Trichloroethene (TCE) #M	<5	<5	<5					<5	ug/kg	TM15/PM10		
1,2-Dichloropropane #M	<4	<4	<4					<4	ug/kg	TM15/PM10		
Dibromomethane #M	<4	<4	<4					<4	ug/kg	TM15/PM10		
Bromodichloromethane #M	<4	<4	<4					<4	ug/kg	TM15/PM10		
cis-1-3-Dichloropropene	<4	<4	<4					<4	ug/kg	TM15/PM10		
Toluene #M	<3	<3	<3					<3	ug/kg	TM15/PM10		
trans-1-3-Dichloropropene	<3	<3	<3					<3	ug/kg	TM15/PM10		
1,1,2-Trichloroethane #M	<4	<4	<4					<4	ug/kg	TM15/PM10		
Tetrachloroethene (PCE) #	<3	<3	<3					<3	ug/kg	TM15/PM10		
1,3-Dichloropropane #M	<4	<4	<4					<4	ug/kg	TM15/PM10		
Dibromochloromethane #M	<5	<5	<5					<5	ug/kg	TM15/PM10		
1,2-Dibromoethane #	<3	<3	<3					<3	ug/kg	TM15/PM10		
Chlorobenzene #M	<4	<4	<4					<4	ug/kg	TM15/PM10		
1,1,1,2-Tetrachloroethane #M	<5	<5	<5					<5	ug/kg	TM15/PM10		
Ethylbenzene #M	<3	<3	<3					<3	ug/kg	TM15/PM10		
p/m-Xylene #M	<4	<4	<4					<4	ug/kg	TM15/PM10		
o-Xylene #M	<4	<4	<4					<4	ug/kg	TM15/PM10		
Styrene	<3	<3	<3					<3	ug/kg	TM15/PM10		
Bromoform	<4	<4	<4					<4	ug/kg	TM15/PM10		
Isopropylbenzene #	<3	<3	<3					<3	ug/kg	TM15/PM10		
1,1,2,2-Tetrachloroethane #M	<3	<3	<3					<3	ug/kg	TM15/PM10		
Bromobenzene	<2	<2	<2					<2	ug/kg	TM15/PM10		
1,2,3-Trichloropropane #M	<4	<4	<4					<4	ug/kg	TM15/PM10		
Propylbenzene #	<4	<4	<4					<4	ug/kg	TM15/PM10		
2-Chlorotoluene	<3	<3	<3					<3	ug/kg	TM15/PM10		
1,3,5-Trimethylbenzene #	<3	<3	<3					<3	ug/kg	TM15/PM10		
4-Chlorotoluene	<3	<3	<3					<3	ug/kg	TM15/PM10		
tert-Butylbenzene #	<5	<5	<5					<5	ug/kg	TM15/PM10		
1,2,4-Trimethylbenzene #	<6	<6	<6					<6	ug/kg	TM15/PM10		
sec-Butylbenzene #	<4	<4	<4					<4	ug/kg	TM15/PM10		
4-Isopropyltoluene #	<4	<4	<4					<4	ug/kg	TM15/PM10		
1,3-Dichlorobenzene #M	<4	<4	<4					<4	ug/kg	TM15/PM10		
1,4-Dichlorobenzene #	<4	<4	<4					<4	ug/kg	TM15/PM10		
n-Butylbenzene #	<4	<4	<4					<4	ug/kg	TM15/PM10		
1,2-Dichlorobenzene #M	<4	<4	<4					<4	ug/kg	TM15/PM10		
1,2-Dibromo-3-chloropropane #	<4	<4	<4					<4	ug/kg	TM15/PM10		
1,2,4-Trichlorobenzene #	<7	<7	<7					<7	ug/kg	TM15/PM10		
Hexachlorobutadiene	<4	<4	<4					<4	ug/kg	TM15/PM10		
Naphthalene	<27	103	191					<27	ug/kg	TM15/PM10		
1,2,3-Trichlorobenzene #	<7	<7	<7					<7	ug/kg	TM15/PM10		
Surrogate Recovery Toluene D8	111	101	112					<0	%	TM15/PM10		
Surrogate Recovery 4-Bromofluorobenzene	115	83	123					<0	%	TM15/PM10		

Please include all sections of this report if it is reproduced

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact:
 JE Job No.: 15/17326

VOC Report : CEN 10:1 1 Batch

J E Sample No.	79-81	91-93	100-102										LOD/LOR	Units	Method No.
Sample ID	BH111	BH108	BH108												
Depth	0.20-0.40	1.00	4.00												
COC No / misc Containers	V J T	V J T	V J T												
Sample Date	03/12/2015	03/12/2015	03/12/2015												
Sample Type	Soil	Soil	Soil												
Batch Number	2	2	2												
Date of Receipt	04/12/2015	04/12/2015	04/12/2015												
VOC MS															
Dichlorodifluoromethane	<2	<2	<2										<2	ug/l	TM15/PM69
Methyl Tertiary Butyl Ether	<1	<1	<1										<1	ug/l	TM15/PM69
Chloromethane	<3	<3	<3										<3	ug/l	TM15/PM69
Vinyl Chloride	<0.1	<0.1	<0.1										<0.1	ug/l	TM15/PM69
Bromomethane	<1	<1	<1										<1	ug/l	TM15/PM69
Chloroethane	<3	<3	<3										<3	ug/l	TM15/PM69
Trichlorofluoromethane	<3	<3	<3										<3	ug/l	TM15/PM69
1,1-Dichloroethene (1,1 DCE)	<3	<3	<3										<3	ug/l	TM15/PM69
Dichloromethane (DCM)	<3	<3	<3										<3	ug/l	TM15/PM69
trans-1-2-Dichloroethene	<3	<3	<3										<3	ug/l	TM15/PM69
1,1-Dichloroethane	<3	<3	<3										<3	ug/l	TM15/PM69
cis-1-2-Dichloroethene	<3	<3	<3										<3	ug/l	TM15/PM69
2,2-Dichloropropane	<1	<1	<1										<1	ug/l	TM15/PM69
Bromochloromethane	<2	<2	<2										<2	ug/l	TM15/PM69
Chloroform	<2	<2	<2										<2	ug/l	TM15/PM69
1,1,1-Trichloroethane	<2	<2	<2										<2	ug/l	TM15/PM69
1,1-Dichloropropene	<3	<3	<3										<3	ug/l	TM15/PM69
Carbon tetrachloride	<2	<2	<2										<2	ug/l	TM15/PM69
1,2-Dichloroethane	<2	<2	<2										<2	ug/l	TM15/PM69
Benzene	<1	<1	<1										<1	ug/l	TM15/PM69
Trichloroethene (TCE)	<3	<3	<3										<3	ug/l	TM15/PM69
1,2-Dichloropropane	<2	<2	<2										<2	ug/l	TM15/PM69
Dibromomethane	<3	<3	<3										<3	ug/l	TM15/PM69
Bromodichloromethane	<2	<2	<2										<2	ug/l	TM15/PM69
cis-1-3-Dichloropropene	<2	<2	<2										<2	ug/l	TM15/PM69
Toluene	<2	<2	<2										<2	ug/l	TM15/PM69
trans-1-3-Dichloropropene	<2	<2	<2										<2	ug/l	TM15/PM69
1,1,2-Trichloroethane	<2	<2	<2										<2	ug/l	TM15/PM69
Tetrachloroethene (PCE)	<3	<3	<3										<3	ug/l	TM15/PM69
1,3-Dichloropropane	<2	<2	<2										<2	ug/l	TM15/PM69
Dibromochloromethane	<2	<2	<2										<2	ug/l	TM15/PM69
1,2-Dibromoethane	<2	<2	<2										<2	ug/l	TM15/PM69
Chlorobenzene	<2	<2	<2										<2	ug/l	TM15/PM69
1,1,1,2-Tetrachloroethane	<2	<2	<2										<2	ug/l	TM15/PM69
Ethylbenzene	<2	<2	<2										<2	ug/l	TM15/PM69
p/m-Xylene	<3	<3	<3										<3	ug/l	TM15/PM69
o-Xylene	<2	<2	<2										<2	ug/l	TM15/PM69
Styrene	<2	<2	<2										<2	ug/l	TM15/PM69
Bromoform	<2	<2	<2										<2	ug/l	TM15/PM69
Isopropylbenzene	<3	<3	<3										<3	ug/l	TM15/PM69
1,1,2,2-Tetrachloroethane	<4	<4	<4										<4	ug/l	TM15/PM69
Bromobenzene	<2	<2	<2										<2	ug/l	TM15/PM69
1,2,3-Trichloropropane	<3	<3	<3										<3	ug/l	TM15/PM69
Propylbenzene	<3	<3	<3										<3	ug/l	TM15/PM69
2-Chlorotoluene	<3	<3	<3										<3	ug/l	TM15/PM69
1,3,5-Trimethylbenzene	<3	<3	<3										<3	ug/l	TM15/PM69
4-Chlorotoluene	<3	<3	<3										<3	ug/l	TM15/PM69
tert-Butylbenzene	<3	<3	<3										<3	ug/l	TM15/PM69
1,2,4-Trimethylbenzene	<3	<3	<3										<3	ug/l	TM15/PM69
sec-Butylbenzene	<3	<3	<3										<3	ug/l	TM15/PM69
4-Isopropyltoluene	<3	<3	<3										<3	ug/l	TM15/PM69
1,3-Dichlorobenzene	<3	<3	<3										<3	ug/l	TM15/PM69
1,4-Dichlorobenzene	<3	<3	<3										<3	ug/l	TM15/PM69
n-Butylbenzene	<3	<3	<3										<3	ug/l	TM15/PM69
1,2-Dichlorobenzene	<3	<3	<3										<3	ug/l	TM15/PM69
1,2-Dibromo-3-chloropropane	<2	<2	<2										<2	ug/l	TM15/PM69
1,2,4-Trichlorobenzene	<3	<3	<3										<3	ug/l	TM15/PM69
Hexachlorobutadiene	<3	<3	<3										<3	ug/l	TM15/PM69
Naphthalene	<2	<2	<2										<2	ug/l	TM15/PM69
1,2,3-Trichlorobenzene	<3	<3	<3										<3	ug/l	TM15/PM69
Surrogate Recovery Toluene D8	108	107	102										<0	%	TM15/PM69
Surrogate Recovery 4-Bromofluorobenzene	109	107	103										<0	%	TM15/PM69

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:

Note:

Analysis was carried out in accordance with our documented in-house methods PM042 and TM065 and HSG 248 by Stereo and Polarised Light Microscopy using Dispersion Staining Techniques and is covered by our UKAS accreditation. Samples are retained for not less than 6 months from the date of analysis unless specifically requested.

Opinions lie outside the scope of our UKAS accreditation.

Where the sample is not taken by a Jones Environmental Laboratory consultant, Jones Environmental Laboratory cannot be responsible for inaccurate or unrepresentative sampling.

Any questionable sample will automatically be assumed to have breached the Waste Limit and further testing may be required.

Signed on behalf of Jones Environmental Laboratory:

Asbestos Team Leader

J E Job No.	Batch	Sample ID	Depth	J E Sample No.	Date Of Analysis	Analysis	Result
15/17326	2	BH111	0.20-0.40	80	23/12/2015	Mass of Dry Sample	43.2 (g)
					23/12/2015	General Description (Bulk Analysis)	Soil/Stone/Brick
					23/12/2015	Asbestos Containing Material	None
					23/12/2015	Asbestos Containing Material (2)	None
					23/12/2015	Asbestos Screen	NAD
					23/12/2015	Asbestos Screen (2)	NAD
					23/12/2015	Asbestos Level	NAD
					23/12/2015	Waste Limit	<0.1%
15/17326	2	BH108	1.00	92	23/12/2015	Mass of Dry Sample	49.0 (g)
					23/12/2015	General Description (Bulk Analysis)	Soil/Stone
					23/12/2015	Asbestos Containing Material	None
					23/12/2015	Asbestos Containing Material (2)	None
					23/12/2015	Asbestos Screen	NAD
					23/12/2015	Asbestos Screen (2)	NAD
					23/12/2015	Asbestos Level	NAD
					23/12/2015	Waste Limit	<0.1%
15/17326	2	BH108	4.00	101	23/12/2015	Mass of Dry Sample	47.4 (g)
					23/12/2015	General Description (Bulk Analysis)	Soil/Stone
					23/12/2015	Asbestos Containing Material	None
					23/12/2015	Asbestos Containing Material (2)	None
					23/12/2015	Asbestos Screen	NAD
					23/12/2015	Asbestos Screen (2)	NAD
					23/12/2015	Asbestos Level	NAD
					23/12/2015	Waste Limit	<0.1%

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

JE Job No.: 15/17326

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. 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.

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.

WATERS

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

ISO17025 (UKAS) accreditation applies to surface water and groundwater and 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

Samples must be received in a condition appropriate to the requested analyses. All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. If this is not the case you will be informed and any test results that may be compromised highlighted on your deviating samples report.

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.

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.

Please include all sections of this report if it is reproduced

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS) accredited - UK.
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.
++	Result outside calibration range, results should be considered as indicative only and are not accredited.
*	Analysis subcontracted to a Jones Environmental 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
AA	x10 Dilution

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.				
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes	Yes	AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM5/TM36	TM005: Modified USEPA 8015B. Determination of solvent Extractable Petroleum Hydrocarbons (EPH) including column fractionation in the carbon range of C10-35 into aliphatic and aromatic fractions by GC-FID. TM036: Modified USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-10 by headspace GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5/TM36	TM005: Modified USEPA 8015B. Determination of solvent Extractable Petroleum Hydrocarbons (EPH) including column fractionation in the carbon range of C10-35 into aliphatic and aromatic fractions by GC-FID. TM036: Modified USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-10 by headspace GC-FID.	PM30/PM69	PM030: Eluate samples are extracted with solvent using a magnetic stirrer to create a vortex. PM069: One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	Yes
PM13	A visual examination of the solid sample is carried out to ascertain sample make up, colour and any other inclusions. This is not a geotechnical description.	PM0	No preparation is required.			AR	
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM69	Modified BS EN 12457 method. One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM69	Modified BS EN 12457 method. One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	Yes
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes
TM17	Modified US EPA method 8270. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	Yes
TM17	Modified US EPA method 8270. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM21	Modified USEPA 415.1. Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.	Yes		AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM14	Analysis of waters and leachates for metals by ICP OES. Samples are filtered for dissolved metals and acidified if required.	Yes		AR	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes	Yes	AD	Yes
TM31	Modified USEPA 8015B. Determination of Methylterbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM31	Modified USEPA 8015B. Determination of Methylterbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM69	Modified BS EN 12457 method. One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	Yes
TM38	Soluble Ion analysis using the Thermo Aquakem Photometric Automatic Analyser. Modified US EPA methods 325.2, 375.4, 365.2, 353.1, 354.1	PM0	No preparation is required.			AR	Yes
TM38	Soluble Ion analysis using the Thermo Aquakem Photometric Automatic Analyser. Modified US EPA methods 325.2, 375.4, 365.2, 353.1, 354.1	PM20	Extraction of dried and ground samples with deionised water in a 2:1 water to solid ratio for anions. Extraction of as received samples with deionised water in a 2:1 water to solid ratio for ammoniacal nitrogen. Samples are extracted using an orbital shaker.	Yes		AR	Yes
TM60	Modified USEPA 9060. Determination of TOC by calculation from Total Carbon and Inorganic Carbon using a TOC analyser, the carbon in the sample is converted to CO2 and then passed through a non-dispersive infrared gas analyser (NDIR).	PM0	No preparation is required.			AR	Yes
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.			AR	
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.	Yes		AR	
TM73	Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.	PM0	No preparation is required.			AR	Yes
TM73	Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes	Yes	AR	No
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM32	Hot water soluble boron is extracted from dried and ground samples using a 20:1 ratio.	Yes	Yes	AD	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM89	Modified USEPA method OIA-1667. Determination of cyanide by Flow Injection Analyser.	PM0	No preparation is required.	Yes		AR	Yes
TM89	Modified USEPA method OIA-1667. Determination of cyanide by Flow Injection Analyser.	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide and Thiocyanate analysis.	Yes	Yes	AR	Yes
NONE	No Method Code	NONE	No Method Code			AR	Yes
NONE	No Method Code	PM17	Modified method EN12457-2 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.				
NONE	No Method Code	PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.			AR	



Jones Environmental Laboratory

Registered Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA. UK

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Attention :

Date : 21st December, 2015

Your reference : PN153428

Our reference : Test Report 15/17326 Batch 3

Location : Stockport Bus Station

Date samples received : 7th December, 2015

Status : Final report

Issue : 1

Six samples were received for analysis on 7th December, 2015 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.

Compiled By:

Jones Environmental Laboratory

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact:
 JE Job No.: 15/17326

Report : Solid
 Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	130-132	136-138															Please see attached notes for all abbreviations and acronyms		
																	LOD/LOR	Units	Method No.
Sample ID	WS203	WS224																	
Depth	0.50	0.20																	
COC No / misc																			
Containers	V J T	V J T																	
Sample Date	04/12/2015	04/12/2015																	
Sample Type	Soil	Soil																	
Batch Number	3	3																	
Date of Receipt	07/12/2015	07/12/2015																	
Arsenic #M	8.1	13.4															<0.5	mg/kg	TM30/PM15
Cadmium #M	1.7	0.8															<0.1	mg/kg	TM30/PM15
Chromium #M	49.8	52.6															<0.5	mg/kg	TM30/PM15
Copper #M	34	44															<1	mg/kg	TM30/PM15
Lead #M	89	93															<5	mg/kg	TM30/PM15
Mercury #M	<0.1	0.2															<0.1	mg/kg	TM30/PM15
Nickel #M	12.6	15.3															<0.7	mg/kg	TM30/PM15
Selenium #M	<1	<1															<1	mg/kg	TM30/PM15
Vanadium	13	20															<1	mg/kg	TM30/PM15
Water Soluble Boron #M	0.7	0.3															<0.1	mg/kg	TM74/PM32
Zinc #M	197	139															<5	mg/kg	TM30/PM15
PAH MS																			
Naphthalene #M	3.00	<0.04															<0.04	mg/kg	TM4/PM8
Acenaphthylene	0.32	<0.03															<0.03	mg/kg	TM4/PM8
Acenaphthene #M	0.47	<0.05															<0.05	mg/kg	TM4/PM8
Fluorene #M	0.68	<0.04															<0.04	mg/kg	TM4/PM8
Phenanthrene #M	3.98	0.41															<0.03	mg/kg	TM4/PM8
Anthracene #	0.88	0.10															<0.04	mg/kg	TM4/PM8
Fluoranthene #M	3.73	0.76															<0.03	mg/kg	TM4/PM8
Pyrene #	3.26	0.67															<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	1.42	0.35															<0.06	mg/kg	TM4/PM8
Chrysene #M	1.66	0.42															<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #M	2.16	0.53															<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	1.49	0.32															<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene #M	0.82	0.20															<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	0.22	0.07															<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	0.72	0.18															<0.04	mg/kg	TM4/PM8
PAH 16 Total	24.8	4.0															<0.6	mg/kg	TM4/PM8
Benzo(b)fluoranthene	1.56	0.38															<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	0.60	0.15															<0.02	mg/kg	TM4/PM8
PAH Surrogate % Recovery	118	118															<0	%	TM4/PM8

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:
JE Job No.: 15/17326

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.		130-132	136-138								Please see attached notes for all abbreviations and acronyms		
Sample ID	WS203	WS224									LOD/LOR	Units	Method No.
Depth	0.50	0.20											
COC No / misc													
Containers	V J T	V J T											
Sample Date	04/12/2015	04/12/2015											
Sample Type	Soil	Soil											
Batch Number	3	3											
Date of Receipt	07/12/2015	07/12/2015											
Phenol	<10	<10									<10	ug/kg	TM16/PM8
Total Speciated Phenols MS	<10	<10									<10	ug/kg	TM16/PM8
Total Organic Carbon #	0.50	1.01									<0.02	%	TM21/PM24
pH #M	8.95	7.89									<0.01	pH units	TM73/PM11
Sample Type	Sand	Clayey Loam										None	PM13/PM0
Sample Colour	Red	Dark Brown										None	PM13/PM0
Other Items	stones	stones, brick fragments and vegetation										None	PM13/PM0

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:

Note:

Analysis was carried out in accordance with our documented in-house methods PM042 and TM065 and HSG 248 by Stereo and Polarised Light Microscopy using Dispersion Staining Techniques and is covered by our UKAS accreditation. Samples are retained for not less than 6 months from the date of analysis unless specifically requested.

Opinions lie outside the scope of our UKAS accreditation.

Where the sample is not taken by a Jones Environmental Laboratory consultant, Jones Environmental Laboratory cannot be responsible for inaccurate or unrepresentative sampling.

Any questionable sample will automatically be assumed to have breached the Waste Limit and further testing may be required.

Signed on behalf of Jones Environmental Laboratory:

Asbestos Team Leader

J E Job No.	Batch	Sample ID	Depth	J E Sample No.	Date Of Analysis	Analysis	Result
15/17326	3	WS203	0.50	131	11/12/2015	Mass of Dry Sample	50.8 (g)
					15/12/2015	General Description (Bulk Analysis)	soil/stones
					15/12/2015	Asbestos Containing Material	None
					15/12/2015	Asbestos Containing Material (2)	None
					15/12/2015	Asbestos Screen	NAD
					15/12/2015	Asbestos Screen (2)	NAD
					15/12/2015	Asbestos Level	NAD
					15/12/2015	Waste Limit	<0.1%
15/17326	3	WS224	0.20	137	11/12/2015	Mass of Dry Sample	46.8 (g)
					15/12/2015	General Description (Bulk Analysis)	soil/stones
					15/12/2015	Asbestos Containing Material	None
					15/12/2015	Asbestos Containing Material (2)	None
					15/12/2015	Asbestos Screen	NAD
					15/12/2015	Asbestos Screen (2)	NAD
					15/12/2015	Asbestos Level	NAD
					15/12/2015	Waste Limit	<0.1%

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:

J E Job No.	Batch	Sample ID	Depth	J E Sample No.	Analysis	Reason
No deviating sample report results for job 15/17326						

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

JE Job No.: 15/17326

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. 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.

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.

WATERS

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

ISO17025 (UKAS) accreditation applies to surface water and groundwater and 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

Samples must be received in a condition appropriate to the requested analyses. All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. If this is not the case you will be informed and any test results that may be compromised highlighted on your deviating samples report.

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.

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.

Please include all sections of this report if it is reproduced

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS) accredited - UK.
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.
++	Result outside calibration range, results should be considered as indicative only and are not accredited.
*	Analysis subcontracted to a Jones Environmental 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

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.				
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes	Yes	AR	Yes
TM5/TM36	TM005: Modified USEPA 8015B. Determination of solvent Extractable Petroleum Hydrocarbons (EPH) including column fractionation in the carbon range of C10-35 into aliphatic and aromatic fractions by GC-FID. TM036: Modified USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-10 by headspace GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
PM13	A visual examination of the solid sample is carried out to ascertain sample make up, colour and any other inclusions. This is not a geotechnical description.	PM0	No preparation is required.			AR	
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM21	Modified USEPA 415.1. Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.	Yes		AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes	Yes	AD	Yes
TM31	Modified USEPA 8015B. Determination of Methyltertbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM31	Modified USEPA 8015B. Determination of Methyltertbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.			AR	
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.	Yes		AR	
TM73	Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes	Yes	AR	No

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM32	Hot water soluble boron is extracted from dried and ground samples using a 20:1 ratio.	Yes	Yes	AD	Yes



Jones Environmental Laboratory

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Attention :

Date : 22nd December, 2015

Your reference : PN153428

Our reference : Test Report 15/17326 Batch 4

Location : Stockport Bus Station

Date samples received : 8th December, 2015

Status : Final report

Issue : 1

Four samples were received for analysis on 8th December, 2015 of which one 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.

Compiled By:

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:
JE Job No.: 15/17326

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	148-150																										
Sample ID	WS212																										
Depth	1.00																										
COC No / misc																											
Containers	V J T																										
Sample Date	07/12/2015																										
Sample Type	Soil																										
Batch Number	4																										
Date of Receipt	08/12/2015																										
		LOD/LOR	Units	Method No.																							
Arsenic ^{#M}	10.4	<0.5	mg/kg	TM30/PM15																							
Cadmium ^{#M}	<0.1	<0.1	mg/kg	TM30/PM15																							
Chromium ^{#M}	41.3	<0.5	mg/kg	TM30/PM15																							
Copper ^{#M}	46	<1	mg/kg	TM30/PM15																							
Lead ^{#M}	29	<5	mg/kg	TM30/PM15																							
Mercury ^{#M}	0.5	<0.1	mg/kg	TM30/PM15																							
Nickel ^{#M}	29.0	<0.7	mg/kg	TM30/PM15																							
Selenium ^{#M}	1	<1	mg/kg	TM30/PM15																							
Vanadium	35	<1	mg/kg	TM30/PM15																							
Water Soluble Boron ^{#M}	0.9	<0.1	mg/kg	TM74/PM32																							
Zinc ^{#M}	49	<5	mg/kg	TM30/PM15																							
Methyl Tertiary Butyl Ether ^{#M}	<6	<6	ug/kg	TM15/PM10																							
Benzene ^{#M}	6	<5	ug/kg	TM15/PM10																							
Toluene ^{#M}	21	<3	ug/kg	TM15/PM10																							
Ethylbenzene ^{#M}	14	<3	ug/kg	TM15/PM10																							
p/m-Xylene ^{#M}	36	<4	ug/kg	TM15/PM10																							
o-Xylene ^{#M}	20	<4	ug/kg	TM15/PM10																							
Surrogate Recovery Toluene D8	104	<0	%	TM15/PM10																							
Surrogate Recovery 4-Bromofluorobenzene	104	<0	%	TM15/PM10																							
TPH CWG																											
Aliphatics																											
>C5-C6 ^{#M}	<0.1	<0.1	mg/kg	TM36/PM12																							
>C6-C8 ^{#M}	<0.1	<0.1	mg/kg	TM36/PM12																							
>C8-C10	0.3	<0.1	mg/kg	TM36/PM12																							
>C10-C12 ^{#M}	<0.2	<0.2	mg/kg	TM5/PM16																							
>C12-C16 ^{#M}	<4	<4	mg/kg	TM5/PM16																							
>C16-C21 ^{#M}	10	<7	mg/kg	TM5/PM16																							
>C21-C35 ^{#M}	43	<7	mg/kg	TM5/PM16																							
>C35-C44	<7	<7	mg/kg	TM5/PM16																							
Total aliphatics C5-44	53	<26	mg/kg	TM5/PM16																							
Aromatics																											
>C5-EC7	<0.1	<0.1	mg/kg	TM36/PM12																							
>EC7-EC8	<0.1	<0.1	mg/kg	TM36/PM12																							
>EC8-EC10 ^{#M}	0.2	<0.1	mg/kg	TM36/PM12																							
>EC10-EC12	10.1	<0.2	mg/kg	TM5/PM16																							
>EC12-EC16	58	<4	mg/kg	TM5/PM16																							
>EC16-EC21	293	<7	mg/kg	TM5/PM16																							
>EC21-EC35	574	<7	mg/kg	TM5/PM16																							
>EC35-EC44	64	<7	mg/kg	TM5/PM16																							
Total aromatics C5-44	999	<26	mg/kg	TM5/PM16																							
Total aliphatics and aromatics(C5-44)	1052	<52	mg/kg	TM5/PM16																							

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact:
 JE Job No.: 15/17326

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	148-150													
Sample ID	WS212													
Depth	1.00													
COC No / misc														
Containers	V J T													
Sample Date	07/12/2015													
Sample Type	Soil													
Batch Number	4													
Date of Receipt	08/12/2015													
												LOD/LOR	Units	Method No.
MTBE #	<5											<5	ug/kg	TM31/PM12
Benzene #	12											<5	ug/kg	TM31/PM12
Toluene #	30											<5	ug/kg	TM31/PM12
Ethylbenzene #	24											<5	ug/kg	TM31/PM12
m/p-Xylene #	61											<5	ug/kg	TM31/PM12
o-Xylene #	47											<5	ug/kg	TM31/PM12
PCB 28 #	<50AA											<5	ug/kg	TM17/PM8
PCB 52 #	<50AA											<5	ug/kg	TM17/PM8
PCB 101 #	<50AA											<5	ug/kg	TM17/PM8
PCB 118 #	<50AA											<5	ug/kg	TM17/PM8
PCB 138 #	<50AA											<5	ug/kg	TM17/PM8
PCB 153 #	<50AA											<5	ug/kg	TM17/PM8
PCB 180 #	<50AA											<5	ug/kg	TM17/PM8
Total 7 PCBs #	<350AA											<35	ug/kg	TM17/PM8
2-Chlorophenol	<10											<10	ug/kg	TM16/PM8
Natural Moisture Content	7.2											<0.1	%	PM4/PM0
2-Methylphenol	<10											<10	ug/kg	TM16/PM8
2-Nitrophenol	<10											<10	ug/kg	TM16/PM8
2,4-Dichlorophenol	<10											<10	ug/kg	TM16/PM8
2,4-Dimethylphenol	<10											<10	ug/kg	TM16/PM8
2,4,5-Trichlorophenol	<10											<10	ug/kg	TM16/PM8
2,4,6-Trichlorophenol	<10											<10	ug/kg	TM16/PM8
4-Chloro-3-methylphenol	<10											<10	ug/kg	TM16/PM8
4-Methylphenol	<10											<10	ug/kg	TM16/PM8
4-Nitrophenol	<10											<10	ug/kg	TM16/PM8
Pentachlorophenol	<10											<10	ug/kg	TM16/PM8
Phenol	<10											<10	ug/kg	TM16/PM8
Total Speciated Phenols MS	<10											<10	ug/kg	TM16/PM8
Total Organic Carbon #	7.74											<0.02	%	TM21/PM24
pH #M	11.39											<0.01	pH units	TM73/PM11
Sample Type	Sand												None	PM13/PM0
Sample Colour	Green												None	PM13/PM0
Other Items	stones and brick fragments												None	PM13/PM0

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact:
 JE Job No.: 15/17326

Report : CEN 10:1 1 Batch

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	148-150										Please see attached notes for all abbreviations and acronyms
Sample ID	WS212										
Depth	1.00										
COC No / misc											
Containers	V J T										
Sample Date	07/12/2015										
Sample Type	Soil										
Batch Number	4										
Date of Receipt	08/12/2015										
									LOD/LOR	Units	
PCB 28	<0.1								<0.1	ug/l	TM17/PM30
PCB 52	<0.1								<0.1	ug/l	TM17/PM30
PCB 101	<0.1								<0.1	ug/l	TM17/PM30
PCB 118	<0.1								<0.1	ug/l	TM17/PM30
PCB 138	<0.1								<0.1	ug/l	TM17/PM30
PCB 153	<0.1								<0.1	ug/l	TM17/PM30
PCB 180	<0.1								<0.1	ug/l	TM17/PM30
Total 7 PCBs	<0.7								<0.7	ug/l	TM17/PM30
2-Chlorophenol	<0.5								<0.5	ug/l	TM16/PM30
2-Methylphenol	<0.5								<0.5	ug/l	TM16/PM30
2-Nitrophenol	<0.5								<0.5	ug/l	TM16/PM30
2,4-Dichlorophenol	<0.5								<0.5	ug/l	TM16/PM30
2,4-Dimethylphenol	<0.5								<0.5	ug/l	TM16/PM30
2,4,5-Trichlorophenol	<0.5								<0.5	ug/l	TM16/PM30
2,4,6-Trichlorophenol	<0.5								<0.5	ug/l	TM16/PM30
4-Chloro-3-methylphenol	<0.5								<0.5	ug/l	TM16/PM30
4-Methylphenol	<0.5								<0.5	ug/l	TM16/PM30
4-Nitrophenol	<0.5								<0.5	ug/l	TM16/PM30
Pentachlorophenol	<0.5								<0.5	ug/l	TM16/PM30
Phenol	<0.5								<0.5	ug/l	TM16/PM30
Total Speciated Phenols MS	<6								<6	ug/l	TM16/PM30
Mass of raw test portion	0.0972									kg	NONE/PM17
Leachant Volume	0.892									l	NONE/PM17
Dissolved Organic Carbon	6								<2	mg/l	TM60/PM0
pH	11.55								<0.01	pH units	TM73/PM0

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:
JE Job No.: 15/17326

SVOC Report : Solid

J E Sample No.	148-150													
Sample ID	WS212													
Depth	1.00													
COC No / misc Containers	V J T													
Sample Date	07/12/2015													
Sample Type	Soil													
Batch Number	4													
Date of Receipt	08/12/2015													
											LOD/LOR	Units	Method No.	
SVOC MS														
Phenols														
2-Chlorophenol ^{#M}	<10											<10	ug/kg	TM16/PM8
2-Methylphenol	<10											<10	ug/kg	TM16/PM8
2-Nitrophenol	<10											<10	ug/kg	TM16/PM8
2,4-Dichlorophenol ^{#M}	<10											<10	ug/kg	TM16/PM8
2,4-Dimethylphenol	<10											<10	ug/kg	TM16/PM8
2,4,5-Trichlorophenol	<10											<10	ug/kg	TM16/PM8
2,4,6-Trichlorophenol	<10											<10	ug/kg	TM16/PM8
4-Chloro-3-methylphenol	<10											<10	ug/kg	TM16/PM8
4-Methylphenol	<10											<10	ug/kg	TM16/PM8
4-Nitrophenol	<10											<10	ug/kg	TM16/PM8
Pentachlorophenol	<10											<10	ug/kg	TM16/PM8
Phenol ^{#M}	<10											<10	ug/kg	TM16/PM8
PAHs														
2-Chloronaphthalene ^{#M}	<10											<10	ug/kg	TM16/PM8
2-Methylnaphthalene ^{#M}	22027 ^{AA}											<10	ug/kg	TM16/PM8
Naphthalene	48270 ^{AA}											<10	ug/kg	TM16/PM8
Acenaphthylene	1602											<10	ug/kg	TM16/PM8
Acenaphthene	21107											<10	ug/kg	TM16/PM8
Fluorene	12684											<10	ug/kg	TM16/PM8
Phenanthrene ^{#M}	118064 ^{AA}											<10	ug/kg	TM16/PM8
Anthracene	31551 ^{AA}											<10	ug/kg	TM16/PM8
Fluoranthene ^{#M}	122155 ^{AA}											<10	ug/kg	TM16/PM8
Pyrene ^{#M}	106556 ^{AA}											<10	ug/kg	TM16/PM8
Benzo(a)anthracene	35629 ^{AA}											<10	ug/kg	TM16/PM8
Chrysene	49125 ^{AA}											<10	ug/kg	TM16/PM8
Benzo(bk)fluoranthene	70633 ^{AA}											<10	ug/kg	TM16/PM8
Benzo(a)pyrene	37328 ^{AA}											<10	ug/kg	TM16/PM8
Indeno(123cd)pyrene	19577											<10	ug/kg	TM16/PM8
Dibenzo(ah)anthracene	10099											<10	ug/kg	TM16/PM8
Benzo(ghi)perylene	22950 ^{AA}											<10	ug/kg	TM16/PM8
Benzo(b)fluoranthene	50856 ^{AA}											<10	ug/kg	TM16/PM8
Benzo(k)fluoranthene	19777 ^{AA}											<10	ug/kg	TM16/PM8
Phthalates														
Bis(2-ethylhexyl) phthalate	<100											<100	ug/kg	TM16/PM8
Butylbenzyl phthalate	<100											<100	ug/kg	TM16/PM8
Di-n-butyl phthalate	<100											<100	ug/kg	TM16/PM8
Di-n-Octyl phthalate	<100											<100	ug/kg	TM16/PM8
Diethyl phthalate	<100											<100	ug/kg	TM16/PM8
Dimethyl phthalate ^{#M}	<100											<100	ug/kg	TM16/PM8

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact:
 JE Job No.: 15/17326

SVOC Report : Solid

J E Sample No.	148-150										LOD/LOR	Units	Method No.
Sample ID	WS212												
Depth	1.00												
COC No / misc Containers	V J T												
Sample Date	07/12/2015												
Sample Type	Soil												
Batch Number	4												
Date of Receipt	08/12/2015												
Please see attached notes for all abbreviations and acronyms													
SVOC MS													
Other SVOCs													
1,2-Dichlorobenzene	<10										<10	ug/kg	TM16/PM8
1,2,4-Trichlorobenzene #M	<10										<10	ug/kg	TM16/PM8
1,3-Dichlorobenzene	<10										<10	ug/kg	TM16/PM8
1,4-Dichlorobenzene	<10										<10	ug/kg	TM16/PM8
2-Nitroaniline	<10										<10	ug/kg	TM16/PM8
2,4-Dinitrotoluene	<10										<10	ug/kg	TM16/PM8
2,6-Dinitrotoluene	<10										<10	ug/kg	TM16/PM8
3-Nitroaniline	<10										<10	ug/kg	TM16/PM8
4-Bromophenylphenylether #M	<10										<10	ug/kg	TM16/PM8
4-Chloroaniline	<10										<10	ug/kg	TM16/PM8
4-Chlorophenylphenylether	<10										<10	ug/kg	TM16/PM8
4-Nitroaniline	<10										<10	ug/kg	TM16/PM8
Azobenzene	<10										<10	ug/kg	TM16/PM8
Bis(2-chloroethoxy)methane	<10										<10	ug/kg	TM16/PM8
Bis(2-chloroethyl)ether	<10										<10	ug/kg	TM16/PM8
Carbazole	10140										<10	ug/kg	TM16/PM8
Dibenzofuran #M	20120										<10	ug/kg	TM16/PM8
Hexachlorobenzene	<10										<10	ug/kg	TM16/PM8
Hexachlorobutadiene #M	<10										<10	ug/kg	TM16/PM8
Hexachlorocyclopentadiene	<10										<10	ug/kg	TM16/PM8
Hexachloroethane	<10										<10	ug/kg	TM16/PM8
Isophorone #M	<10										<10	ug/kg	TM16/PM8
N-nitrosodi-n-propylamine #M	<10										<10	ug/kg	TM16/PM8
Nitrobenzene #M	<10										<10	ug/kg	TM16/PM8

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact:
 JE Job No.: 15/17326

SVOC Report : CEN 10:1 1 Batch

J E Sample No.	148-150											
Sample ID	WS212											
Depth	1.00											
COC No / misc												
Containers	V J T											
Sample Date	07/12/2015											
Sample Type	Soil											
Batch Number	4											
Date of Receipt	08/12/2015									LOD/LOR	Units	Method No.
SVOC MS												
Other SVOCs												
1,2-Dichlorobenzene	<1									<1	ug/l	TM16/PM30
1,2,4-Trichlorobenzene	<1									<1	ug/l	TM16/PM30
1,3-Dichlorobenzene	<1									<1	ug/l	TM16/PM30
1,4-Dichlorobenzene	<1									<1	ug/l	TM16/PM30
2-Nitroaniline	<1									<1	ug/l	TM16/PM30
2,4-Dinitrotoluene	<0.5									<0.5	ug/l	TM16/PM30
2,6-Dinitrotoluene	<1									<1	ug/l	TM16/PM30
3-Nitroaniline	<1									<1	ug/l	TM16/PM30
4-Bromophenylphenylether	<1									<1	ug/l	TM16/PM30
4-Chloroaniline	<1									<1	ug/l	TM16/PM30
4-Chlorophenylphenylether	<1									<1	ug/l	TM16/PM30
4-Nitroaniline	<0.5									<0.5	ug/l	TM16/PM30
Azobenzene	<0.5									<0.5	ug/l	TM16/PM30
Bis(2-chloroethoxy)methane	<0.5									<0.5	ug/l	TM16/PM30
Bis(2-chloroethyl)ether	<1									<1	ug/l	TM16/PM30
Carbazole	8.0									<0.5	ug/l	TM16/PM30
Dibenzofuran	1.8									<0.5	ug/l	TM16/PM30
Hexachlorobenzene	<1									<1	ug/l	TM16/PM30
Hexachlorobutadiene	<1									<1	ug/l	TM16/PM30
Hexachlorocyclopentadiene	<1									<1	ug/l	TM16/PM30
Hexachloroethane	<1									<1	ug/l	TM16/PM30
Isophorone	<0.5									<0.5	ug/l	TM16/PM30
N-nitrosodi-n-propylamine	<0.5									<0.5	ug/l	TM16/PM30
Nitrobenzene	<1									<1	ug/l	TM16/PM30

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact:
 JE Job No.: 15/17326

VOC Report : Solid

J E Sample No.	148-150												
Sample ID	WS212												
Depth	1.00												
COC No / misc Containers	V J T												
Sample Date	07/12/2015												
Sample Type	Soil												
Batch Number	4												
Date of Receipt	08/12/2015												
										LOD/LOR	Units	Method No.	
Please see attached notes for all abbreviations and acronyms													
VOC MS													
Dichlorodifluoromethane	<2									<2	ug/kg	TM15/PM10	
Methyl Tertiary Butyl Ether #M	<6									<6	ug/kg	TM15/PM10	
Chloromethane #	<3									<3	ug/kg	TM15/PM10	
Vinyl Chloride	<2									<2	ug/kg	TM15/PM10	
Bromomethane	<1									<1	ug/kg	TM15/PM10	
Chloroethane #M	<6									<6	ug/kg	TM15/PM10	
Trichlorofluoromethane #M	<3									<3	ug/kg	TM15/PM10	
1,1-Dichloroethene (1,1 DCE) #M	<6									<6	ug/kg	TM15/PM10	
Dichloromethane (DCM) #	<7									<7	ug/kg	TM15/PM10	
trans-1-2-Dichloroethene #	<3									<3	ug/kg	TM15/PM10	
1,1-Dichloroethane #M	<6									<6	ug/kg	TM15/PM10	
cis-1-2-Dichloroethene #M	<7									<7	ug/kg	TM15/PM10	
2,2-Dichloropropane	<4									<4	ug/kg	TM15/PM10	
Bromochloromethane #M	<4									<4	ug/kg	TM15/PM10	
Chloroform #M	<5									<5	ug/kg	TM15/PM10	
1,1,1-Trichloroethane #M	<5									<5	ug/kg	TM15/PM10	
1,1-Dichloropropene #	<3									<3	ug/kg	TM15/PM10	
Carbon tetrachloride #M	<4									<4	ug/kg	TM15/PM10	
1,2-Dichloroethane #M	<5									<5	ug/kg	TM15/PM10	
Benzene #M	6									<5	ug/kg	TM15/PM10	
Trichloroethene (TCE) #M	<5									<5	ug/kg	TM15/PM10	
1,2-Dichloropropane #M	<4									<4	ug/kg	TM15/PM10	
Dibromomethane #M	<4									<4	ug/kg	TM15/PM10	
Bromodichloromethane #M	<4									<4	ug/kg	TM15/PM10	
cis-1-3-Dichloropropene	<4									<4	ug/kg	TM15/PM10	
Toluene #M	21									<3	ug/kg	TM15/PM10	
trans-1-3-Dichloropropene	<3									<3	ug/kg	TM15/PM10	
1,1,2-Trichloroethane #M	<4									<4	ug/kg	TM15/PM10	
Tetrachloroethene (PCE) #	<3									<3	ug/kg	TM15/PM10	
1,3-Dichloropropane #M	<4									<4	ug/kg	TM15/PM10	
Dibromochloromethane #M	<5									<5	ug/kg	TM15/PM10	
1,2-Dibromoethane #	<3									<3	ug/kg	TM15/PM10	
Chlorobenzene #M	<4									<4	ug/kg	TM15/PM10	
1,1,1,2-Tetrachloroethane #M	<5									<5	ug/kg	TM15/PM10	
Ethylbenzene #M	14									<3	ug/kg	TM15/PM10	
p/m-Xylene #M	36									<4	ug/kg	TM15/PM10	
o-Xylene #M	20									<4	ug/kg	TM15/PM10	
Styrene	<3									<3	ug/kg	TM15/PM10	
Bromoform	<4									<4	ug/kg	TM15/PM10	
Isopropylbenzene #	<3									<3	ug/kg	TM15/PM10	
1,1,2,2-Tetrachloroethane #M	<3									<3	ug/kg	TM15/PM10	
Bromobenzene	<2									<2	ug/kg	TM15/PM10	
1,2,3-Trichloropropane #M	<4									<4	ug/kg	TM15/PM10	
Propylbenzene #	<4									<4	ug/kg	TM15/PM10	
2-Chlorotoluene	<3									<3	ug/kg	TM15/PM10	
1,3,5-Trimethylbenzene #	21									<3	ug/kg	TM15/PM10	
4-Chlorotoluene	<3									<3	ug/kg	TM15/PM10	
tert-Butylbenzene #	<5									<5	ug/kg	TM15/PM10	
1,2,4-Trimethylbenzene #	54									<6	ug/kg	TM15/PM10	
sec-Butylbenzene #	<4									<4	ug/kg	TM15/PM10	
4-Isopropyltoluene #	<4									<4	ug/kg	TM15/PM10	
1,3-Dichlorobenzene #M	<4									<4	ug/kg	TM15/PM10	
1,4-Dichlorobenzene #	<4									<4	ug/kg	TM15/PM10	
n-Butylbenzene #	<4									<4	ug/kg	TM15/PM10	
1,2-Dichlorobenzene #M	<4									<4	ug/kg	TM15/PM10	
1,2-Dibromo-3-chloropropane #	<4									<4	ug/kg	TM15/PM10	
1,2,4-Trichlorobenzene #	<7									<7	ug/kg	TM15/PM10	
Hexachlorobutadiene	<4									<4	ug/kg	TM15/PM10	
Naphthalene	16882 ⁺⁺									<27	ug/kg	TM15/PM10	
1,2,3-Trichlorobenzene #	<7									<7	ug/kg	TM15/PM10	
Surrogate Recovery Toluene D8	104									<0	%	TM15/PM10	
Surrogate Recovery 4-Bromofluorobenzene	104									<0	%	TM15/PM10	

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

JE Job No.: 15/17326

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. 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.

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.

WATERS

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

ISO17025 (UKAS) accreditation applies to surface water and groundwater and 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

Samples must be received in a condition appropriate to the requested analyses. All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. If this is not the case you will be informed and any test results that may be compromised highlighted on your deviating samples report.

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.

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.

Please include all sections of this report if it is reproduced

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS) accredited - UK.
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.
++	Result outside calibration range, results should be considered as indicative only and are not accredited.
*	Analysis subcontracted to a Jones Environmental 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
AA	x10 Dilution

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.				
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes	Yes	AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	Yes
TM5/TM36	TM005: Modified USEPA 8015B. Determination of solvent Extractable Petroleum Hydrocarbons (EPH) including column fractionation in the carbon range of C10-35 into aliphatic and aromatic fractions by GC-FID. TM036: Modified USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-10 by headspace GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5/TM36	TM005: Modified USEPA 8015B. Determination of solvent Extractable Petroleum Hydrocarbons (EPH) including column fractionation in the carbon range of C10-35 into aliphatic and aromatic fractions by GC-FID. TM036: Modified USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-10 by headspace GC-FID.	PM30/PM69	PM030: Eluate samples are extracted with solvent using a magnetic stirrer to create a vortex.PM069: One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	Yes
PM13	A visual examination of the solid sample is carried out to ascertain sample make up, colour and any other inclusions. This is not a geotechnical description.	PM0	No preparation is required.			AR	
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM69	Modified BS EN 12457 method. One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM69	Modified BS EN 12457 method. One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	Yes
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes
TM17	Modified US EPA method 8270. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	Yes
TM17	Modified US EPA method 8270. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM21	Modified USEPA 415.1. Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.	Yes		AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM14	Analysis of waters and leachates for metals by ICP OES. Samples are filtered for dissolved metals and acidified if required.	Yes		AR	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes	Yes	AD	Yes
TM31	Modified USEPA 8015B. Determination of Methylterbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM31	Modified USEPA 8015B. Determination of Methylterbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM69	Modified BS EN 12457 method. One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	Yes
TM60	Modified USEPA 9060. Determination of TOC by calculation from Total Carbon and Inorganic Carbon using a TOC analyser, the carbon in the sample is converted to CO2 and then passed through a non-dispersive infrared gas analyser (NDIR).	PM0	No preparation is required.			AR	Yes
TM73	Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.	PM0	No preparation is required.			AR	Yes
TM73	Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes	Yes	AR	No
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM32	Hot water soluble boron is extracted from dried and ground samples using a 20:1 ratio.	Yes	Yes	AD	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
NONE	No Method Code	PM17	Modified method EN12457-2 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.				
NONE	No Method Code	PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.			AR	



Jones Environmental Laboratory

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Attention :

Date : 21st December, 2015
Your reference : PN153428
Our reference : Test Report 15/17326 Batch 5
Location : Stockport Bus Station
Date samples received : 9th December, 2015
Status : Final report
Issue : 1

Twelve samples were received for analysis on 9th December, 2015 of which three 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.

Compiled By:

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact:
 JE Job No.: 15/17326

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	169-171	175-177	181-183											Please see attached notes for all abbreviations and acronyms				
Sample ID	WS214	WS211	WS211															
Depth	0.50	0.20	1.00															
COC No / misc																		
Containers	V J T	V J T	V J T															
Sample Date	08/12/2015	08/12/2015	08/12/2015															
Sample Type	Soil	Soil	Soil															
Batch Number	5	5	5															
Date of Receipt	09/12/2015	09/12/2015	09/12/2015															
														LOD/LOR	Units	Method No.		
Arsenic ^{#M}	21.5	13.5	8.7											<0.5	mg/kg	TM30/PM15		
Cadmium ^{#M}	0.3	0.2	<0.1											<0.1	mg/kg	TM30/PM15		
Chromium ^{#M}	39.4	39.1	40.5											<0.5	mg/kg	TM30/PM15		
Copper ^{#M}	79	114	37											<1	mg/kg	TM30/PM15		
Lead ^{#M}	131	42	81											<5	mg/kg	TM30/PM15		
Mercury ^{#M}	0.2	0.2	0.2											<0.1	mg/kg	TM30/PM15		
Nickel ^{#M}	35.5	44.5	20.9											<0.7	mg/kg	TM30/PM15		
Selenium ^{#M}	1	2	<1											<1	mg/kg	TM30/PM15		
Vanadium	53	60	28											<1	mg/kg	TM30/PM15		
Water Soluble Boron ^{#M}	0.8	0.9	0.9											<0.1	mg/kg	TM74/PM32		
Zinc ^{#M}	131	104	32											<5	mg/kg	TM30/PM15		
PAH MS																		
Naphthalene ^{#M}	-	-	0.32											<0.04	mg/kg	TM4/PM8		
Acenaphthylene	-	-	0.11											<0.03	mg/kg	TM4/PM8		
Acenaphthene ^{#M}	-	-	0.35											<0.05	mg/kg	TM4/PM8		
Fluorene ^{#M}	-	-	0.34											<0.04	mg/kg	TM4/PM8		
Phenanthrene ^{#M}	-	-	2.55											<0.03	mg/kg	TM4/PM8		
Anthracene #	-	-	0.64											<0.04	mg/kg	TM4/PM8		
Fluoranthene ^{#M}	-	-	2.99											<0.03	mg/kg	TM4/PM8		
Pyrene #	-	-	2.83											<0.03	mg/kg	TM4/PM8		
Benzo(a)anthracene #	-	-	1.38											<0.06	mg/kg	TM4/PM8		
Chrysene ^{#M}	-	-	1.62											<0.02	mg/kg	TM4/PM8		
Benzo(bk)fluoranthene ^{#M}	-	-	2.35											<0.07	mg/kg	TM4/PM8		
Benzo(a)pyrene #	-	-	1.73											<0.04	mg/kg	TM4/PM8		
Indeno(123cd)pyrene ^{#M}	-	-	1.20											<0.04	mg/kg	TM4/PM8		
Dibenzo(ah)anthracene #	-	-	0.31											<0.04	mg/kg	TM4/PM8		
Benzo(ghi)perylene #	-	-	0.84											<0.04	mg/kg	TM4/PM8		
PAH 16 Total	-	-	19.6											<0.6	mg/kg	TM4/PM8		
Benzo(b)fluoranthene	-	-	1.69											<0.05	mg/kg	TM4/PM8		
Benzo(k)fluoranthene	-	-	0.66											<0.02	mg/kg	TM4/PM8		
PAH Surrogate % Recovery	-	-	114											<0	%	TM4/PM8		
Methyl Tertiary Butyl Ether ^{#M}	<6	<6	-											<6	ug/kg	TM15/PM10		
Benzene ^{#M}	<5	<5	-											<5	ug/kg	TM15/PM10		
Toluene ^{#M}	<3	15	-											<3	ug/kg	TM15/PM10		
Ethylbenzene ^{#M}	15	42	-											<3	ug/kg	TM15/PM10		
p/m-Xylene ^{#M}	14	37	-											<4	ug/kg	TM15/PM10		
o-Xylene ^{#M}	7	19	-											<4	ug/kg	TM15/PM10		
Surrogate Recovery Toluene D8	109	95	-											<0	%	TM15/PM10		
Surrogate Recovery 4-Bromofluorobenzene	87	81	-											<0	%	TM15/PM10		

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact:
 JE Job No.: 15/17326

Report : Solid
 Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	169-171	175-177	181-183												
Sample ID	WS214	WS211	WS211												
Depth	0.50	0.20	1.00												
COC No / misc															
Containers	V J T	V J T	V J T												
Sample Date	08/12/2015	08/12/2015	08/12/2015												
Sample Type	Soil	Soil	Soil												
Batch Number	5	5	5												
Date of Receipt	09/12/2015	09/12/2015	09/12/2015												
											LOD/LOR	Units	Method No.		
TPH CWG															
Aliphatics															
>C5-C6 ^{#M}	<0.1	<0.1	<0.1										<0.1	mg/kg	TM36/PM12
>C6-C8 ^{#M}	<0.1	<0.1	<0.1										<0.1	mg/kg	TM36/PM12
>C8-C10	<0.1	0.5	<0.1										<0.1	mg/kg	TM36/PM12
>C10-C12 ^{#M}	<0.2	5.2	<0.2										<0.2	mg/kg	TM5/PM16
>C12-C16 ^{#M}	<4	22	<4										<4	mg/kg	TM5/PM16
>C16-C21 ^{#M}	<7	62	<7										<7	mg/kg	TM5/PM16
>C21-C35 ^{#M}	13	197	<7										<7	mg/kg	TM5/PM16
>C35-C44	<7	23	<7										<7	mg/kg	TM5/PM16
Total aliphatics C5-44	<26	310	<26										<26	mg/kg	TM5/TM36/PM16
Aromatics															
>C5-EC7	<0.1	<0.1	<0.1										<0.1	mg/kg	TM36/PM12
>EC7-EC8	<0.1	<0.1	<0.1										<0.1	mg/kg	TM36/PM12
>EC8-EC10 ^{#M}	<0.1	<0.1	<0.1										<0.1	mg/kg	TM36/PM12
>EC10-EC12	1.7	14.9	0.9										<0.2	mg/kg	TM5/PM16
>EC12-EC16	29	337	10										<4	mg/kg	TM5/PM16
>EC16-EC21	278	2009	54										<7	mg/kg	TM5/PM16
>EC21-EC35	665	3359	185										<7	mg/kg	TM5/PM16
>EC35-EC44	71	349	21										<7	mg/kg	TM5/PM16
Total aromatics C5-44	1045	6069	271										<26	mg/kg	TM5/TM36/PM16
Total aliphatics and aromatics(C5-44)	1045	6379	271										<52	mg/kg	TM5/TM36/PM16
MTBE [#]	-	-	<5										<5	ug/kg	TM31/PM12
Benzene [#]	-	-	<5										<5	ug/kg	TM31/PM12
Toluene [#]	-	-	<5										<5	ug/kg	TM31/PM12
Ethylbenzene [#]	-	-	<5										<5	ug/kg	TM31/PM12
m/p-Xylene [#]	-	-	<5										<5	ug/kg	TM31/PM12
o-Xylene [#]	-	-	<5										<5	ug/kg	TM31/PM12
PCB 28 [#]	<25 _{AA}	<25 _{AA}	-										<5	ug/kg	TM17/PM8
PCB 52 [#]	<25 _{AA}	<25 _{AA}	-										<5	ug/kg	TM17/PM8
PCB 101 [#]	<25 _{AA}	<25 _{AA}	-										<5	ug/kg	TM17/PM8
PCB 118 [#]	<25 _{AA}	<25 _{AA}	-										<5	ug/kg	TM17/PM8
PCB 138 [#]	<25 _{AA}	<25 _{AA}	-										<5	ug/kg	TM17/PM8
PCB 153 [#]	<25 _{AA}	<25 _{AA}	-										<5	ug/kg	TM17/PM8
PCB 180 [#]	<25 _{AA}	<25 _{AA}	-										<5	ug/kg	TM17/PM8
Total 7 PCBs [#]	<175 _{AA}	<175 _{AA}	-										<35	ug/kg	TM17/PM8
2-Chlorophenol	<50 _{AA}	<100 _{AB}	<10										<10	ug/kg	TM16/PM8
Natural Moisture Content	19.9	15.4	13.4										<0.1	%	PM4/PM0
2-Methylphenol	<50 _{AA}	<100 _{AB}	<10										<10	ug/kg	TM16/PM8

Please see attached notes for all abbreviations and acronyms

Jones Environmental Laboratory

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact:
 JE Job No.: 15/17326

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

J E Sample No.	169-171	175-177	181-183							LOD/LOR	Units	Method No.
Sample ID	WS214	WS211	WS211									
Depth	0.50	0.20	1.00									
COC No / misc												
Containers	V J T	V J T	V J T									
Sample Date	08/12/2015	08/12/2015	08/12/2015									
Sample Type	Soil	Soil	Soil									
Batch Number	5	5	5									
Date of Receipt	09/12/2015	09/12/2015	09/12/2015									
2-Nitrophenol	<50 ^{AA}	<100 ^{AB}	<10							<10	ug/kg	TM16/PM8
2,4-Dichlorophenol	<50 ^{AA}	<100 ^{AB}	<10							<10	ug/kg	TM16/PM8
2,4-Dimethylphenol	<50 ^{AA}	<100 ^{AB}	<10							<10	ug/kg	TM16/PM8
2,4,5-Trichlorophenol	<50 ^{AA}	<100 ^{AB}	<10							<10	ug/kg	TM16/PM8
2,4,6-Trichlorophenol	<50 ^{AA}	<100 ^{AB}	<10							<10	ug/kg	TM16/PM8
4-Chloro-3-methylphenol	<50 ^{AA}	<100 ^{AB}	<10							<10	ug/kg	TM16/PM8
4-Methylphenol	<50 ^{AA}	<100 ^{AB}	<10							<10	ug/kg	TM16/PM8
4-Nitrophenol	<50 ^{AA}	<100 ^{AB}	<10							<10	ug/kg	TM16/PM8
Pentachlorophenol	<50 ^{AA}	<100 ^{AB}	<10							<10	ug/kg	TM16/PM8
Phenol	<50 ^{AA}	<100 ^{AB}	<10							<10	ug/kg	TM16/PM8
Total Speciated Phenols MS	<50 ^{AA}	<100 ^{AB}	<10							<10	ug/kg	TM16/PM8
pH ^{#M}	8.92	8.60	8.78							<0.01	pH units	TM73/PM11
Sample Type	Loam	Loam	Sand								None	PM13/PM0
Sample Colour	Dark Brown	Black	Medium Brown								None	PM13/PM0
Other Items	stones and brick fragments	stones and brick fragments	stones and clinker								None	PM13/PM0

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:
JE Job No.: 15/17326

Report : CEN 10:1 1 Batch

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Table with columns for J E Sample No., Sample ID, Depth, COC No / misc, Containers, Sample Date, Sample Type, Batch Number, Date of Receipt, LOD/LOR, Units, Method No., and various chemical analysis results (Dissolved Arsenic, Boron, Cadmium, Chromium, Copper, Lead, Mercury, Nickel, Selenium, Vanadium, Zinc, Methyl Tertiary Butyl Ether, Benzene, Toluene, Ethylbenzene, etc.).

Please see attached notes for all abbreviations and acronyms

Please include all sections of this report if it is reproduced

Jones Environmental Laboratory

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact:
 JE Job No.: 15/17326

Report : CEN 10:1 1 Batch
 Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

J E Sample No.	169-171	175-177									LOD/LOR	Units	Method No.
Sample ID	WS214	WS211											
Depth	0.50	0.20											
COC No / misc													
Containers	V J T	V J T											
Sample Date	08/12/2015	08/12/2015											
Sample Type	Soil	Soil											
Batch Number	5	5											
Date of Receipt	09/12/2015	09/12/2015											
PCB 28	<0.1	<0.1									<0.1	ug/l	TM17/PM30
PCB 52	<0.1	<0.1									<0.1	ug/l	TM17/PM30
PCB 101	<0.1	<0.1									<0.1	ug/l	TM17/PM30
PCB 118	<0.1	<0.1									<0.1	ug/l	TM17/PM30
PCB 138	<0.1	<0.1									<0.1	ug/l	TM17/PM30
PCB 153	<0.1	<0.1									<0.1	ug/l	TM17/PM30
PCB 180	<0.1	<0.1									<0.1	ug/l	TM17/PM30
Total 7 PCBs	<0.7	<0.7									<0.7	ug/l	TM17/PM30
2-Chlorophenol	<0.5	<10.0 _{AC}									<0.5	ug/l	TM16/PM30
2-Methylphenol	<0.5	<10.0 _{AC}									<0.5	ug/l	TM16/PM30
2-Nitrophenol	<0.5	<10.0 _{AC}									<0.5	ug/l	TM16/PM30
2,4-Dichlorophenol	<0.5	<10.0 _{AC}									<0.5	ug/l	TM16/PM30
2,4-Dimethylphenol	<0.5	<10.0 _{AC}									<0.5	ug/l	TM16/PM30
2,4,5-Trichlorophenol	<0.5	<10.0 _{AC}									<0.5	ug/l	TM16/PM30
2,4,6-Trichlorophenol	<0.5	<10.0 _{AC}									<0.5	ug/l	TM16/PM30
4-Chloro-3-methylphenol	<0.5	<10.0 _{AC}									<0.5	ug/l	TM16/PM30
4-Methylphenol	<0.5	<10.0 _{AC}									<0.5	ug/l	TM16/PM30
4-Nitrophenol	<0.5	<10.0 _{AC}									<0.5	ug/l	TM16/PM30
Pentachlorophenol	<0.5	<10.0 _{AC}									<0.5	ug/l	TM16/PM30
Phenol	<0.5	<10.0 _{AC}									<0.5	ug/l	TM16/PM30
Total Speciated Phenols MS	<6	<120 _{AC}									<6	ug/l	TM16/PM30
pH	8.51	8.45									<0.01	pH units	TM73/PM0

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact:
 JE Job No.: 15/17326

SVOC Report : CEN 10:1 1 Batch

J E Sample No.	169-171	175-177																	LOD/LOR	Units	Method No.
Sample ID	WS214	WS211																			
Depth	0.50	0.20																			
COC No / misc																					
Containers	V J T	V J T																			
Sample Date	08/12/2015	08/12/2015																			
Sample Type	Soil	Soil																			
Batch Number	5	5																			
Date of Receipt	09/12/2015	09/12/2015																			
SVOC MS																					
Phenols																					
2-Chlorophenol	<1	<20 _{AC}																<1	ug/l	TM16/PM30	
2-Methylphenol	<0.5	<10.0 _{AC}																<0.5	ug/l	TM16/PM30	
2-Nitrophenol	<0.5	<10.0 _{AC}																<0.5	ug/l	TM16/PM30	
2,4-Dichlorophenol	<0.5	<10.0 _{AC}																<0.5	ug/l	TM16/PM30	
2,4-Dimethylphenol	<1	<20 _{AC}																<1	ug/l	TM16/PM30	
2,4,5-Trichlorophenol	<0.5	<10.0 _{AC}																<0.5	ug/l	TM16/PM30	
2,4,6-Trichlorophenol	<1	<20 _{AC}																<1	ug/l	TM16/PM30	
4-Chloro-3-methylphenol	<0.5	<10.0 _{AC}																<0.5	ug/l	TM16/PM30	
4-Methylphenol	<1	<20 _{AC}																<1	ug/l	TM16/PM30	
4-Nitrophenol	<10	<200 _{AC}																<10	ug/l	TM16/PM30	
Pentachlorophenol	<1	<20 _{AC}																<1	ug/l	TM16/PM30	
Phenol	<1	<20 _{AC}																<1	ug/l	TM16/PM30	
PAHs																					
2-Chloronaphthalene	<1	<20 _{AC}																<1	ug/l	TM16/PM30	
2-Methylnaphthalene	<1	<20 _{AC}																<1	ug/l	TM16/PM30	
Naphthalene	<1	<20 _{AC}																<1	ug/l	TM16/PM30	
Acenaphthylene	<0.5	<10.0 _{AC}																<0.5	ug/l	TM16/PM30	
Acenaphthene	<1	23 _{AC}																<1	ug/l	TM16/PM30	
Fluorene	<0.5	11.2 _{AC}																<0.5	ug/l	TM16/PM30	
Phenanthrene	<0.5	47.7 _{AC}																<0.5	ug/l	TM16/PM30	
Anthracene	<0.5	13.5 _{AC}																<0.5	ug/l	TM16/PM30	
Fluoranthene	1.1	54.9 _{AC}																<0.5	ug/l	TM16/PM30	
Pyrene	1.3	62.3 _{AC}																<0.5	ug/l	TM16/PM30	
Benzo(a)anthracene	<0.5	24.7 _{AC}																<0.5	ug/l	TM16/PM30	
Chrysene	<0.5	27.8 _{AC}																<0.5	ug/l	TM16/PM30	
Benzo(bk)fluoranthene	<1	57 _{AC}																<1	ug/l	TM16/PM30	
Benzo(a)pyrene	1	38 _{AC}																<1	ug/l	TM16/PM30	
Indeno(123cd)pyrene	<1	20 _{AC}																<1	ug/l	TM16/PM30	
Dibenzo(ah)anthracene	<0.5	<10.0 _{AC}																<0.5	ug/l	TM16/PM30	
Benzo(ghi)perylene	<0.5	25.4 _{AC}																<0.5	ug/l	TM16/PM30	
Phthalates																					
Bis(2-ethylhexyl) phthalate	<5	<100 _{AC}																<5	ug/l	TM16/PM30	
Butylbenzyl phthalate	<1	<20 _{AC}																<1	ug/l	TM16/PM30	
Di-n-butyl phthalate	<1.5	<30.0 _{AC}																<1.5	ug/l	TM16/PM30	
Di-n-Octyl phthalate	<1	<20 _{AC}																<1	ug/l	TM16/PM30	
Diethyl phthalate	<1	<20 _{AC}																<1	ug/l	TM16/PM30	
Dimethyl phthalate	<1	<20 _{AC}																<1	ug/l	TM16/PM30	

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:
JE Job No.: 15/17326

VOC Report : Solid

J E Sample No.	169-171	175-177													
Sample ID	WS214	WS211													
Depth	0.50	0.20													
COC No / misc															
Containers	V J T	V J T													
Sample Date	08/12/2015	08/12/2015													
Sample Type	Soil	Soil													
Batch Number	5	5													
Date of Receipt	09/12/2015	09/12/2015													
											LOD/LOR	Units	Method No.		
VOC MS															
Dichlorodifluoromethane	<2	<2											<2	ug/kg	TM15/PM10
Methyl Tertiary Butyl Ether ^{#M}	<6	<6											<6	ug/kg	TM15/PM10
Chloromethane [#]	<3	<3											<3	ug/kg	TM15/PM10
Vinyl Chloride	<2	<2											<2	ug/kg	TM15/PM10
Bromomethane	<1	<1											<1	ug/kg	TM15/PM10
Chloroethane ^{#M}	<6	<6											<6	ug/kg	TM15/PM10
Trichlorofluoromethane ^{#M}	<3	<3											<3	ug/kg	TM15/PM10
1,1-Dichloroethene (1,1 DCE) ^{#M}	<6	<6											<6	ug/kg	TM15/PM10
Dichloromethane (DCM) [#]	<7	<7											<7	ug/kg	TM15/PM10
trans-1-2-Dichloroethene [#]	<3	<3											<3	ug/kg	TM15/PM10
1,1-Dichloroethane ^{#M}	<6	<6											<6	ug/kg	TM15/PM10
cis-1-2-Dichloroethene ^{#M}	<7	<7											<7	ug/kg	TM15/PM10
2,2-Dichloropropane	<4	<4											<4	ug/kg	TM15/PM10
Bromochloromethane ^{#M}	<4	<4											<4	ug/kg	TM15/PM10
Chloroform ^{#M}	<5	<5											<5	ug/kg	TM15/PM10
1,1,1-Trichloroethane ^{#M}	<5	<5											<5	ug/kg	TM15/PM10
1,1-Dichloropropene [#]	<3	<3											<3	ug/kg	TM15/PM10
Carbon tetrachloride ^{#M}	<4	<4											<4	ug/kg	TM15/PM10
1,2-Dichloroethane ^{#M}	<5	<5											<5	ug/kg	TM15/PM10
Benzene ^{#M}	<5	<5											<5	ug/kg	TM15/PM10
Trichloroethene (TCE) ^{#M}	<5	<5											<5	ug/kg	TM15/PM10
1,2-Dichloropropane ^{#M}	<4	<4											<4	ug/kg	TM15/PM10
Dibromomethane ^{#M}	<4	<4											<4	ug/kg	TM15/PM10
Bromodichloromethane ^{#M}	<4	<4											<4	ug/kg	TM15/PM10
cis-1-3-Dichloropropene	<4	<4											<4	ug/kg	TM15/PM10
Toluene ^{#M}	<3	15											<3	ug/kg	TM15/PM10
trans-1-3-Dichloropropene	<3	<3											<3	ug/kg	TM15/PM10
1,1,2-Trichloroethane ^{#M}	<4	<4											<4	ug/kg	TM15/PM10
Tetrachloroethene (PCE) [#]	19	<3											<3	ug/kg	TM15/PM10
1,3-Dichloropropane ^{#M}	<4	<4											<4	ug/kg	TM15/PM10
Dibromochloromethane ^{#M}	<5	<5											<5	ug/kg	TM15/PM10
1,2-Dibromoethane [#]	<3	<3											<3	ug/kg	TM15/PM10
Chlorobenzene ^{#M}	<4	<4											<4	ug/kg	TM15/PM10
1,1,1,2-Tetrachloroethane ^{#M}	<5	<5											<5	ug/kg	TM15/PM10
Ethylbenzene ^{#M}	15	42											<3	ug/kg	TM15/PM10
p/m-Xylene ^{#M}	14	37											<4	ug/kg	TM15/PM10
o-Xylene ^{#M}	7	19											<4	ug/kg	TM15/PM10
Styrene	<3	<3											<3	ug/kg	TM15/PM10
Bromoform	<4	<4											<4	ug/kg	TM15/PM10
Isopropylbenzene [#]	<3	10											<3	ug/kg	TM15/PM10
1,1,2,2-Tetrachloroethane ^{#M}	<3	<3											<3	ug/kg	TM15/PM10
Bromobenzene	<2	<2											<2	ug/kg	TM15/PM10
1,2,3-Trichloropropane ^{#M}	<4	<4											<4	ug/kg	TM15/PM10
Propylbenzene [#]	<4	<4											<4	ug/kg	TM15/PM10
2-Chlorotoluene	<3	<3											<3	ug/kg	TM15/PM10
1,3,5-Trimethylbenzene [#]	11	26											<3	ug/kg	TM15/PM10
4-Chlorotoluene	<3	<3											<3	ug/kg	TM15/PM10
tert-Butylbenzene [#]	<5	<5											<5	ug/kg	TM15/PM10
1,2,4-Trimethylbenzene [#]	19	47											<6	ug/kg	TM15/PM10
sec-Butylbenzene [#]	<4	<4											<4	ug/kg	TM15/PM10
4-Isopropyltoluene [#]	<4	10											<4	ug/kg	TM15/PM10
1,3-Dichlorobenzene ^{#M}	<4	<4											<4	ug/kg	TM15/PM10
1,4-Dichlorobenzene [#]	<4	<4											<4	ug/kg	TM15/PM10
n-Butylbenzene [#]	<4	<4											<4	ug/kg	TM15/PM10
1,2-Dichlorobenzene ^{#M}	<4	<4											<4	ug/kg	TM15/PM10
1,2-Dibromo-3-chloropropane [#]	<4	<4											<4	ug/kg	TM15/PM10
1,2,4-Trichlorobenzene [#]	<7	<7											<7	ug/kg	TM15/PM10
Hexachlorobutadiene	<4	<4											<4	ug/kg	TM15/PM10
Naphthalene	3737	9554											<27	ug/kg	TM15/PM10
1,2,3-Trichlorobenzene [#]	<7	<7											<7	ug/kg	TM15/PM10
Surrogate Recovery Toluene D8	109	95											<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	87	81											<0	%	TM15/PM10

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact:
 JE Job No.: 15/17326

VOC Report : CEN 10:1 1 Batch

J E Sample No.		169-171	175-177											Please see attached notes for all abbreviations and acronyms			
Sample ID	WS214	WS211															
Depth	0.50	0.20															
COC No / misc Containers	V J T	V J T															
Sample Date	08/12/2015	08/12/2015															
Sample Type	Soil	Soil															
Batch Number	5	5															
Date of Receipt	09/12/2015	09/12/2015															
														LOD/LOR	Units	Method No.	
VOC MS																	
Dichlorodifluoromethane	<2	<2												<2	ug/l	TM15/PM69	
Methyl Tertiary Butyl Ether	<1	<1												<1	ug/l	TM15/PM69	
Chloromethane	<3	<3												<3	ug/l	TM15/PM69	
Vinyl Chloride	<0.1	<0.1												<0.1	ug/l	TM15/PM69	
Bromomethane	<1	<1												<1	ug/l	TM15/PM69	
Chloroethane	<3	<3												<3	ug/l	TM15/PM69	
Trichlorofluoromethane	<3	<3												<3	ug/l	TM15/PM69	
1,1-Dichloroethene (1,1 DCE)	<3	<3												<3	ug/l	TM15/PM69	
Dichloromethane (DCM)	<3	<3												<3	ug/l	TM15/PM69	
trans-1-2-Dichloroethene	<3	<3												<3	ug/l	TM15/PM69	
1,1-Dichloroethane	<3	<3												<3	ug/l	TM15/PM69	
cis-1-2-Dichloroethene	<3	<3												<3	ug/l	TM15/PM69	
2,2-Dichloropropane	<1	<1												<1	ug/l	TM15/PM69	
Bromochloromethane	<2	<2												<2	ug/l	TM15/PM69	
Chloroform	<2	<2												<2	ug/l	TM15/PM69	
1,1,1-Trichloroethane	<2	<2												<2	ug/l	TM15/PM69	
1,1-Dichloropropene	<3	<3												<3	ug/l	TM15/PM69	
Carbon tetrachloride	<2	<2												<2	ug/l	TM15/PM69	
1,2-Dichloroethane	<2	<2												<2	ug/l	TM15/PM69	
Benzene	<1	<1												<1	ug/l	TM15/PM69	
Trichloroethene (TCE)	<3	<3												<3	ug/l	TM15/PM69	
1,2-Dichloropropane	<2	<2												<2	ug/l	TM15/PM69	
Dibromomethane	<3	<3												<3	ug/l	TM15/PM69	
Bromodichloromethane	<2	<2												<2	ug/l	TM15/PM69	
cis-1-3-Dichloropropene	<2	<2												<2	ug/l	TM15/PM69	
Toluene	<2	<2												<2	ug/l	TM15/PM69	
trans-1-3-Dichloropropene	<2	<2												<2	ug/l	TM15/PM69	
1,1,2-Trichloroethane	<2	<2												<2	ug/l	TM15/PM69	
Tetrachloroethene (PCE)	<3	<3												<3	ug/l	TM15/PM69	
1,3-Dichloropropane	<2	<2												<2	ug/l	TM15/PM69	
Dibromochloromethane	<2	<2												<2	ug/l	TM15/PM69	
1,2-Dibromoethane	<2	<2												<2	ug/l	TM15/PM69	
Chlorobenzene	<2	<2												<2	ug/l	TM15/PM69	
1,1,1,2-Tetrachloroethane	<2	<2												<2	ug/l	TM15/PM69	
Ethylbenzene	<2	<2												<2	ug/l	TM15/PM69	
p/m-Xylene	<3	<3												<3	ug/l	TM15/PM69	
o-Xylene	<2	<2												<2	ug/l	TM15/PM69	
Styrene	<2	<2												<2	ug/l	TM15/PM69	
Bromoform	<2	<2												<2	ug/l	TM15/PM69	
Isopropylbenzene	<3	<3												<3	ug/l	TM15/PM69	
1,1,2,2-Tetrachloroethane	<4	<4												<4	ug/l	TM15/PM69	
Bromobenzene	<2	<2												<2	ug/l	TM15/PM69	
1,2,3-Trichloropropane	<3	<3												<3	ug/l	TM15/PM69	
Propylbenzene	<3	<3												<3	ug/l	TM15/PM69	
2-Chlorotoluene	<3	<3												<3	ug/l	TM15/PM69	
1,3,5-Trimethylbenzene	<3	<3												<3	ug/l	TM15/PM69	
4-Chlorotoluene	<3	<3												<3	ug/l	TM15/PM69	
tert-Butylbenzene	<3	<3												<3	ug/l	TM15/PM69	
1,2,4-Trimethylbenzene	<3	<3												<3	ug/l	TM15/PM69	
sec-Butylbenzene	<3	<3												<3	ug/l	TM15/PM69	
4-Isopropyltoluene	<3	<3												<3	ug/l	TM15/PM69	
1,3-Dichlorobenzene	<3	<3												<3	ug/l	TM15/PM69	
1,4-Dichlorobenzene	<3	<3												<3	ug/l	TM15/PM69	
n-Butylbenzene	<3	<3												<3	ug/l	TM15/PM69	
1,2-Dichlorobenzene	<3	<3												<3	ug/l	TM15/PM69	
1,2-Dibromo-3-chloropropane	<2	<2												<2	ug/l	TM15/PM69	
1,2,4-Trichlorobenzene	<3	<3												<3	ug/l	TM15/PM69	
Hexachlorobutadiene	<3	<3												<3	ug/l	TM15/PM69	
Naphthalene	<2	19												<2	ug/l	TM15/PM69	
1,2,3-Trichlorobenzene	<3	<3												<3	ug/l	TM15/PM69	
Surrogate Recovery Toluene D8	89	90												<0	%	TM15/PM69	
Surrogate Recovery 4-Bromofluorobenzene	111	111												<0	%	TM15/PM69	

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:

Note:

Analysis was carried out in accordance with our documented in-house methods PM042 and TM065 and HSG 248 by Stereo and Polarised Light Microscopy using Dispersion Staining Techniques and is covered by our UKAS accreditation. Samples are retained for not less than 6 months from the date of analysis unless specifically requested.

Opinions lie outside the scope of our UKAS accreditation.

Where the sample is not taken by a Jones Environmental Laboratory consultant, Jones Environmental Laboratory cannot be responsible for inaccurate or unrepresentative sampling.

Any questionable sample will automatically be assumed to have breached the Waste Limit and further testing may be required.

Signed on behalf of Jones Environmental Laboratory:

Asbestos Team Leader

J E Job No.	Batch	Sample ID	Depth	J E Sample No.	Date Of Analysis	Analysis	Result
15/17326	5	WS214	0.50	170	11/12/2015	Mass of Dry Sample	48.3 (g)
					14/12/2015	General Description (Bulk Analysis)	Soil-Silt/Clay/Brick/Stone
					14/12/2015	Asbestos Containing Material	None
					14/12/2015	Asbestos Containing Material (2)	None
					14/12/2015	Asbestos Screen	NAD
					14/12/2015	Asbestos Screen (2)	NAD
					14/12/2015	Asbestos Level	NAD
					14/12/2015	Waste Limit	<0.1%
15/17326	5	WS211	0.20	176	11/12/2015	Mass of Dry Sample	50.2 (g)
					14/12/2015	General Description (Bulk Analysis)	Soil-Silt/Clay/Brick/Stone
					14/12/2015	Asbestos Containing Material	None
					14/12/2015	Asbestos Containing Material (2)	None
					14/12/2015	Asbestos Screen	NAD
					14/12/2015	Asbestos Screen (2)	NAD
					14/12/2015	Asbestos Level	NAD
					14/12/2015	Waste Limit	<0.1%
15/17326	5	WS211	1.00	182	11/12/2015	Mass of Dry Sample	50.3 (g)
					14/12/2015	General Description (Bulk Analysis)	Soil-Silt/Clay/Brick/Stone
					14/12/2015	Asbestos Containing Material	None
					14/12/2015	Asbestos Containing Material (2)	None
					14/12/2015	Asbestos Screen	NAD
					14/12/2015	Asbestos Screen (2)	NAD
					14/12/2015	Asbestos Level	NAD
					14/12/2015	Waste Limit	<0.1%

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

JE Job No.: 15/17326

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. 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.

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.

WATERS

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

ISO17025 (UKAS) accreditation applies to surface water and groundwater and 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

Samples must be received in a condition appropriate to the requested analyses. All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. If this is not the case you will be informed and any test results that may be compromised highlighted on your deviating samples report.

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.

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.

Please include all sections of this report if it is reproduced

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS) accredited - UK.
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.
++	Result outside calibration range, results should be considered as indicative only and are not accredited.
*	Analysis subcontracted to a Jones Environmental 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
AA	x5 Dilution
AB	x10 Dilution
AC	x20 Dilution

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.				
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes	Yes	AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	Yes
TM5/TM36	TM005: Modified USEPA 8015B. Determination of solvent Extractable Petroleum Hydrocarbons (EPH) including column fractionation in the carbon range of C10-35 into aliphatic and aromatic fractions by GC-FID. TM036: Modified USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-10 by headspace GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5/TM36	TM005: Modified USEPA 8015B. Determination of solvent Extractable Petroleum Hydrocarbons (EPH) including column fractionation in the carbon range of C10-35 into aliphatic and aromatic fractions by GC-FID. TM036: Modified USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-10 by headspace GC-FID.	PM30/PM69	PM030: Eluate samples are extracted with solvent using a magnetic stirrer to create a vortex.PM069: One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM13	A visual examination of the solid sample is carried out to ascertain sample make up, colour and any other inclusions. This is not a geotechnical description.	PM0	No preparation is required.			AR	
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM69	Modified BS EN 12457 method. One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM69	Modified BS EN 12457 method. One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	Yes
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM17	Modified US EPA method 8270. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	Yes
TM17	Modified US EPA method 8270. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM14	Analysis of waters and leachates for metals by ICP OES. Samples are filtered for dissolved metals and acidified if required.	Yes		AR	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes	Yes	AD	Yes
TM31	Modified USEPA 8015B. Determination of Methylterbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM31	Modified USEPA 8015B. Determination of Methylterbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM69	Modified BS EN 12457 method. One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.			AR	
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.	Yes		AR	
TM73	Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.	PM0	No preparation is required.			AR	Yes
TM73	Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes	Yes	AR	No
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM32	Hot water soluble boron is extracted from dried and ground samples using a 20:1 ratio.	Yes	Yes	AD	Yes
NONE	No Method Code	PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.			AR	



Jones Environmental Laboratory

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Attention :

Date : 4th January, 2016

Your reference : PN153428

Our reference : Test Report 15/17326 Batch 5 Schedule B

Location : Stockport Bus Station

Date samples received : 9th December, 2015

Status : Final report

Issue : 1

Twelve samples were received for analysis on 9th December, 2015 of which one 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.

Compiled By:

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:
JE Job No.: 15/17326

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.		184-186									Please see attached notes for all abbreviations and acronyms			
Sample ID		BH103												
Depth		0.35-0.55												
COC No / misc														
Containers		V J T												
Sample Date		08/12/2015												
Sample Type		Soil												
Batch Number		5												
Date of Receipt		09/12/2015										LOD/LOR	Units	Method No.
Arsenic ^{#M}		1.4										<0.5	mg/kg	TM30/PM15
Chromium ^{#M}		13.4										<0.5	mg/kg	TM30/PM15
Copper ^{#M}		4										<1	mg/kg	TM30/PM15
Lead ^{#M}		9										<5	mg/kg	TM30/PM15
Mercury ^{#M}		<0.1										<0.1	mg/kg	TM30/PM15
Nickel ^{#M}		6.4										<0.7	mg/kg	TM30/PM15
Selenium ^{#M}		<1										<1	mg/kg	TM30/PM15
Vanadium		5										<1	mg/kg	TM30/PM15
Water Soluble Boron ^{#M}		<0.1										<0.1	mg/kg	TM74/PM32
Zinc ^{#M}		41										<5	mg/kg	TM30/PM15
PAH MS														
Naphthalene ^{#M}		<0.04										<0.04	mg/kg	TM4/PM8
Acenaphthylene		<0.03										<0.03	mg/kg	TM4/PM8
Acenaphthene ^{#M}		<0.05										<0.05	mg/kg	TM4/PM8
Fluorene ^{#M}		<0.04										<0.04	mg/kg	TM4/PM8
Phenanthrene ^{#M}		<0.03										<0.03	mg/kg	TM4/PM8
Anthracene #		<0.04										<0.04	mg/kg	TM4/PM8
Fluoranthene ^{#M}		<0.03										<0.03	mg/kg	TM4/PM8
Pyrene #		<0.03										<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #		<0.06										<0.06	mg/kg	TM4/PM8
Chrysene ^{#M}		<0.02										<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene ^{#M}		<0.07										<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #		<0.04										<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene ^{#M}		<0.04										<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #		<0.04										<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #		<0.04										<0.04	mg/kg	TM4/PM8
PAH 16 Total		<0.6										<0.6	mg/kg	TM4/PM8
Benzo(b)fluoranthene		<0.05										<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene		<0.02										<0.02	mg/kg	TM4/PM8
PAH Surrogate % Recovery		117										<0	%	TM4/PM8
TPH CWG														
Aliphatics														
>C5-C6 ^{#M}		<0.1										<0.1	mg/kg	TM36/PM12
>C6-C8 ^{#M}		<0.1										<0.1	mg/kg	TM36/PM12
>C8-C10		<0.1										<0.1	mg/kg	TM36/PM12
>C10-C12 ^{#M}		<0.2										<0.2	mg/kg	TM5/PM16
>C12-C16 ^{#M}		<4										<4	mg/kg	TM5/PM16
>C16-C21 ^{#M}		<7										<7	mg/kg	TM5/PM16
>C21-C35 ^{#M}		<7										<7	mg/kg	TM5/PM16
>C35-C44		<7										<7	mg/kg	TM5/PM16
Total aliphatics C5-44		<26										<26	mg/kg	TM5/TM36/PM16

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:
JE Job No.: 15/17326

Report : Solid
Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No. 184-186									Please see attached notes for all abbreviations and acronyms		
Sample ID	BH103										
Depth	0.35-0.55										
COC No / misc											
Containers	V J T										
Sample Date	08/12/2015										
Sample Type	Soil										
Batch Number	5										
Date of Receipt	09/12/2015								LOD/LOR	Units	Method No.
TPH CWG											
Aromatics											
>C5-EC7	<0.1								<0.1	mg/kg	TM36/PM12
>EC7-EC8	<0.1								<0.1	mg/kg	TM36/PM12
>EC8-EC10 ^{#M}	<0.1								<0.1	mg/kg	TM36/PM12
>EC10-EC12	<0.2								<0.2	mg/kg	TM5/PM16
>EC12-EC16	<4								<4	mg/kg	TM5/PM16
>EC16-EC21	<7								<7	mg/kg	TM5/PM16
>EC21-EC35	<7								<7	mg/kg	TM5/PM16
>EC35-EC44	<7								<7	mg/kg	TM5/PM16
Total aromatics C5-44	<26								<26	mg/kg	TM5/7/TM36/PM16
Total aliphatics and aromatics(C5-44)	<52								<52	mg/kg	TM5/TM36/PM16
MTBE [#]	<5								<5	ug/kg	TM31/PM12
Benzene [#]	<5								<5	ug/kg	TM31/PM12
Toluene [#]	<5								<5	ug/kg	TM31/PM12
Ethylbenzene [#]	<5								<5	ug/kg	TM31/PM12
m/p-Xylene [#]	<5								<5	ug/kg	TM31/PM12
o-Xylene [#]	<5								<5	ug/kg	TM31/PM12
2-Chlorophenol	<10								<10	ug/kg	TM16/PM8
Natural Moisture Content	2.9								<0.1	%	PM4/PM0
2-Methylphenol	<10								<10	ug/kg	TM16/PM8
2-Nitrophenol	<10								<10	ug/kg	TM16/PM8
2,4-Dichlorophenol	<10								<10	ug/kg	TM16/PM8
2,4-Dimethylphenol	<10								<10	ug/kg	TM16/PM8
2,4,5-Trichlorophenol	<10								<10	ug/kg	TM16/PM8
2,4,6-Trichlorophenol	<10								<10	ug/kg	TM16/PM8
4-Chloro-3-methylphenol	<10								<10	ug/kg	TM16/PM8
4-Methylphenol	<10								<10	ug/kg	TM16/PM8
4-Nitrophenol	<10								<10	ug/kg	TM16/PM8
Pentachlorophenol	<10								<10	ug/kg	TM16/PM8
Phenol	<10								<10	ug/kg	TM16/PM8
Total Speciated Phenols MS	<10								<10	ug/kg	TM16/PM8
Hexavalent Chromium [#]	<0.3								<0.3	mg/kg	TM38/PM20
Chromium III	13.4								<0.5	mg/kg	NONE/NONE
Total Cyanide ^{#M}	<0.5								<0.5	mg/kg	TM89/PM45
Total Organic Carbon [#]	0.10								<0.02	%	TM21/PM24

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

JE Job No.: 15/17326

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. 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.

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.

WATERS

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

ISO17025 (UKAS) accreditation applies to surface water and groundwater and 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

Samples must be received in a condition appropriate to the requested analyses. All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. If this is not the case you will be informed and any test results that may be compromised highlighted on your deviating samples report.

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.

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.

Please include all sections of this report if it is reproduced

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS) accredited - UK.
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.
++	Result outside calibration range, results should be considered as indicative only and are not accredited.
*	Analysis subcontracted to a Jones Environmental 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

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.				
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes	Yes	AR	Yes
TM5/TM36	TM005: Modified USEPA 8015B. Determination of solvent Extractable Petroleum Hydrocarbons (EPH) including column fractionation in the carbon range of C10-35 into aliphatic and aromatic fractions by GC-FID. TM036: Modified USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-10 by headspace GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
PM13	A visual examination of the solid sample is carried out to ascertain sample make up, colour and any other inclusions. This is not a geotechnical description.	PM0	No preparation is required.			AR	
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM21	Modified USEPA 415.1. Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.	Yes		AD	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes	Yes	AD	Yes
TM31	Modified USEPA 8015B. Determination of Methyltertbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM31	Modified USEPA 8015B. Determination of Methyltertbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes
TM38	Soluble Ion analysis using the Thermo Aquakem Photometric Automatic Analyser. Modified US EPA methods 325.2, 375.4, 365.2, 353.1, 354.1	PM20	Extraction of dried and ground samples with deionised water in a 2:1 water to solid ratio for anions. Extraction of as received samples with deionised water in a 2:1 water to solid ratio for ammoniacal nitrogen. Samples are extracted using an orbital shaker.	Yes		AR	Yes
TM73	Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes	Yes	AR	No
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM32	Hot water soluble boron is extracted from dried and ground samples using a 20:1 ratio.	Yes	Yes	AD	Yes
TM89	Modified USEPA method OIA-1667. Determination of cyanide by Flow Injection Analyser.	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide and Thiocyanate analysis.	Yes	Yes	AR	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
NONE	No Method Code	NONE	No Method Code			AR	Yes



Jones Environmental Laboratory

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Attention :

Date : 30th December, 2015
Your reference : PN153428
Our reference : Test Report 15/17326 Batch 6
Location : Stockport Bus Station
Date samples received : 11th December, 2015
Status : Final report
Issue : 1

Four samples were received for analysis on 11th December, 2015 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.

Compiled By:

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:
JE Job No.: 15/17326

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	199-201	202-204								Please see attached notes for all abbreviations and acronyms		
										LOD/LOR	Units	Method No.
Sample ID	BH105	BH105										
Depth	1.00	2.00										
COC No / misc												
Containers	V J T	V J T										
Sample Date	09/12/2015	09/12/2015										
Sample Type	Soil	Soil										
Batch Number	6	6										
Date of Receipt	11/12/2015	11/12/2015										
Arsenic #M	<0.5	2.5							<0.5	mg/kg	TM30/PM15	
Cadmium #M	7.4	6.3							<0.1	mg/kg	TM30/PM15	
Chromium #M	17.0	58.8							<0.5	mg/kg	TM30/PM15	
Copper #M	-	12							<1	mg/kg	TM30/PM15	
Lead #M	26	23							<5	mg/kg	TM30/PM15	
Mercury #M	<0.1	<0.1							<0.1	mg/kg	TM30/PM15	
Nickel #M	2.4	9.9							<0.7	mg/kg	TM30/PM15	
Selenium #M	<1	<1							<1	mg/kg	TM30/PM15	
Vanadium	4	12							<1	mg/kg	TM30/PM15	
Water Soluble Boron #M	0.4	0.3							<0.1	mg/kg	TM74/PM32	
Zinc #M	31	23							<5	mg/kg	TM30/PM15	
PAH MS												
Naphthalene #M	<0.04	<0.04							<0.04	mg/kg	TM4/PM8	
Acenaphthylene	<0.03	<0.03							<0.03	mg/kg	TM4/PM8	
Acenaphthene #M	<0.05	<0.05							<0.05	mg/kg	TM4/PM8	
Fluorene #M	<0.04	<0.04							<0.04	mg/kg	TM4/PM8	
Phenanthrene #M	0.04	<0.03							<0.03	mg/kg	TM4/PM8	
Anthracene #	<0.04	<0.04							<0.04	mg/kg	TM4/PM8	
Fluoranthene #M	0.05	<0.03							<0.03	mg/kg	TM4/PM8	
Pyrene #	0.05	<0.03							<0.03	mg/kg	TM4/PM8	
Benzo(a)anthracene #	0.06	<0.06							<0.06	mg/kg	TM4/PM8	
Chrysene #M	0.04	0.02							<0.02	mg/kg	TM4/PM8	
Benzo(bk)fluoranthene #M	<0.07	<0.07							<0.07	mg/kg	TM4/PM8	
Benzo(a)pyrene #	0.04	<0.04							<0.04	mg/kg	TM4/PM8	
Indeno(123cd)pyrene #M	0.04	<0.04							<0.04	mg/kg	TM4/PM8	
Dibenzo(ah)anthracene #	<0.04	<0.04							<0.04	mg/kg	TM4/PM8	
Benzo(ghi)perylene #	<0.04	<0.04							<0.04	mg/kg	TM4/PM8	
PAH 16 Total	<0.6	<0.6							<0.6	mg/kg	TM4/PM8	
Benzo(b)fluoranthene	<0.05	<0.05							<0.05	mg/kg	TM4/PM8	
Benzo(k)fluoranthene	<0.02	<0.02							<0.02	mg/kg	TM4/PM8	
PAH Surrogate % Recovery	106	120							<0	%	TM4/PM8	

Jones Environmental Laboratory

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact:
 JE Job No.: 15/17326

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	199-201	202-204																																								
Sample ID	BH105	BH105																																								
Depth	1.00	2.00																																								
COC No / misc																																										
Containers	V J T	V J T																																								
Sample Date	09/12/2015	09/12/2015																																								
Sample Type	Soil	Soil																																								
Batch Number	6	6																																								
Date of Receipt	11/12/2015	11/12/2015																																								
TPH CWG																																										
Aliphatics																																										
>C5-C6 ^{#M}	<0.1	<0.1																																								
>C6-C8 ^{#M}	<0.1	<0.1																																								
>C8-C10	<0.1	<0.1																																								
>C10-C12 ^{#M}	<0.2	<0.2																																								
>C12-C16 ^{#M}	<4	<4																																								
>C16-C21 ^{#M}	<7	<7																																								
>C21-C35 ^{#M}	<7	<7																																								
>C35-C44	<7	<7																																								
Total aliphatics C5-44	<26	<26																																								
Aromatics																																										
>C5-EC7	<0.1	<0.1																																								
>EC7-EC8	<0.1	<0.1																																								
>EC8-EC10 ^{#M}	<0.1	<0.1																																								
>EC10-EC12	<0.2	<0.2																																								
>EC12-EC16	<4	<4																																								
>EC16-EC21	<7	<7																																								
>EC21-EC35	<7	<7																																								
>EC35-EC44	<7	<7																																								
Total aromatics C5-44	<26	<26																																								
Total aliphatics and aromatics(C5-44)	<52	<52																																								
MTBE [#]	<5	<5																																								
Benzene [#]	<5	<5																																								
Toluene [#]	<5	<5																																								
Ethylbenzene [#]	<5	<5																																								
m/p-Xylene [#]	<5	<5																																								
o-Xylene [#]	<5	<5																																								
Natural Moisture Content	1.6	11.1																																								
Total Cyanide ^{#M}	<0.5	<0.5																																								
Total Organic Carbon [#]	<0.02	0.33																																								
pH ^{#M}	12.13	9.29																																								
Sample Type	Sand	Clayey Sand																																								
Sample Colour	Light Brown	Medium Brown																																								
Other Items	stones	mostly stones and water																																								

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:

Note:

Analysis was carried out in accordance with our documented in-house methods PM042 and TM065 and HSG 248 by Stereo and Polarised Light Microscopy using Dispersion Staining Techniques and is covered by our UKAS accreditation. Samples are retained for not less than 6 months from the date of analysis unless specifically requested.

Opinions lie outside the scope of our UKAS accreditation.

Where the sample is not taken by a Jones Environmental Laboratory consultant, Jones Environmental Laboratory cannot be responsible for inaccurate or unrepresentative sampling.

Any questionable sample will automatically be assumed to have breached the Waste Limit and further testing may be required.

Signed on behalf of Jones Environmental Laboratory:

Asbestos Team Leader

J E Job No.	Batch	Sample ID	Depth	J E Sample No.	Date Of Analysis	Analysis	Result
15/17326	6	BH105	1.00	200	17/12/2015	Mass of Dry Sample	51.3 (g)
					17/12/2015	General Description (Bulk Analysis)	Soil/Stones
					17/12/2015	Asbestos Containing Material	None
					17/12/2015	Asbestos Containing Material (2)	None
					17/12/2015	Asbestos Screen	NAD
					17/12/2015	Asbestos Screen (2)	NAD
					17/12/2015	Asbestos Level	NAD
					17/12/2015	Waste Limit	<0.1%

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:

J E Job No.	Batch	Sample ID	Depth	J E Sample No.	Analysis	Reason
No deviating sample report results for job 15/17326						

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

JE Job No.: 15/17326

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. 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.

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.

WATERS

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

ISO17025 (UKAS) accreditation applies to surface water and groundwater and 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

Samples must be received in a condition appropriate to the requested analyses. All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. If this is not the case you will be informed and any test results that may be compromised highlighted on your deviating samples report.

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.

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.

Please include all sections of this report if it is reproduced

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS) accredited - UK.
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.
++	Result outside calibration range, results should be considered as indicative only and are not accredited.
*	Analysis subcontracted to a Jones Environmental 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

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.				
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes	Yes	AR	Yes
TM5/TM36	TM005: Modified USEPA 8015B. Determination of solvent Extractable Petroleum Hydrocarbons (EPH) including column fractionation in the carbon range of C10-35 into aliphatic and aromatic fractions by GC-FID. TM036: Modified USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-10 by headspace GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
PM13	A visual examination of the solid sample is carried out to ascertain sample make up, colour and any other inclusions. This is not a geotechnical description.	PM0	No preparation is required.			AR	
TM21	Modified USEPA 415.1. Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.	Yes		AD	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes	Yes	AD	Yes
TM31	Modified USEPA 8015B. Determination of Methyltertbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM31	Modified USEPA 8015B. Determination of Methyltertbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.			AR	
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.	Yes		AR	
TM73	Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes	Yes	AR	No
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM32	Hot water soluble boron is extracted from dried and ground samples using a 20:1 ratio.	Yes	Yes	AD	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM89	Modified USEPA method OIA-1667. Determination of cyanide by Flow Injection Analyser.	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide and Thiocyanate analysis.	Yes	Yes	AR	Yes



Jones Environmental Laboratory

Registered Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA. UK

Unit 3 Deeside Point
Zone 3
Deeside Industrial Park
Deeside
CH5 2UA

Geotechnics
Unit 1B
Borders Industrial Park
River Lane
Chester
Cheshire
CH4 8RJ

Tel: +44 (0) 1244 833780
Fax: +44 (0) 1244 833781



Attention :

Date : 7th January, 2016

Your reference : PN153428

Our reference : Test Report 15/17326 Batch 7

Location : Stockport Bus Station

Date samples received : 12th December, 2015

Status : Final report

Issue : 1

Seven samples were received for analysis on 12th December, 2015 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.

Compiled By:

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:
JE Job No.: 15/17326

Report : CEN 10:1 1 Batch
Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.										Please see attached notes for all abbreviations and acronyms		
Sample ID	WS205									LOD/LOR	Units	Method No.
Depth	0.50											
COC No / misc												
Containers	V J T											
Sample Date	11/12/2015											
Sample Type	Soil											
Batch Number	7											
Date of Receipt	12/12/2015											
Dissolved Arsenic #	<2.5									<2.5	ug/l	TM30/PM14
Dissolved Boron #	<12									<12	ug/l	TM30/PM14
Dissolved Cadmium #	<0.5									<0.5	ug/l	TM30/PM14
Dissolved Chromium #	13.9									<1.5	ug/l	TM30/PM14
Dissolved Copper #	<7									<7	ug/l	TM30/PM14
Dissolved Lead #	8									<5	ug/l	TM30/PM14
Dissolved Mercury #	<1									<1	ug/l	TM30/PM14
Dissolved Nickel #	4									<2	ug/l	TM30/PM14
Dissolved Selenium #	<3									<3	ug/l	TM30/PM14
Dissolved Vanadium #	5.3									<1.5	ug/l	TM30/PM14
Dissolved Zinc #	5									<3	ug/l	TM30/PM14
PAH MS												
Naphthalene	<0.1									<0.1	ug/l	TM4/PM30
Acenaphthylene	0.050									<0.013	ug/l	TM4/PM30
Acenaphthene	0.050									<0.013	ug/l	TM4/PM30
Fluorene	0.050									<0.014	ug/l	TM4/PM30
Phenanthrene	0.120									<0.011	ug/l	TM4/PM30
Anthracene	0.030									<0.013	ug/l	TM4/PM30
Fluoranthene	0.060									<0.012	ug/l	TM4/PM30
Pyrene	0.050									<0.013	ug/l	TM4/PM30
Benzo(a)anthracene	0.040									<0.015	ug/l	TM4/PM30
Chrysene	0.040									<0.011	ug/l	TM4/PM30
Benzo(bk)fluoranthene	0.060									<0.018	ug/l	TM4/PM30
Benzo(a)pyrene	0.030									<0.016	ug/l	TM4/PM30
Indeno(123cd)pyrene	0.030									<0.011	ug/l	TM4/PM30
Dibenzo(ah)anthracene	<0.01									<0.01	ug/l	TM4/PM30
Benzo(ghi)perylene	0.020									<0.011	ug/l	TM4/PM30
PAH 16 Total	0.630									<0.195	ug/l	TM4/PM30
Benzo(b)fluoranthene	0.04									<0.01	ug/l	TM4/PM30
Benzo(k)fluoranthene	0.02									<0.01	ug/l	TM4/PM30
PAH Surrogate % Recovery	87									<0	%	TM4/PM30
Methyl Tertiary Butyl Ether												
Methyl Tertiary Butyl Ether	<1									<1	ug/l	TM15/PM69
Benzene	<1									<1	ug/l	TM15/PM69
Toluene	<2									<2	ug/l	TM15/PM69
Ethylbenzene	<2									<2	ug/l	TM15/PM69
p/m-Xylene	<3									<3	ug/l	TM15/PM69
o-Xylene	<2									<2	ug/l	TM15/PM69
Surrogate Recovery Toluene D8	103									<0	%	TM15/PM69
Surrogate Recovery 4-Bromofluorobenzene	107									<0	%	TM15/PM69

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:
JE Job No.: 15/17326

Report : CEN 10:1 1 Batch
Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	208-210																				
Sample ID	WS205																				
Depth	0.50																				
COC No / misc																					
Containers	V J T																				
Sample Date	11/12/2015																				
Sample Type	Soil																				
Batch Number	7																				
Date of Receipt	12/12/2015																				
		LOD/LOR	Units	Method No.																	
TPH CWG																					
Aliphatics																					
>C5-C6	<5	<5	ug/l	TM36/PM69																	
>C6-C8	<5	<5	ug/l	TM36/PM69																	
>C8-C10	<5	<5	ug/l	TM36/PM69																	
>C10-C12	<5	<5	ug/l	TM5/PM30																	
>C12-C16	<10	<10	ug/l	TM5/PM30																	
>C16-C21	<10	<10	ug/l	TM5/PM30																	
>C21-C35	<10	<10	ug/l	TM5/PM30																	
>C35-C44	<10	<10	ug/l	TM5/PM30																	
Total aliphatics C5-44	<10	<10	ug/l	TM5/PM30/PM69																	
Aromatics																					
>C5-EC7	<5	<5	ug/l	TM36/PM69																	
>EC7-EC8	<5	<5	ug/l	TM36/PM69																	
>EC8-EC10	<5	<5	ug/l	TM36/PM69																	
>EC10-EC12	<5	<5	ug/l	TM5/PM30																	
>EC12-EC16	<10	<10	ug/l	TM5/PM30																	
>EC16-EC21	<10	<10	ug/l	TM5/PM30																	
>EC21-EC35	<10	<10	ug/l	TM5/PM30																	
>EC35-EC44	<10	<10	ug/l	TM5/PM30																	
Total aromatics C5-44	<10	<10	ug/l	TM5/PM30/PM69																	
Total aliphatics and aromatics(C5-44)	<10	<10	ug/l	TM5/PM30/PM69																	
PCB 28	<0.1	<0.1	ug/l	TM17/PM30																	
PCB 52	<0.1	<0.1	ug/l	TM17/PM30																	
PCB 101	<0.1	<0.1	ug/l	TM17/PM30																	
PCB 118	<0.1	<0.1	ug/l	TM17/PM30																	
PCB 138	<0.1	<0.1	ug/l	TM17/PM30																	
PCB 153	<0.1	<0.1	ug/l	TM17/PM30																	
PCB 180	<0.1	<0.1	ug/l	TM17/PM30																	
Total 7 PCBs	<0.7	<0.7	ug/l	TM17/PM30																	
2-Chlorophenol	<0.5	<0.5	ug/l	TM16/PM30																	
2-Methylphenol	<0.5	<0.5	ug/l	TM16/PM30																	
2-Nitrophenol	<0.5	<0.5	ug/l	TM16/PM30																	
2,4-Dichlorophenol	<0.5	<0.5	ug/l	TM16/PM30																	
2,4-Dimethylphenol	<0.5	<0.5	ug/l	TM16/PM30																	
2,4,5-Trichlorophenol	<0.5	<0.5	ug/l	TM16/PM30																	
2,4,6-Trichlorophenol	<0.5	<0.5	ug/l	TM16/PM30																	
4-Chloro-3-methylphenol	<0.5	<0.5	ug/l	TM16/PM30																	
4-Methylphenol	<0.5	<0.5	ug/l	TM16/PM30																	
4-Nitrophenol	<0.5	<0.5	ug/l	TM16/PM30																	
Pentachlorophenol	<0.5	<0.5	ug/l	TM16/PM30																	
Phenol	<0.5	<0.5	ug/l	TM16/PM30																	

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:
JE Job No.: 15/17326

Report : CEN 10:1 1 Batch

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	208-210								
Sample ID	WS205								
Depth	0.50								
COC No / misc									
Containers	V J T								
Sample Date	11/12/2015								
Sample Type	Soil								
Batch Number	7								
Date of Receipt	12/12/2015								

Please see attached notes for all abbreviations and acronyms

									LOD/LOR	Units	Method No.
Total Speciated Phenols MS	<6								<6	ug/l	TM16/PM30
Total Cyanide #	<0.01								<0.01	mg/l	TM89/PM0
Mass of raw test portion	0.094									kg	NONE/PM17
Leachant Volume	0.896									l	NONE/PM17
Dissolved Organic Carbon	3								<2	mg/l	TM60/PM0
pH	10.99								<0.01	pH units	TM73/PM0

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact:
 JE Job No.: 15/17326

SVOC Report : Solid

J E Sample No.	208-210																							
Sample ID	WS205																							
Depth	0.50																							
COC No / misc Containers	V J T																							
Sample Date	11/12/2015																							
Sample Type	Soil																							
Batch Number	7																							
Date of Receipt	12/12/2015																							
Please see attached notes for all abbreviations and acronyms																								
SVOC MS																								
Phenols																								
2-Chlorophenol ^{#M}	<10																				<10	ug/kg	TM16/PM8	
2-Methylphenol	<10																					<10	ug/kg	TM16/PM8
2-Nitrophenol	<10																					<10	ug/kg	TM16/PM8
2,4-Dichlorophenol ^{#M}	<10																					<10	ug/kg	TM16/PM8
2,4-Dimethylphenol	<10																					<10	ug/kg	TM16/PM8
2,4,5-Trichlorophenol	<10																					<10	ug/kg	TM16/PM8
2,4,6-Trichlorophenol	<10																					<10	ug/kg	TM16/PM8
4-Chloro-3-methylphenol	<10																					<10	ug/kg	TM16/PM8
4-Methylphenol	<10																					<10	ug/kg	TM16/PM8
4-Nitrophenol	<10																					<10	ug/kg	TM16/PM8
Pentachlorophenol	<10																					<10	ug/kg	TM16/PM8
Phenol ^{#M}	<10																					<10	ug/kg	TM16/PM8
PAHs																								
2-Chloronaphthalene ^{#M}	<10																					<10	ug/kg	TM16/PM8
2-Methylnaphthalene ^{#M}	<10																					<10	ug/kg	TM16/PM8
Phthalates																								
Bis(2-ethylhexyl) phthalate	<100																					<100	ug/kg	TM16/PM8
Butylbenzyl phthalate	<100																					<100	ug/kg	TM16/PM8
Di-n-butyl phthalate	<100																					<100	ug/kg	TM16/PM8
Di-n-Octyl phthalate	<100																					<100	ug/kg	TM16/PM8
Diethyl phthalate	<100																					<100	ug/kg	TM16/PM8
Dimethyl phthalate ^{#M}	<100																					<100	ug/kg	TM16/PM8
Other SVOCs																								
1,2-Dichlorobenzene	<10																					<10	ug/kg	TM16/PM8
1,2,4-Trichlorobenzene ^{#M}	<10																					<10	ug/kg	TM16/PM8
1,3-Dichlorobenzene	<10																					<10	ug/kg	TM16/PM8
1,4-Dichlorobenzene	<10																					<10	ug/kg	TM16/PM8
2-Nitroaniline	<10																					<10	ug/kg	TM16/PM8
2,4-Dinitrotoluene	<10																					<10	ug/kg	TM16/PM8
2,6-Dinitrotoluene	<10																					<10	ug/kg	TM16/PM8
3-Nitroaniline	<10																					<10	ug/kg	TM16/PM8
4-Bromophenylphenylether ^{#M}	<10																					<10	ug/kg	TM16/PM8
4-Chloroaniline	<10																					<10	ug/kg	TM16/PM8
4-Chlorophenylphenylether	<10																					<10	ug/kg	TM16/PM8
4-Nitroaniline	<10																					<10	ug/kg	TM16/PM8
Azobenzene	<10																					<10	ug/kg	TM16/PM8
Bis(2-chloroethoxy)methane	<10																					<10	ug/kg	TM16/PM8
Bis(2-chloroethyl)ether	<10																					<10	ug/kg	TM16/PM8
Carbazole	<10																					<10	ug/kg	TM16/PM8
Dibenzofuran ^{#M}	<10																					<10	ug/kg	TM16/PM8
Hexachlorobenzene	<10																					<10	ug/kg	TM16/PM8
Hexachlorobutadiene ^{#M}	<10																					<10	ug/kg	TM16/PM8
Hexachlorocyclopentadiene	<10																					<10	ug/kg	TM16/PM8
Hexachloroethane	<10																					<10	ug/kg	TM16/PM8
Isophorone ^{#M}	<10																					<10	ug/kg	TM16/PM8
N-nitrosodi-n-propylamine ^{#M}	<10																					<10	ug/kg	TM16/PM8
Nitrobenzene ^{#M}	<10																					<10	ug/kg	TM16/PM8

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:
JE Job No.: 15/17326

SVOC Report : CEN 10:1 1 Batch

J E Sample No.	208-210												
Sample ID	WS205												
Depth	0.50												
COC No / misc													
Containers	V J T												
Sample Date	11/12/2015												
Sample Type	Soil												
Batch Number	7												
Date of Receipt	12/12/2015												
Please see attached notes for all abbreviations and acronyms													
SVOC MS										LOD/LOR	Units	Method No.	
Phenols													
2-Chlorophenol	<1									<1	ug/l	TM16/PM30	
2-Methylphenol	<0.5									<0.5	ug/l	TM16/PM30	
2-Nitrophenol	<0.5									<0.5	ug/l	TM16/PM30	
2,4-Dichlorophenol	<0.5									<0.5	ug/l	TM16/PM30	
2,4-Dimethylphenol	<1									<1	ug/l	TM16/PM30	
2,4,5-Trichlorophenol	<0.5									<0.5	ug/l	TM16/PM30	
2,4,6-Trichlorophenol	<1									<1	ug/l	TM16/PM30	
4-Chloro-3-methylphenol	<0.5									<0.5	ug/l	TM16/PM30	
4-Methylphenol	<1									<1	ug/l	TM16/PM30	
4-Nitrophenol	<10									<10	ug/l	TM16/PM30	
Pentachlorophenol	<1									<1	ug/l	TM16/PM30	
Phenol	<1									<1	ug/l	TM16/PM30	
PAHs													
2-Chloronaphthalene	<1									<1	ug/l	TM16/PM30	
2-Methylnaphthalene	<1									<1	ug/l	TM16/PM30	
Phthalates													
Bis(2-ethylhexyl) phthalate	<5									<5	ug/l	TM16/PM30	
Butylbenzyl phthalate	<1									<1	ug/l	TM16/PM30	
Di-n-butyl phthalate	<1.5									<1.5	ug/l	TM16/PM30	
Di-n-Octyl phthalate	<1									<1	ug/l	TM16/PM30	
Diethyl phthalate	<1									<1	ug/l	TM16/PM30	
Dimethyl phthalate	<1									<1	ug/l	TM16/PM30	
Other SVOCs													
1,2-Dichlorobenzene	<1									<1	ug/l	TM16/PM30	
1,2,4-Trichlorobenzene	<1									<1	ug/l	TM16/PM30	
1,3-Dichlorobenzene	<1									<1	ug/l	TM16/PM30	
1,4-Dichlorobenzene	<1									<1	ug/l	TM16/PM30	
2-Nitroaniline	<1									<1	ug/l	TM16/PM30	
2,4-Dinitrotoluene	<0.5									<0.5	ug/l	TM16/PM30	
2,6-Dinitrotoluene	<1									<1	ug/l	TM16/PM30	
3-Nitroaniline	<1									<1	ug/l	TM16/PM30	
4-Bromophenylphenylether	<1									<1	ug/l	TM16/PM30	
4-Chloroaniline	<1									<1	ug/l	TM16/PM30	
4-Chlorophenylphenylether	<1									<1	ug/l	TM16/PM30	
4-Nitroaniline	<0.5									<0.5	ug/l	TM16/PM30	
Azobenzene	<0.5									<0.5	ug/l	TM16/PM30	
Bis(2-chloroethoxy)methane	<0.5									<0.5	ug/l	TM16/PM30	
Bis(2-chloroethyl)ether	<1									<1	ug/l	TM16/PM30	
Carbazole	<0.5									<0.5	ug/l	TM16/PM30	
Dibenzofuran	<0.5									<0.5	ug/l	TM16/PM30	
Hexachlorobenzene	<1									<1	ug/l	TM16/PM30	
Hexachlorobutadiene	<1									<1	ug/l	TM16/PM30	
Hexachlorocyclopentadiene	<1									<1	ug/l	TM16/PM30	
Hexachloroethane	<1									<1	ug/l	TM16/PM30	
Isophorone	<0.5									<0.5	ug/l	TM16/PM30	
N-nitrosodi-n-propylamine	<0.5									<0.5	ug/l	TM16/PM30	
Nitrobenzene	<1									<1	ug/l	TM16/PM30	

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:
JE Job No.: 15/17326

VOC Report : Solid

J E Sample No.	208-210												
Sample ID	WS205												
Depth	0.50												
COC No / misc Containers	V J T												
Sample Date	11/12/2015												
Sample Type	Soil												
Batch Number	7												
Date of Receipt	12/12/2015												
VOC MS													
Dichlorodifluoromethane	<2									<2	ug/kg	TM15/PM10	
Methyl Tertiary Butyl Ether #M	<6									<6	ug/kg	TM15/PM10	
Chloromethane #	<3									<3	ug/kg	TM15/PM10	
Vinyl Chloride	<2									<2	ug/kg	TM15/PM10	
Bromomethane	<1									<1	ug/kg	TM15/PM10	
Chloroethane #M	<6									<6	ug/kg	TM15/PM10	
Trichlorofluoromethane #M	<3									<3	ug/kg	TM15/PM10	
1,1-Dichloroethene (1,1 DCE) #M	<6									<6	ug/kg	TM15/PM10	
Dichloromethane (DCM) #	<7									<7	ug/kg	TM15/PM10	
trans-1-2-Dichloroethene #	<3									<3	ug/kg	TM15/PM10	
1,1-Dichloroethane #M	<6									<6	ug/kg	TM15/PM10	
cis-1-2-Dichloroethene #M	<7									<7	ug/kg	TM15/PM10	
2,2-Dichloropropane	<4									<4	ug/kg	TM15/PM10	
Bromochloromethane #M	<4									<4	ug/kg	TM15/PM10	
Chloroform #M	<5									<5	ug/kg	TM15/PM10	
1,1,1-Trichloroethane #M	<5									<5	ug/kg	TM15/PM10	
1,1-Dichloropropene #	<3									<3	ug/kg	TM15/PM10	
Carbon tetrachloride #M	<4									<4	ug/kg	TM15/PM10	
1,2-Dichloroethane #M	<5									<5	ug/kg	TM15/PM10	
Benzene #M	<5									<5	ug/kg	TM15/PM10	
Trichloroethene (TCE) #M	<5									<5	ug/kg	TM15/PM10	
1,2-Dichloropropane #M	<4									<4	ug/kg	TM15/PM10	
Dibromomethane #M	<4									<4	ug/kg	TM15/PM10	
Bromodichloromethane #M	<4									<4	ug/kg	TM15/PM10	
cis-1-3-Dichloropropene	<4									<4	ug/kg	TM15/PM10	
Toluene #M	<3									<3	ug/kg	TM15/PM10	
trans-1-3-Dichloropropene	<3									<3	ug/kg	TM15/PM10	
1,1,2-Trichloroethane #M	<4									<4	ug/kg	TM15/PM10	
Tetrachloroethene (PCE) #	<3									<3	ug/kg	TM15/PM10	
1,3-Dichloropropane #M	<4									<4	ug/kg	TM15/PM10	
Dibromochloromethane #M	<5									<5	ug/kg	TM15/PM10	
1,2-Dibromoethane #	<3									<3	ug/kg	TM15/PM10	
Chlorobenzene #M	<4									<4	ug/kg	TM15/PM10	
1,1,1,2-Tetrachloroethane #M	<5									<5	ug/kg	TM15/PM10	
Ethylbenzene #M	<3									<3	ug/kg	TM15/PM10	
p/m-Xylene #M	<4									<4	ug/kg	TM15/PM10	
o-Xylene #M	<4									<4	ug/kg	TM15/PM10	
Styrene	<3									<3	ug/kg	TM15/PM10	
Bromofrom	<4									<4	ug/kg	TM15/PM10	
Isopropylbenzene #	<3									<3	ug/kg	TM15/PM10	
1,1,2,2-Tetrachloroethane #M	<3									<3	ug/kg	TM15/PM10	
Bromobenzene	<2									<2	ug/kg	TM15/PM10	
1,2,3-Trichloropropane #M	<4									<4	ug/kg	TM15/PM10	
Propylbenzene #	<4									<4	ug/kg	TM15/PM10	
2-Chlorotoluene	<3									<3	ug/kg	TM15/PM10	
1,3,5-Trimethylbenzene #	<3									<3	ug/kg	TM15/PM10	
4-Chlorotoluene	<3									<3	ug/kg	TM15/PM10	
tert-Butylbenzene #	<5									<5	ug/kg	TM15/PM10	
1,2,4-Trimethylbenzene #	<6									<6	ug/kg	TM15/PM10	
sec-Butylbenzene #	<4									<4	ug/kg	TM15/PM10	
4-Isopropyltoluene #	<4									<4	ug/kg	TM15/PM10	
1,3-Dichlorobenzene #M	<4									<4	ug/kg	TM15/PM10	
1,4-Dichlorobenzene #	<4									<4	ug/kg	TM15/PM10	
n-Butylbenzene #	<4									<4	ug/kg	TM15/PM10	
1,2-Dichlorobenzene #M	<4									<4	ug/kg	TM15/PM10	
1,2-Dibromo-3-chloropropane #	<4									<4	ug/kg	TM15/PM10	
1,2,4-Trichlorobenzene #	<7									<7	ug/kg	TM15/PM10	
Hexachlorobutadiene	<4									<4	ug/kg	TM15/PM10	
Naphthalene	<27									<27	ug/kg	TM15/PM10	
1,2,3-Trichlorobenzene #	<7									<7	ug/kg	TM15/PM10	
Surrogate Recovery Toluene D8	114									<0	%	TM15/PM10	
Surrogate Recovery 4-Bromofluorobenzene	139									<0	%	TM15/PM10	

Please see attached notes for all abbreviations and acronyms

LOD/LOR Units Method No.

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:
JE Job No.: 15/17326

VOC Report : CEN 10:1 1 Batch

J E Sample No.	208-210														
Sample ID	WS205														
Depth	0.50														
COC No / misc Containers	V J T														
Sample Date	11/12/2015														
Sample Type	Soil														
Batch Number	7														
Date of Receipt	12/12/2015														
											LOD/LOR	Units	Method No.		
VOC MS															
Dichlorodifluoromethane	<2												<2	ug/l	TM15/PM69
Methyl Tertiary Butyl Ether	<1												<1	ug/l	TM15/PM69
Chloromethane	<3												<3	ug/l	TM15/PM69
Vinyl Chloride	<0.1												<0.1	ug/l	TM15/PM69
Bromomethane	<1												<1	ug/l	TM15/PM69
Chloroethane	<3												<3	ug/l	TM15/PM69
Trichlorofluoromethane	<3												<3	ug/l	TM15/PM69
1,1-Dichloroethene (1,1 DCE)	<3												<3	ug/l	TM15/PM69
Dichloromethane (DCM)	<3												<3	ug/l	TM15/PM69
trans-1-2-Dichloroethene	<3												<3	ug/l	TM15/PM69
1,1-Dichloroethane	<3												<3	ug/l	TM15/PM69
cis-1-2-Dichloroethene	<3												<3	ug/l	TM15/PM69
2,2-Dichloropropane	<1												<1	ug/l	TM15/PM69
Bromochloromethane	<2												<2	ug/l	TM15/PM69
Chloroform	<2												<2	ug/l	TM15/PM69
1,1,1-Trichloroethane	<2												<2	ug/l	TM15/PM69
1,1-Dichloropropene	<3												<3	ug/l	TM15/PM69
Carbon tetrachloride	<2												<2	ug/l	TM15/PM69
1,2-Dichloroethane	<2												<2	ug/l	TM15/PM69
Benzene	<1												<1	ug/l	TM15/PM69
Trichloroethene (TCE)	<3												<3	ug/l	TM15/PM69
1,2-Dichloropropane	<2												<2	ug/l	TM15/PM69
Dibromomethane	<3												<3	ug/l	TM15/PM69
Bromodichloromethane	<2												<2	ug/l	TM15/PM69
cis-1-3-Dichloropropene	<2												<2	ug/l	TM15/PM69
Toluene	<2												<2	ug/l	TM15/PM69
trans-1-3-Dichloropropene	<2												<2	ug/l	TM15/PM69
1,1,2-Trichloroethane	<2												<2	ug/l	TM15/PM69
Tetrachloroethene (PCE)	<3												<3	ug/l	TM15/PM69
1,3-Dichloropropane	<2												<2	ug/l	TM15/PM69
Dibromochloromethane	<2												<2	ug/l	TM15/PM69
1,2-Dibromoethane	<2												<2	ug/l	TM15/PM69
Chlorobenzene	<2												<2	ug/l	TM15/PM69
1,1,1,2-Tetrachloroethane	<2												<2	ug/l	TM15/PM69
Ethylbenzene	<2												<2	ug/l	TM15/PM69
p/m-Xylene	<3												<3	ug/l	TM15/PM69
o-Xylene	<2												<2	ug/l	TM15/PM69
Styrene	<2												<2	ug/l	TM15/PM69
Bromoform	<2												<2	ug/l	TM15/PM69
Isopropylbenzene	<3												<3	ug/l	TM15/PM69
1,1,2,2-Tetrachloroethane	<4												<4	ug/l	TM15/PM69
Bromobenzene	<2												<2	ug/l	TM15/PM69
1,2,3-Trichloropropane	<3												<3	ug/l	TM15/PM69
Propylbenzene	<3												<3	ug/l	TM15/PM69
2-Chlorotoluene	<3												<3	ug/l	TM15/PM69
1,3,5-Trimethylbenzene	<3												<3	ug/l	TM15/PM69
4-Chlorotoluene	<3												<3	ug/l	TM15/PM69
tert-Butylbenzene	<3												<3	ug/l	TM15/PM69
1,2,4-Trimethylbenzene	<3												<3	ug/l	TM15/PM69
sec-Butylbenzene	<3												<3	ug/l	TM15/PM69
4-Isopropyltoluene	<3												<3	ug/l	TM15/PM69
1,3-Dichlorobenzene	<3												<3	ug/l	TM15/PM69
1,4-Dichlorobenzene	<3												<3	ug/l	TM15/PM69
n-Butylbenzene	<3												<3	ug/l	TM15/PM69
1,2-Dichlorobenzene	<3												<3	ug/l	TM15/PM69
1,2-Dibromo-3-chloropropane	<2												<2	ug/l	TM15/PM69
1,2,4-Trichlorobenzene	<3												<3	ug/l	TM15/PM69
Hexachlorobutadiene	<3												<3	ug/l	TM15/PM69
Naphthalene	<2												<2	ug/l	TM15/PM69
1,2,3-Trichlorobenzene	<3												<3	ug/l	TM15/PM69
Surrogate Recovery Toluene D8	103												<0	%	TM15/PM69
Surrogate Recovery 4-Bromofluorobenzene	107												<0	%	TM15/PM69

Please see attached notes for all abbreviations and acronyms

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

JE Job No.: 15/17326

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. 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.

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.

WATERS

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

ISO17025 (UKAS) accreditation applies to surface water and groundwater and 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

Samples must be received in a condition appropriate to the requested analyses. All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. If this is not the case you will be informed and any test results that may be compromised highlighted on your deviating samples report.

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.

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.

Please include all sections of this report if it is reproduced

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS) accredited - UK.
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.
++	Result outside calibration range, results should be considered as indicative only and are not accredited.
*	Analysis subcontracted to a Jones Environmental 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

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.				
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes	Yes	AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM5/TM36	TM005: Modified USEPA 8015B. Determination of solvent Extractable Petroleum Hydrocarbons (EPH) including column fractionation in the carbon range of C10-35 into aliphatic and aromatic fractions by GC-FID. TM036: Modified USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-10 by headspace GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5/TM36	TM005: Modified USEPA 8015B. Determination of solvent Extractable Petroleum Hydrocarbons (EPH) including column fractionation in the carbon range of C10-35 into aliphatic and aromatic fractions by GC-FID. TM036: Modified USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-10 by headspace GC-FID.	PM30/PM69	PM030: Eluate samples are extracted with solvent using a magnetic stirrer to create a vortex. PM069: One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	Yes
PM13	A visual examination of the solid sample is carried out to ascertain sample make up, colour and any other inclusions. This is not a geotechnical description.	PM0	No preparation is required.			AR	
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM69	Modified BS EN 12457 method. One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM69	Modified BS EN 12457 method. One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	Yes
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes
TM17	Modified US EPA method 8270. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	Yes
TM17	Modified US EPA method 8270. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM21	Modified USEPA 415.1. Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.	Yes		AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM14	Analysis of waters and leachates for metals by ICP OES. Samples are filtered for dissolved metals and acidified if required.	Yes		AR	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes	Yes	AD	Yes
TM31	Modified USEPA 8015B. Determination of Methylterbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM31	Modified USEPA 8015B. Determination of Methylterbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM69	Modified BS EN 12457 method. One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	Yes
TM38	Soluble Ion analysis using the Thermo Aquakem Photometric Automatic Analyser. Modified US EPA methods 325.2, 375.4, 365.2, 353.1, 354.1	PM20	Extraction of dried and ground samples with deionised water in a 2:1 water to solid ratio for anions. Extraction of as received samples with deionised water in a 2:1 water to solid ratio for ammoniacal nitrogen. Samples are extracted using an orbital shaker.	Yes		AR	Yes
TM60	Modified USEPA 9060. Determination of TOC by calculation from Total Carbon and Inorganic Carbon using a TOC analyser, the carbon in the sample is converted to CO2 and then passed through a non-dispersive infrared gas analyser (NDIR).	PM0	No preparation is required.			AR	Yes
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.			AR	
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.	Yes		AR	
TM73	Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.	PM0	No preparation is required.			AR	Yes
TM73	Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes	Yes	AR	No
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM32	Hot water soluble boron is extracted from dried and ground samples using a 20:1 ratio.	Yes	Yes	AD	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM89	Modified USEPA method OIA-1667. Determination of cyanide by Flow Injection Analyser.	PM0	No preparation is required.	Yes		AR	Yes
TM89	Modified USEPA method OIA-1667. Determination of cyanide by Flow Injection Analyser.	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide and Thiocyanate analysis.	Yes	Yes	AR	Yes
NONE	No Method Code	NONE	No Method Code			AR	Yes
NONE	No Method Code	PM17	Modified method EN12457-2 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.				
NONE	No Method Code	PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.			AR	



Jones Environmental Laboratory

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Attention :

Date : 7th January, 2016

Your reference : PN153428

Our reference : Test Report 15/17326 Batch 8

Location : Stockport Bus Station

Date samples received : 12th December, 2015

Status : Final report

Issue : 1

Seventeen samples were received for analysis on 12th December, 2015 of which six 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.

Compiled By:

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:
JE Job No.: 15/17326

Report : CEN 10:1 1 Batch

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	226-228	235-237	250-252	271-273							Please see attached notes for all abbreviations and acronyms		
											Sample ID	HP02	HP01
Sample ID	HP02	HP01	WS210	WS223									
Depth	0.20	0.20	1.00	1.00									
COC No / misc													
Containers	V J T	V J T	V J T	V J T									
Sample Date	09/12/2015	09/12/2015	09/12/2015	10/12/2015									
Sample Type	Soil	Soil	Soil	Soil									
Batch Number	8	8	8	8									
Date of Receipt	12/12/2015	12/12/2015	12/12/2015	12/12/2015									
Total Speciated Phenols MS	<6	<6	<6	<6						<6	ug/l	TM16/PM30	
Total Cyanide #	<0.01	<0.01	<0.01	<0.01						<0.01	mg/l	TM89/PM0	
Mass of raw test portion	0.0982	0.1056	0.11	0.0933							kg	NONE/PM17	
Leachant Volume	0.891	0.884	0.88	0.897							l	NONE/PM17	
Dissolved Chromium III	0.007	0.006	<0.006	0.013						<0.006	mg/l	NONE/NONE	
Dissolved Organic Carbon	7	13	3	5						<2	mg/l	TM60/PM0	
Hexavalent Chromium	<0.006	<0.006	<0.006	<0.006						<0.006	mg/l	TM38/PM0	
pH	8.62	9.70	7.90	11.71						<0.01	pH units	TM73/PM0	

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:
JE Job No.: 15/17326

SVOC Report : Solid

J E Sample No.	226-228	229-231	235-237	244-246	250-252	271-273												
Sample ID	HP02	HP02	HP01	WS210	WS210	WS223												
Depth	0.20	0.50	0.20	0.20	1.00	1.00												
COC No / misc																		
Containers	V J T	V J T	V J T	V J T	V J T	V J T												
Sample Date	09/12/2015	09/12/2015	09/12/2015	09/12/2015	09/12/2015	10/12/2015												
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil												
Batch Number	8	8	8	8	8	8												
Date of Receipt	12/12/2015	12/12/2015	12/12/2015	12/12/2015	12/12/2015	12/12/2015												
												LOD/LOR	Units	Method No.	Please see attached notes for all abbreviations and acronyms			
SVOC MS																		
Phenols																		
2-Chlorophenol ^{#M}	<50 ^{AA}	<10	<50 ^{AA}	<100 ^{AB}	<10	<10						<10	ug/kg	TM16/PM8				
2-Methylphenol	<50 ^{AA}	<10	<50 ^{AA}	<100 ^{AB}	159	<10						<10	ug/kg	TM16/PM8				
2-Nitrophenol	<50 ^{AA}	<10	<50 ^{AA}	<100 ^{AB}	<10	<10						<10	ug/kg	TM16/PM8				
2,4-Dichlorophenol ^{#M}	<50 ^{AA}	<10	<50 ^{AA}	<100 ^{AB}	<10	<10						<10	ug/kg	TM16/PM8				
2,4-Dimethylphenol	<50 ^{AA}	<10	<50 ^{AA}	3030 ^{AB}	309	<10						<10	ug/kg	TM16/PM8				
2,4,5-Trichlorophenol	<50 ^{AA}	<10	<50 ^{AA}	<100 ^{AB}	<10	<10						<10	ug/kg	TM16/PM8				
2,4,6-Trichlorophenol	<50 ^{AA}	<10	<50 ^{AA}	<100 ^{AB}	<10	<10						<10	ug/kg	TM16/PM8				
4-Chloro-3-methylphenol	<50 ^{AA}	<10	<50 ^{AA}	<100 ^{AB}	<10	<10						<10	ug/kg	TM16/PM8				
4-Methylphenol	<50 ^{AA}	<10	<50 ^{AA}	2907 ^{AB}	488	<10						<10	ug/kg	TM16/PM8				
4-Nitrophenol	<50 ^{AA}	<10	<50 ^{AA}	<100 ^{AB}	<10	<10						<10	ug/kg	TM16/PM8				
Pentachlorophenol	<50 ^{AA}	<10	<50 ^{AA}	<100 ^{AB}	<10	<10						<10	ug/kg	TM16/PM8				
Phenol ^{#M}	<50 ^{AA}	<10	<50 ^{AA}	<100 ^{AB}	<10	<10						<10	ug/kg	TM16/PM8				
PAHs																		
2-Chloronaphthalene ^{#M}	<50 ^{AA}	<10	<50 ^{AA}	<100 ^{AB}	<10	<10						<10	ug/kg	TM16/PM8				
2-Methylnaphthalene ^{#M}	3271 ^{AA}	<10	411 ^{AA}	121597 ^{AB}	1828	<10						<10	ug/kg	TM16/PM8				
Phthalates																		
Bis(2-ethylhexyl) phthalate	<500 ^{AA}	<100	<500 ^{AA}	<1000 ^{AB}	<100	<100						<100	ug/kg	TM16/PM8				
Butylbenzyl phthalate	<500 ^{AA}	<100	<500 ^{AA}	<1000 ^{AB}	<100	<100						<100	ug/kg	TM16/PM8				
Di-n-butyl phthalate	<500 ^{AA}	<100	<500 ^{AA}	<1000 ^{AB}	<100	<100						<100	ug/kg	TM16/PM8				
Di-n-Octyl phthalate	<500 ^{AA}	<100	<500 ^{AA}	<1000 ^{AB}	<100	<100						<100	ug/kg	TM16/PM8				
Diethyl phthalate	<500 ^{AA}	<100	<500 ^{AA}	<1000 ^{AB}	<100	<100						<100	ug/kg	TM16/PM8				
Dimethyl phthalate ^{#M}	<500 ^{AA}	<100	<500 ^{AA}	<1000 ^{AB}	<100	<100						<100	ug/kg	TM16/PM8				
Other SVOCs																		
1,2-Dichlorobenzene	<50 ^{AA}	<10	<50 ^{AA}	<100 ^{AB}	<10	<10						<10	ug/kg	TM16/PM8				
1,2,4-Trichlorobenzene ^{#M}	<50 ^{AA}	<10	<50 ^{AA}	<100 ^{AB}	<10	<10						<10	ug/kg	TM16/PM8				
1,3-Dichlorobenzene	<50 ^{AA}	<10	<50 ^{AA}	<100 ^{AB}	<10	<10						<10	ug/kg	TM16/PM8				
1,4-Dichlorobenzene	<50 ^{AA}	<10	<50 ^{AA}	<100 ^{AB}	<10	<10						<10	ug/kg	TM16/PM8				
2-Nitroaniline	<50 ^{AA}	<10	<50 ^{AA}	<100 ^{AB}	<10	<10						<10	ug/kg	TM16/PM8				
2,4-Dinitrotoluene	<50 ^{AA}	<10	<50 ^{AA}	<100 ^{AB}	<10	<10						<10	ug/kg	TM16/PM8				
2,6-Dinitrotoluene	<50 ^{AA}	<10	<50 ^{AA}	<100 ^{AB}	<10	<10						<10	ug/kg	TM16/PM8				
3-Nitroaniline	<50 ^{AA}	<10	<50 ^{AA}	<100 ^{AB}	<10	<10						<10	ug/kg	TM16/PM8				
4-Bromophenyphenylether ^{#M}	<50 ^{AA}	<10	<50 ^{AA}	<100 ^{AB}	<10	<10						<10	ug/kg	TM16/PM8				
4-Chloroaniline	<50 ^{AA}	<10	<50 ^{AA}	<100 ^{AB}	<10	<10						<10	ug/kg	TM16/PM8				
4-Chlorophenyphenylether	<50 ^{AA}	<10	<50 ^{AA}	<100 ^{AB}	<10	<10						<10	ug/kg	TM16/PM8				
4-Nitroaniline	<50 ^{AA}	<10	<50 ^{AA}	<100 ^{AB}	<10	<10						<10	ug/kg	TM16/PM8				
Azobenzene	<50 ^{AA}	<10	<50 ^{AA}	<100 ^{AB}	<10	<10						<10	ug/kg	TM16/PM8				
Bis(2-chloroethoxy)methane	<50 ^{AA}	<10	<50 ^{AA}	<100 ^{AB}	<10	<10						<10	ug/kg	TM16/PM8				
Bis(2-chloroethyl)ether	<50 ^{AA}	<10	<50 ^{AA}	<100 ^{AB}	<10	<10						<10	ug/kg	TM16/PM8				
Carbazole	5747 ^{AA}	<10	<50 ^{AA}	50353 ^{AB}	1366	<10						<10	ug/kg	TM16/PM8				
Dibenzofuran ^{#M}	2429 ^{AA}	<10	490 ^{AA}	72535 ^{AB}	1188	<10						<10	ug/kg	TM16/PM8				
Hexachlorobenzene	<50 ^{AA}	<10	<50 ^{AA}	<100 ^{AB}	<10	<10						<10	ug/kg	TM16/PM8				
Hexachlorobutadiene ^{#M}	<50 ^{AA}	<10	<50 ^{AA}	<100 ^{AB}	<10	<10						<10	ug/kg	TM16/PM8				
Hexachlorocyclopentadiene	<50 ^{AA}	<10	<50 ^{AA}	<100 ^{AB}	<10	<10						<10	ug/kg	TM16/PM8				
Hexachloroethane	<50 ^{AA}	<10	<50 ^{AA}	<100 ^{AB}	<10	<10						<10	ug/kg	TM16/PM8				
Isophorone ^{#M}	<50 ^{AA}	<10	<50 ^{AA}	<100 ^{AB}	<10	<10						<10	ug/kg	TM16/PM8				
N-nitrosodi-n-propylamine ^{#M}	<50 ^{AA}	<10	<50 ^{AA}	<100 ^{AB}	<10	<10						<10	ug/kg	TM16/PM8				
Nitrobenzene ^{#M}	<50 ^{AA}	<10	<50 ^{AA}	<100 ^{AB}	<10	<10						<10	ug/kg	TM16/PM8				

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:
JE Job No.: 15/17326

SVOC Report : CEN 10:1 1 Batch

J E Sample No.	226-228	235-237	250-252	271-273															LOD/LOR	Units	Method No.
Sample ID	HP02	HP01	WS210	WS223																	
Depth	0.20	0.20	1.00	1.00																	
COC No / misc Containers	V J T	V J T	V J T	V J T																	
Sample Date	09/12/2015	09/12/2015	09/12/2015	10/12/2015																	
Sample Type	Soil	Soil	Soil	Soil																	
Batch Number	8	8	8	8																	
Date of Receipt	12/12/2015	12/12/2015	12/12/2015	12/12/2015																	
Please see attached notes for all abbreviations and acronyms																					
SVOC MS																					
Phenols																					
2-Chlorophenol	<1	<1	<1	<1															<1	ug/l	TM16/PM30
2-Methylphenol	<0.5	<0.5	<0.5	<0.5															<0.5	ug/l	TM16/PM30
2-Nitrophenol	<0.5	<0.5	<0.5	<0.5															<0.5	ug/l	TM16/PM30
2,4-Dichlorophenol	<0.5	<0.5	<0.5	<0.5															<0.5	ug/l	TM16/PM30
2,4-Dimethylphenol	<1	<1	<1	<1															<1	ug/l	TM16/PM30
2,4,5-Trichlorophenol	<0.5	<0.5	<0.5	<0.5															<0.5	ug/l	TM16/PM30
2,4,6-Trichlorophenol	<1	<1	<1	<1															<1	ug/l	TM16/PM30
4-Chloro-3-methylphenol	<0.5	<0.5	<0.5	<0.5															<0.5	ug/l	TM16/PM30
4-Methylphenol	<1	<1	<1	<1															<1	ug/l	TM16/PM30
4-Nitrophenol	<10	<10	<10	<10															<10	ug/l	TM16/PM30
Pentachlorophenol	<1	<1	<1	<1															<1	ug/l	TM16/PM30
Phenol	<1	<1	<1	<1															<1	ug/l	TM16/PM30
PAHs																					
2-Chloronaphthalene	<1	<1	<1	<1															<1	ug/l	TM16/PM30
2-Methylnaphthalene	<1	<1	<1	<1															<1	ug/l	TM16/PM30
Phthalates																					
Bis(2-ethylhexyl) phthalate	<5	<5	<5	<5															<5	ug/l	TM16/PM30
Butylbenzyl phthalate	<1	<1	<1	<1															<1	ug/l	TM16/PM30
Di-n-butyl phthalate	<1.5	<1.5	<1.5	<1.5															<1.5	ug/l	TM16/PM30
Di-n-Octyl phthalate	<1	<1	<1	<1															<1	ug/l	TM16/PM30
Diethyl phthalate	<1	<1	<1	<1															<1	ug/l	TM16/PM30
Dimethyl phthalate	<1	<1	<1	<1															<1	ug/l	TM16/PM30
Other SVOCs																					
1,2-Dichlorobenzene	<1	<1	<1	<1															<1	ug/l	TM16/PM30
1,2,4-Trichlorobenzene	<1	<1	<1	<1															<1	ug/l	TM16/PM30
1,3-Dichlorobenzene	<1	<1	<1	<1															<1	ug/l	TM16/PM30
1,4-Dichlorobenzene	<1	<1	<1	<1															<1	ug/l	TM16/PM30
2-Nitroaniline	<1	<1	<1	<1															<1	ug/l	TM16/PM30
2,4-Dinitrotoluene	<0.5	<0.5	<0.5	<0.5															<0.5	ug/l	TM16/PM30
2,6-Dinitrotoluene	<1	<1	<1	<1															<1	ug/l	TM16/PM30
3-Nitroaniline	<1	<1	<1	<1															<1	ug/l	TM16/PM30
4-Bromophenylphenylether	<1	<1	<1	<1															<1	ug/l	TM16/PM30
4-Chloroaniline	<1	<1	<1	<1															<1	ug/l	TM16/PM30
4-Chlorophenylphenylether	<1	<1	<1	<1															<1	ug/l	TM16/PM30
4-Nitroaniline	<0.5	<0.5	<0.5	<0.5															<0.5	ug/l	TM16/PM30
Azobenzene	<0.5	<0.5	<0.5	<0.5															<0.5	ug/l	TM16/PM30
Bis(2-chloroethoxy)methane	<0.5	<0.5	<0.5	<0.5															<0.5	ug/l	TM16/PM30
Bis(2-chloroethyl)ether	<1	<1	<1	<1															<1	ug/l	TM16/PM30
Carbazole	<0.5	<0.5	<0.5	<0.5															<0.5	ug/l	TM16/PM30
Dibenzofuran	<0.5	<0.5	<0.5	<0.5															<0.5	ug/l	TM16/PM30
Hexachlorobenzene	<1	<1	<1	<1															<1	ug/l	TM16/PM30
Hexachlorobutadiene	<1	<1	<1	<1															<1	ug/l	TM16/PM30
Hexachlorocyclopentadiene	<1	<1	<1	<1															<1	ug/l	TM16/PM30
Hexachloroethane	<1	<1	<1	<1															<1	ug/l	TM16/PM30
Isophorone	<0.5	<0.5	<0.5	<0.5															<0.5	ug/l	TM16/PM30
N-nitrosodi-n-propylamine	<0.5	<0.5	<0.5	<0.5															<0.5	ug/l	TM16/PM30
Nitrobenzene	<1	<1	<1	<1															<1	ug/l	TM16/PM30

Jones Environmental Laboratory

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:
JE Job No.: 15/17326

VOC Report : Solid

J E Sample No.	226-228	229-231	235-237	244-246	250-252	271-273						
Sample ID	HP02	HP02	HP01	WS210	WS210	WS223						
Depth	0.20	0.50	0.20	0.20	1.00	1.00						
COC No / misc												
Containers	V J T	V J T	V J T	V J T	V J T	V J T						
Sample Date	09/12/2015	09/12/2015	09/12/2015	09/12/2015	09/12/2015	10/12/2015						
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil						
Batch Number	8	8	8	8	8	8						
Date of Receipt	12/12/2015	12/12/2015	12/12/2015	12/12/2015	12/12/2015	12/12/2015						
										LOD/LOR	Units	Method No.
VOC MS												
Dichlorodifluoromethane	<2	<2	<2	<2	<2	<2				<2	ug/kg	TM15/PM10
Methyl Tertiary Butyl Ether #M	<6	<6	<6	<6	<6	<6				<6	ug/kg	TM15/PM10
Chloromethane #	<3	<3	<3	<3	<3	<3				<3	ug/kg	TM15/PM10
Vinyl Chloride	<2	<2	<2	<2	<2	<2				<2	ug/kg	TM15/PM10
Bromomethane	<1	<1	<1	<1	<1	<1				<1	ug/kg	TM15/PM10
Chloroethane #M	<6	<6	<6	<6	<6	<6				<6	ug/kg	TM15/PM10
Trichlorofluoromethane #M	<3	<3	<3	<3	<3	<3				<3	ug/kg	TM15/PM10
1,1-Dichloroethene (1,1 DCE) #M	<6	<6	<6	<6	<6	<6				<6	ug/kg	TM15/PM10
Dichloromethane (DCM) #	<7	<7	<7	<7	<7	<7				<7	ug/kg	TM15/PM10
trans-1-2-Dichloroethene #	<3	<3	<3	<3	<3	<3				<3	ug/kg	TM15/PM10
1,1-Dichloroethane #M	<6	<6	<6	<6	<6	<6				<6	ug/kg	TM15/PM10
cis-1-2-Dichloroethene #M	<7	<7	<7	<7	<7	<7				<7	ug/kg	TM15/PM10
2,2-Dichloropropane	<4	<4	<4	<4	<4	<4				<4	ug/kg	TM15/PM10
Bromochloromethane #M	<4	<4	<4	<4	<4	<4				<4	ug/kg	TM15/PM10
Chloroform #M	<5	<5	<5	<5	<5	<5				<5	ug/kg	TM15/PM10
1,1,1-Trichloroethane #M	<5	<5	<5	<5	<5	<5				<5	ug/kg	TM15/PM10
1,1-Dichloropropene #	<3	<3	<3	<3	<3	<3				<3	ug/kg	TM15/PM10
Carbon tetrachloride #M	<4	<4	<4	<4	<4	<4				<4	ug/kg	TM15/PM10
1,2-Dichloroethane #M	<5	<5	<5	<5	<5	<5				<5	ug/kg	TM15/PM10
Benzene #M	<5	<5	<5	<5	<5	<5				<5	ug/kg	TM15/PM10
Trichloroethene (TCE) #M	<5	<5	<5	<5	<5	<5				<5	ug/kg	TM15/PM10
1,2-Dichloropropane #M	<4	<4	<4	<4	<4	<4				<4	ug/kg	TM15/PM10
Dibromomethane #M	<4	<4	<4	<4	<4	<4				<4	ug/kg	TM15/PM10
Bromodichloromethane #M	<4	<4	<4	<4	<4	<4				<4	ug/kg	TM15/PM10
cis-1-3-Dichloropropene	<4	<4	<4	<4	<4	<4				<4	ug/kg	TM15/PM10
Toluene #M	<3	<3	5	24	13	<3				<3	ug/kg	TM15/PM10
trans-1-3-Dichloropropene	<3	<3	<3	<3	<3	<3				<3	ug/kg	TM15/PM10
1,1,2-Trichloroethane #M	<4	<4	<4	<4	<4	<4				<4	ug/kg	TM15/PM10
Tetrachloroethene (PCE) #	26	<3	113	22	157	<3				<3	ug/kg	TM15/PM10
1,3-Dichloropropane #M	<4	<4	<4	<4	<4	<4				<4	ug/kg	TM15/PM10
Dibromochloromethane #M	<5	<5	<5	<5	<5	<5				<5	ug/kg	TM15/PM10
1,2-Dibromoethane #	<3	<3	<3	<3	<3	<3				<3	ug/kg	TM15/PM10
Chlorobenzene #M	<4	<4	<4	<4	<4	<4				<4	ug/kg	TM15/PM10
1,1,1,2-Tetrachloroethane #M	<5	<5	<5	<5	<5	<5				<5	ug/kg	TM15/PM10
Ethylbenzene #M	<3	<3	<3	62	<3	<3				<3	ug/kg	TM15/PM10
p/m-Xylene #M	<4	<4	<4	69	13	<4				<4	ug/kg	TM15/PM10
o-Xylene #M	<4	<4	<4	27	9	<4				<4	ug/kg	TM15/PM10
Styrene	<3	<3	<3	<3	<3	<3				<3	ug/kg	TM15/PM10
Bromoform	<4	<4	<4	<4	<4	<4				<4	ug/kg	TM15/PM10
Isopropylbenzene #	<3	<3	<3	16	<3	<3				<3	ug/kg	TM15/PM10
1,1,2,2-Tetrachloroethane #M	<3	<3	<3	<3	<3	<3				<3	ug/kg	TM15/PM10
Bromobenzene	<2	<2	<2	<2	<2	<2				<2	ug/kg	TM15/PM10
1,2,3-Trichloropropane #M	<4	<4	<4	<4	<4	<4				<4	ug/kg	TM15/PM10
Propylbenzene #	<4	<4	<4	<4	<4	<4				<4	ug/kg	TM15/PM10
2-Chlorotoluene	<3	<3	<3	<3	<3	<3				<3	ug/kg	TM15/PM10
1,3,5-Trimethylbenzene #	<3	<3	<3	31	<3	<3				<3	ug/kg	TM15/PM10
4-Chlorotoluene	<3	<3	<3	<3	<3	<3				<3	ug/kg	TM15/PM10
tert-Butylbenzene #	<5	<5	<5	<5	<5	<5				<5	ug/kg	TM15/PM10
1,2,4-Trimethylbenzene #	<6	<6	<6	38	11	<6				<6	ug/kg	TM15/PM10
sec-Butylbenzene #	<4	<4	<4	<4	<4	<4				<4	ug/kg	TM15/PM10
4-Isopropyltoluene #	<4	<4	<4	<4	<4	<4				<4	ug/kg	TM15/PM10
1,3-Dichlorobenzene #M	<4	<4	<4	<4	<4	<4				<4	ug/kg	TM15/PM10
1,4-Dichlorobenzene #	<4	<4	<4	<4	<4	<4				<4	ug/kg	TM15/PM10
n-Butylbenzene #	<4	<4	<4	<4	<4	<4				<4	ug/kg	TM15/PM10
1,2-Dichlorobenzene #M	<4	<4	<4	<4	<4	<4				<4	ug/kg	TM15/PM10
1,2-Dibromo-3-chloropropane #	<4	<4	<4	<4	<4	<4				<4	ug/kg	TM15/PM10
1,2,4-Trichlorobenzene #	<7	<7	<7	<7	<7	<7				<7	ug/kg	TM15/PM10
Hexachlorobutadiene	<4	<4	<4	<4	<4	<4				<4	ug/kg	TM15/PM10
Naphthalene	<27	<27	<27	6844	951	<27				<27	ug/kg	TM15/PM10
1,2,3-Trichlorobenzene #	<7	<7	<7	<7	<7	<7				<7	ug/kg	TM15/PM10
Surrogate Recovery Toluene D8	112	111	103	83	101	113				<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	111	130	74	70	81	131				<0	%	TM15/PM10

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact:
 JE Job No.: 15/17326

VOC Report : CEN 10:1 1 Batch

J E Sample No.	226-228	235-237	250-252	271-273													
Sample ID	HP02	HP01	WS210	WS223													
Depth	0.20	0.20	1.00	1.00													
COC No / misc Containers	V J T	V J T	V J T	V J T													
Sample Date	09/12/2015	09/12/2015	09/12/2015	10/12/2015													
Sample Type	Soil	Soil	Soil	Soil													
Batch Number	8	8	8	8													
Date of Receipt	12/12/2015	12/12/2015	12/12/2015	12/12/2015													
	LOD/LOR	Units	Method No.														
VOC MS																	
Dichlorodifluoromethane	<2	ug/l	TM15/PM69														
Methyl Tertiary Butyl Ether	<1	ug/l	TM15/PM69														
Chloromethane	<3	ug/l	TM15/PM69														
Vinyl Chloride	<0.1	ug/l	TM15/PM69														
Bromomethane	<1	ug/l	TM15/PM69														
Chloroethane	<3	ug/l	TM15/PM69														
Trichlorofluoromethane	<3	ug/l	TM15/PM69														
1,1-Dichloroethene (1,1 DCE)	<3	ug/l	TM15/PM69														
Dichloromethane (DCM)	<3	ug/l	TM15/PM69														
trans-1-2-Dichloroethene	<3	ug/l	TM15/PM69														
1,1-Dichloroethane	<3	ug/l	TM15/PM69														
cis-1-2-Dichloroethene	<3	ug/l	TM15/PM69														
2,2-Dichloropropane	<1	ug/l	TM15/PM69														
Bromochloromethane	<2	ug/l	TM15/PM69														
Chloroform	<2	ug/l	TM15/PM69														
1,1,1-Trichloroethane	<2	ug/l	TM15/PM69														
1,1-Dichloropropene	<3	ug/l	TM15/PM69														
Carbon tetrachloride	<2	ug/l	TM15/PM69														
1,2-Dichloroethane	<2	ug/l	TM15/PM69														
Benzene	<1	ug/l	TM15/PM69														
Trichloroethene (TCE)	<3	ug/l	TM15/PM69														
1,2-Dichloropropane	<2	ug/l	TM15/PM69														
Dibromomethane	<3	ug/l	TM15/PM69														
Bromodichloromethane	<2	ug/l	TM15/PM69														
cis-1-3-Dichloropropene	<2	ug/l	TM15/PM69														
Toluene	<2	ug/l	TM15/PM69														
trans-1-3-Dichloropropene	<2	ug/l	TM15/PM69														
1,1,2-Trichloroethane	<2	ug/l	TM15/PM69														
Tetrachloroethene (PCE)	<3	ug/l	TM15/PM69														
1,3-Dichloropropane	<2	ug/l	TM15/PM69														
Dibromochloromethane	<2	ug/l	TM15/PM69														
1,2-Dibromoethane	<2	ug/l	TM15/PM69														
Chlorobenzene	<2	ug/l	TM15/PM69														
1,1,1,2-Tetrachloroethane	<2	ug/l	TM15/PM69														
Ethylbenzene	<2	ug/l	TM15/PM69														
p/m-Xylene	<3	ug/l	TM15/PM69														
o-Xylene	<2	ug/l	TM15/PM69														
Styrene	<2	ug/l	TM15/PM69														
Bromoform	<2	ug/l	TM15/PM69														
Isopropylbenzene	<3	ug/l	TM15/PM69														
1,1,2,2-Tetrachloroethane	<4	ug/l	TM15/PM69														
Bromobenzene	<2	ug/l	TM15/PM69														
1,2,3-Trichloropropane	<3	ug/l	TM15/PM69														
Propylbenzene	<3	ug/l	TM15/PM69														
2-Chlorotoluene	<3	ug/l	TM15/PM69														
1,3,5-Trimethylbenzene	<3	ug/l	TM15/PM69														
4-Chlorotoluene	<3	ug/l	TM15/PM69														
tert-Butylbenzene	<3	ug/l	TM15/PM69														
1,2,4-Trimethylbenzene	<3	ug/l	TM15/PM69														
sec-Butylbenzene	<3	ug/l	TM15/PM69														
4-Isopropyltoluene	<3	ug/l	TM15/PM69														
1,3-Dichlorobenzene	<3	ug/l	TM15/PM69														
1,4-Dichlorobenzene	<3	ug/l	TM15/PM69														
n-Butylbenzene	<3	ug/l	TM15/PM69														
1,2-Dichlorobenzene	<3	ug/l	TM15/PM69														
1,2-Dibromo-3-chloropropane	<2	ug/l	TM15/PM69														
1,2,4-Trichlorobenzene	<3	ug/l	TM15/PM69														
Hexachlorobutadiene	<3	ug/l	TM15/PM69														
Naphthalene	<2	ug/l	TM15/PM69														
1,2,3-Trichlorobenzene	<3	ug/l	TM15/PM69														
Surrogate Recovery Toluene D8	107	%	TM15/PM69														
Surrogate Recovery 4-Bromofluorobenzene	108	%	TM15/PM69														

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:

Note:

Analysis was carried out in accordance with our documented in-house methods PM042 and TM065 and HSG 248 by Stereo and Polarised Light Microscopy using Dispersion Staining Techniques and is covered by our UKAS accreditation. Samples are retained for not less than 6 months from the date of analysis unless specifically requested.

Opinions lie outside the scope of our UKAS accreditation.

Where the sample is not taken by a Jones Environmental Laboratory consultant, Jones Environmental Laboratory cannot be responsible for inaccurate or unrepresentative sampling.

Any questionable sample will automatically be assumed to have breached the Waste Limit and further testing may be required.

Signed on behalf of Jones Environmental Laboratory:

Asbestos Team Leader

J E Job No.	Batch	Sample ID	Depth	J E Sample No.	Date Of Analysis	Analysis	Result
15/17326	8	HP02	0.20	227	23/12/2015	Mass of Dry Sample	51.2 (g)
					23/12/2015	General Description (Bulk Analysis)	Soil/Stone
					23/12/2015	Asbestos Containing Material	None
					23/12/2015	Asbestos Containing Material (2)	None
					23/12/2015	Asbestos Screen	NAD
					23/12/2015	Asbestos Screen (2)	NAD
					23/12/2015	Asbestos Level	NAD
					23/12/2015	Waste Limit	<0.1%
15/17326	8	HP02	0.50	230	23/12/2015	Mass of Dry Sample	48.7 (g)
					23/12/2015	General Description (Bulk Analysis)	Soil/Stone
					23/12/2015	Asbestos Containing Material	None
					23/12/2015	Asbestos Containing Material (2)	None
					23/12/2015	Asbestos Screen	NAD
					23/12/2015	Asbestos Screen (2)	NAD
					23/12/2015	Asbestos Level	NAD
					23/12/2015	Waste Limit	<0.1%
15/17326	8	HP01	0.20	236	23/12/2015	Mass of Dry Sample	51.2 (g)
					23/12/2015	General Description (Bulk Analysis)	soil/stones
					23/12/2015	Asbestos Containing Material	None
					23/12/2015	Asbestos Containing Material (2)	None
					23/12/2015	Asbestos Screen	NAD
					23/12/2015	Asbestos Screen (2)	NAD
					23/12/2015	Asbestos Level	NAD
					23/12/2015	Waste Limit	<0.1%
15/17326	8	WS210	0.20	245	23/12/2015	Mass of Dry Sample	51.4 (g)
					23/12/2015	General Description (Bulk Analysis)	Soil/Stone/Silt
					23/12/2015	Asbestos Containing Material	None
					23/12/2015	Asbestos Containing Material (2)	None
					23/12/2015	Asbestos Screen	NAD
					23/12/2015	Asbestos Screen (2)	NAD
					23/12/2015	Asbestos Level	NAD
					23/12/2015	Waste Limit	<0.1%
15/17326	8	WS210	1.00	251	23/12/2015	Mass of Dry Sample	48.3 (g)
					23/12/2015	General Description (Bulk Analysis)	Soil/Stone/Silt
					23/12/2015	Asbestos Containing Material	None

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact:

J E Job No.	Batch	Sample ID	Depth	J E Sample No.	Date Of Analysis	Analysis	Result
15/17326	8	WS210	1.00	251	23/12/2015	Asbestos Containing Material (2)	None
					23/12/2015	Asbestos Screen	NAD
					23/12/2015	Asbestos Screen (2)	NAD
					23/12/2015	Asbestos Level	NAD
					23/12/2015	Waste Limit	<0.1%
15/17326	8	WS223	1.00	272	23/12/2015	Mass of Dry Sample	53.3 (g)
					23/12/2015	General Description (Bulk Analysis)	Soil/Stone
					23/12/2015	Asbestos Containing Material	None
					23/12/2015	Asbestos Containing Material (2)	None
					23/12/2015	Asbestos Screen	NAD
					23/12/2015	Asbestos Screen (2)	NAD
					23/12/2015	Asbestos Level	NAD
					23/12/2015	Waste Limit	<0.1%

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

JE Job No.: 15/17326

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. 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.

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.

WATERS

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

ISO17025 (UKAS) accreditation applies to surface water and groundwater and 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

Samples must be received in a condition appropriate to the requested analyses. All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. If this is not the case you will be informed and any test results that may be compromised highlighted on your deviating samples report.

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.

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.

Please include all sections of this report if it is reproduced

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS) accredited - UK.
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.
++	Result outside calibration range, results should be considered as indicative only and are not accredited.
*	Analysis subcontracted to a Jones Environmental 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
AA	x5 Dilution
AB	x10 Dilution
AC	x50 Dilution

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.				
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes	Yes	AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM5/TM36	TM005: Modified USEPA 8015B. Determination of solvent Extractable Petroleum Hydrocarbons (EPH) including column fractionation in the carbon range of C10-35 into aliphatic and aromatic fractions by GC-FID. TM036: Modified USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-10 by headspace GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5/TM36	TM005: Modified USEPA 8015B. Determination of solvent Extractable Petroleum Hydrocarbons (EPH) including column fractionation in the carbon range of C10-35 into aliphatic and aromatic fractions by GC-FID. TM036: Modified USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-10 by headspace GC-FID.	PM30/PM69	PM030: Eluate samples are extracted with solvent using a magnetic stirrer to create a vortex. PM069: One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	Yes
PM13	A visual examination of the solid sample is carried out to ascertain sample make up, colour and any other inclusions. This is not a geotechnical description.	PM0	No preparation is required.			AR	
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM69	Modified BS EN 12457 method. One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM69	Modified BS EN 12457 method. One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	Yes
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes
TM17	Modified US EPA method 8270. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	Yes
TM17	Modified US EPA method 8270. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM21	Modified USEPA 415.1. Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.	Yes		AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM14	Analysis of waters and leachates for metals by ICP OES. Samples are filtered for dissolved metals and acidified if required.	Yes		AR	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes	Yes	AD	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM69	Modified BS EN 12457 method. One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM38	Soluble Ion analysis using the Thermo Aquakem Photometric Automatic Analyser. Modified US EPA methods 325.2, 375.4, 365.2, 353.1, 354.1	PM0	No preparation is required.			AR	Yes
TM38	Soluble Ion analysis using the Thermo Aquakem Photometric Automatic Analyser. Modified US EPA methods 325.2, 375.4, 365.2, 353.1, 354.1	PM20	Extraction of dried and ground samples with deionised water in a 2:1 water to solid ratio for anions. Extraction of as received samples with deionised water in a 2:1 water to solid ratio for ammoniacal nitrogen. Samples are extracted using an orbital shaker.	Yes		AR	Yes
TM60	Modified USEPA 9060. Determination of TOC by calculation from Total Carbon and Inorganic Carbon using a TOC analyser, the carbon in the sample is converted to CO2 and then passed through a non-dispersive infrared gas analyser (NDIR).	PM0	No preparation is required.			AR	Yes
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.			AR	
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.	Yes		AR	
TM73	Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.	PM0	No preparation is required.			AR	Yes
TM73	Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes	Yes	AR	No
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM32	Hot water soluble boron is extracted from dried and ground samples using a 20:1 ratio.	Yes	Yes	AD	Yes
TM89	Modified USEPA method OIA-1667. Determination of cyanide by Flow Injection Analyser.	PM0	No preparation is required.	Yes		AR	Yes
TM89	Modified USEPA method OIA-1667. Determination of cyanide by Flow Injection Analyser.	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide and Thiocyanate analysis.	Yes	Yes	AR	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
NONE	No Method Code	NONE	No Method Code			AR	Yes
NONE	No Method Code	PM17	Modified method EN12457-2 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.				
NONE	No Method Code	PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.			AR	



Jones Environmental Laboratory

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Attention :

Date : 4th January, 2016

Your reference : PN153428

Our reference : Test Report 15/17326 Batch 9

Location : Stockport Bus Station

Date samples received : 15th December, 2015

Status : Final report

Issue : 1

Fourteen samples were received for analysis on 15th December, 2015 of which three 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.

Compiled By:

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:
JE Job No.: 15/17326

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	289-291	292-294	313-315														LOD/LOR	Units	Method No.
Sample ID	WS217	WS217	BH106																
Depth	1.00	1.30	1.10-1.20																
COC No / misc																			
Containers	V J	V J	V J																
Sample Date	14/12/2015	14/12/2015	14/12/2015																
Sample Type	Soil	Soil	Soil																
Batch Number	9	9	9																
Date of Receipt	15/12/2015	15/12/2015	15/12/2015																
Arsenic #M	1.1	8.6	3.0														<0.5	mg/kg	TM30/PM15
Cadmium #M	0.4	0.2	<0.1														<0.1	mg/kg	TM30/PM15
Chromium #M	13.5	75.7	93.0														<0.5	mg/kg	TM30/PM15
Copper #M	7	10	19														<1	mg/kg	TM30/PM15
Lead #M	9	21	13														<5	mg/kg	TM30/PM15
Mercury #M	<0.1	<0.1	<0.1														<0.1	mg/kg	TM30/PM15
Nickel #M	6.9	19.9	11.6														<0.7	mg/kg	TM30/PM15
Selenium #M	<1	<1	<1														<1	mg/kg	TM30/PM15
Vanadium	4	30	15														<1	mg/kg	TM30/PM15
Water Soluble Boron #M	0.2	0.1	<0.1														<0.1	mg/kg	TM74/PM32
Zinc #M	17	207	22														<5	mg/kg	TM30/PM15
PAH MS																			
Naphthalene #M	<0.04	<0.04	<0.04														<0.04	mg/kg	TM4/PM8
Acenaphthylene	<0.03	<0.03	0.03														<0.03	mg/kg	TM4/PM8
Acenaphthene #M	<0.05	<0.05	0.07														<0.05	mg/kg	TM4/PM8
Fluorene #M	<0.04	<0.04	0.05														<0.04	mg/kg	TM4/PM8
Phenanthrene #M	0.03	<0.03	0.66														<0.03	mg/kg	TM4/PM8
Anthracene #	<0.04	<0.04	0.20														<0.04	mg/kg	TM4/PM8
Fluoranthene #M	0.05	<0.03	0.87														<0.03	mg/kg	TM4/PM8
Pyrene #	0.06	<0.03	0.76														<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	<0.06	<0.06	0.38														<0.06	mg/kg	TM4/PM8
Chrysene #M	0.03	<0.02	0.45														<0.02	mg/kg	TM4/PM8
Benzo(b)fluoranthene #M	<0.07	<0.07	0.57														<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	<0.04	<0.04	0.43														<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene #M	<0.04	<0.04	0.22														<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	<0.04	<0.04	0.04														<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	<0.04	<0.04	0.20														<0.04	mg/kg	TM4/PM8
PAH 16 Total	<0.6	<0.6	4.9														<0.6	mg/kg	TM4/PM8
Benzo(b)fluoranthene	<0.05	<0.05	0.41														<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	<0.02	<0.02	0.16														<0.02	mg/kg	TM4/PM8
PAH Surrogate % Recovery	119	124	130														<0	%	TM4/PM8

Please see attached notes for all abbreviations and acronyms

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

JE Job No.: 15/17326

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. 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.

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.

WATERS

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

ISO17025 (UKAS) accreditation applies to surface water and groundwater and 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

Samples must be received in a condition appropriate to the requested analyses. All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. If this is not the case you will be informed and any test results that may be compromised highlighted on your deviating samples report.

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.

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.

Please include all sections of this report if it is reproduced

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS) accredited - UK.
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.
++	Result outside calibration range, results should be considered as indicative only and are not accredited.
*	Analysis subcontracted to a Jones Environmental 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

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
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PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes	Yes	AR	Yes
TM5/TM36	TM005: Modified USEPA 8015B. Determination of solvent Extractable Petroleum Hydrocarbons (EPH) including column fractionation in the carbon range of C10-35 into aliphatic and aromatic fractions by GC-FID. TM036: Modified USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-10 by headspace GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
PM13	A visual examination of the solid sample is carried out to ascertain sample make up, colour and any other inclusions. This is not a geotechnical description.	PM0	No preparation is required.			AR	
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM21	Modified USEPA 415.1. Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.	Yes		AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes	Yes	AD	Yes
TM31	Modified USEPA 8015B. Determination of Methyltertbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM31	Modified USEPA 8015B. Determination of Methyltertbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.			AR	
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.	Yes		AR	
TM73	Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes	Yes	AR	No

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM32	Hot water soluble boron is extracted from dried and ground samples using a 20:1 ratio.	Yes	Yes	AD	Yes
TM89	Modified USEPA method OIA-1667. Determination of cyanide by Flow Injection Analyser.	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide and Thiocyanate analysis.	Yes	Yes	AR	Yes



Jones Environmental Laboratory

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Attention :

Date : 6th January, 2016
Your reference : PN153428
Our reference : Test Report 15/17326 Batch 10
Location : Stockport Bus Station
Date samples received : 17th December, 2015
Status : Final report
Issue : 1

Eight samples were received for analysis on 17th December, 2015 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.

Compiled By:

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:
JE Job No.: 15/17326

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.		334-336	340-342									Please see attached notes for all abbreviations and acronyms		
Sample ID		BH109	BH109									LOD/LOR	Units	Method No.
Depth		1.00-1.20	3.00-3.20											
COC No / misc														
Containers		V J	V J											
Sample Date		15/12/2015	15/12/2015											
Sample Type		Soil	Soil											
Batch Number		10	10											
Date of Receipt		17/12/2015	17/12/2015											
Arsenic ^{#M}		6.9	5.3									<0.5	mg/kg	TM30/PM15
Cadmium ^{#M}		0.1	<0.1									<0.1	mg/kg	TM30/PM15
Chromium ^{#M}		58.4	68.2									<0.5	mg/kg	TM30/PM15
Copper ^{#M}		22	7									<1	mg/kg	TM30/PM15
Lead ^{#M}		91	10									<5	mg/kg	TM30/PM15
Mercury ^{#M}		0.1	<0.1									<0.1	mg/kg	TM30/PM15
Nickel ^{#M}		12.4	20.8									<0.7	mg/kg	TM30/PM15
Selenium ^{#M}		<1	<1									<1	mg/kg	TM30/PM15
Vanadium		21	22									<1	mg/kg	TM30/PM15
Water Soluble Boron ^{#M}		0.4	0.5									<0.1	mg/kg	TM74/PM32
Zinc ^{#M}		25	82									<5	mg/kg	TM30/PM15
PAH MS														
Naphthalene ^{#M}		<0.04	<0.04									<0.04	mg/kg	TM4/PM8
Acenaphthylene		0.03	<0.03									<0.03	mg/kg	TM4/PM8
Acenaphthene ^{#M}		<0.05	<0.05									<0.05	mg/kg	TM4/PM8
Fluorene ^{#M}		<0.04	<0.04									<0.04	mg/kg	TM4/PM8
Phenanthrene ^{#M}		0.20	<0.03									<0.03	mg/kg	TM4/PM8
Anthracene #		0.08	<0.04									<0.04	mg/kg	TM4/PM8
Fluoranthene ^{#M}		0.64	0.04									<0.03	mg/kg	TM4/PM8
Pyrene #		0.60	<0.03									<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #		0.41	<0.06									<0.06	mg/kg	TM4/PM8
Chrysene ^{#M}		0.42	0.05									<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene ^{#M}		0.89	<0.07									<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #		0.60	0.06									<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene ^{#M}		0.30	<0.04									<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #		0.06	<0.04									<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #		0.32	<0.04									<0.04	mg/kg	TM4/PM8
PAH 16 Total		4.6	<0.6									<0.6	mg/kg	TM4/PM8
Benzo(b)fluoranthene		0.64	<0.05									<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene		0.25	<0.02									<0.02	mg/kg	TM4/PM8
PAH Surrogate % Recovery		99	110									<0	%	TM4/PM8
Methyl Tertiary Butyl Ether ^{#M}		<6	-									<6	ug/kg	TM15/PM10
Benzene ^{#M}		<5	-									<5	ug/kg	TM15/PM10
Toluene ^{#M}		<3	-									<3	ug/kg	TM15/PM10
Ethylbenzene ^{#M}		<3	-									<3	ug/kg	TM15/PM10
p/m-Xylene ^{#M}		<4	-									<4	ug/kg	TM15/PM10
o-Xylene ^{#M}		<4	-									<4	ug/kg	TM15/PM10
Surrogate Recovery Toluene D8		114	-									<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene		117	-									<0	%	TM15/PM10

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:
JE Job No.: 15/17326

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	334-336	340-342										
Sample ID	BH109	BH109										
Depth	1.00-1.20	3.00-3.20										
COC No / misc												
Containers	V J	V J										
Sample Date	15/12/2015	15/12/2015										
Sample Type	Soil	Soil										
Batch Number	10	10										
Date of Receipt	17/12/2015	17/12/2015										
										LOD/LOR	Units	Method No.
2-Nitrophenol	<10	<10								<10	ug/kg	TM16/PM8
2,4-Dichlorophenol	<10	<10								<10	ug/kg	TM16/PM8
2,4-Dimethylphenol	<10	<10								<10	ug/kg	TM16/PM8
2,4,5-Trichlorophenol	<10	<10								<10	ug/kg	TM16/PM8
2,4,6-Trichlorophenol	<10	<10								<10	ug/kg	TM16/PM8
4-Chloro-3-methylphenol	<10	<10								<10	ug/kg	TM16/PM8
4-Methylphenol	<10	<10								<10	ug/kg	TM16/PM8
4-Nitrophenol	<10	<10								<10	ug/kg	TM16/PM8
Pentachlorophenol	<10	<10								<10	ug/kg	TM16/PM8
Phenol	<10	<10								<10	ug/kg	TM16/PM8
Total Speciated Phenols MS	<10	<10								<10	ug/kg	TM16/PM8
Total Cyanide ^{#M}	<0.5	<0.5								<0.5	mg/kg	TM89/PM45
Total Organic Carbon [#]	0.32	0.15								<0.02	%	TM21/PM24
pH ^{#M}	8.36	8.36								<0.01	pH units	TM73/PM11
Sample Type	Sand	Sand									None	PM13/PM0
Sample Colour	Red	Medium Brown									None	PM13/PM0
Other Items	stones	mostly stones									None	PM13/PM0

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact:
 JE Job No.: 15/17326

VOC Report : Solid

J E Sample No.	334-336													
Sample ID	BH109													
Depth	1.00-1.20													
COC No / misc														
Containers	V J													
Sample Date	15/12/2015													
Sample Type	Soil													
Batch Number	10													
Date of Receipt	17/12/2015													
										Please see attached notes for all abbreviations and acronyms				
												LOD/LOR	Units	Method No.
VOC MS														
Dichlorodifluoromethane	<2										<2	ug/kg	TM15/PM10	
Methyl Tertiary Butyl Ether #M	<6										<6	ug/kg	TM15/PM10	
Chloromethane #	<3										<3	ug/kg	TM15/PM10	
Vinyl Chloride	<2										<2	ug/kg	TM15/PM10	
Bromomethane	<1										<1	ug/kg	TM15/PM10	
Chloroethane #M	<6										<6	ug/kg	TM15/PM10	
Trichlorofluoromethane #M	<3										<3	ug/kg	TM15/PM10	
1,1-Dichloroethene (1,1 DCE) #M	<6										<6	ug/kg	TM15/PM10	
Dichloromethane (DCM) #	<7										<7	ug/kg	TM15/PM10	
trans-1-2-Dichloroethene #	<3										<3	ug/kg	TM15/PM10	
1,1-Dichloroethane #M	<6										<6	ug/kg	TM15/PM10	
cis-1-2-Dichloroethene #M	<7										<7	ug/kg	TM15/PM10	
2,2-Dichloropropane	<4										<4	ug/kg	TM15/PM10	
Bromochloromethane #M	<4										<4	ug/kg	TM15/PM10	
Chloroform #M	<5										<5	ug/kg	TM15/PM10	
1,1,1-Trichloroethane #M	<5										<5	ug/kg	TM15/PM10	
1,1-Dichloropropene #	<3										<3	ug/kg	TM15/PM10	
Carbon tetrachloride #M	<4										<4	ug/kg	TM15/PM10	
1,2-Dichloroethane #M	<5										<5	ug/kg	TM15/PM10	
Benzene #M	<5										<5	ug/kg	TM15/PM10	
Trichloroethene (TCE) #M	<5										<5	ug/kg	TM15/PM10	
1,2-Dichloropropane #M	<4										<4	ug/kg	TM15/PM10	
Dibromomethane #M	<4										<4	ug/kg	TM15/PM10	
Bromodichloromethane #M	<4										<4	ug/kg	TM15/PM10	
cis-1-3-Dichloropropene	<4										<4	ug/kg	TM15/PM10	
Toluene #M	<3										<3	ug/kg	TM15/PM10	
trans-1-3-Dichloropropene	<3										<3	ug/kg	TM15/PM10	
1,1,2-Trichloroethane #M	<4										<4	ug/kg	TM15/PM10	
Tetrachloroethene (PCE) #	<3										<3	ug/kg	TM15/PM10	
1,3-Dichloropropane #M	<4										<4	ug/kg	TM15/PM10	
Dibromochloromethane #M	<5										<5	ug/kg	TM15/PM10	
1,2-Dibromoethane #	<3										<3	ug/kg	TM15/PM10	
Chlorobenzene #M	<4										<4	ug/kg	TM15/PM10	
1,1,1,2-Tetrachloroethane #M	<5										<5	ug/kg	TM15/PM10	
Ethylbenzene #M	<3										<3	ug/kg	TM15/PM10	
p/m-Xylene #M	<4										<4	ug/kg	TM15/PM10	
o-Xylene #M	<4										<4	ug/kg	TM15/PM10	
Styrene	<3										<3	ug/kg	TM15/PM10	
Bromoform	<4										<4	ug/kg	TM15/PM10	
Isopropylbenzene #	<3										<3	ug/kg	TM15/PM10	
1,1,2,2-Tetrachloroethane #M	<3										<3	ug/kg	TM15/PM10	
Bromobenzene	<2										<2	ug/kg	TM15/PM10	
1,2,3-Trichloropropane #M	<4										<4	ug/kg	TM15/PM10	
Propylbenzene #	<4										<4	ug/kg	TM15/PM10	
2-Chlorotoluene	<3										<3	ug/kg	TM15/PM10	
1,3,5-Trimethylbenzene #	<3										<3	ug/kg	TM15/PM10	
4-Chlorotoluene	<3										<3	ug/kg	TM15/PM10	
tert-Butylbenzene #	<5										<5	ug/kg	TM15/PM10	
1,2,4-Trimethylbenzene #	<6										<6	ug/kg	TM15/PM10	
sec-Butylbenzene #	<4										<4	ug/kg	TM15/PM10	
4-Isopropyltoluene #	<4										<4	ug/kg	TM15/PM10	
1,3-Dichlorobenzene #M	<4										<4	ug/kg	TM15/PM10	
1,4-Dichlorobenzene #	<4										<4	ug/kg	TM15/PM10	
n-Butylbenzene #	<4										<4	ug/kg	TM15/PM10	
1,2-Dichlorobenzene #M	<4										<4	ug/kg	TM15/PM10	
1,2-Dibromo-3-chloropropane #	<4										<4	ug/kg	TM15/PM10	
1,2,4-Trichlorobenzene #	<7										<7	ug/kg	TM15/PM10	
Hexachlorobutadiene	<4										<4	ug/kg	TM15/PM10	
Naphthalene	<27										<27	ug/kg	TM15/PM10	
1,2,3-Trichlorobenzene #	<7										<7	ug/kg	TM15/PM10	
Surrogate Recovery Toluene D8	114										<0	%	TM15/PM10	
Surrogate Recovery 4-Bromofluorobenzene	117										<0	%	TM15/PM10	

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:

Note:

Analysis was carried out in accordance with our documented in-house methods PM042 and TM065 and HSG 248 by Stereo and Polarised Light Microscopy using Dispersion Staining Techniques and is covered by our UKAS accreditation. Samples are retained for not less than 6 months from the date of analysis unless specifically requested.

Opinions lie outside the scope of our UKAS accreditation.

Where the sample is not taken by a Jones Environmental Laboratory consultant, Jones Environmental Laboratory cannot be responsible for inaccurate or unrepresentative sampling.

Any questionable sample will automatically be assumed to have breached the Waste Limit and further testing may be required.

Signed on behalf of Jones Environmental Laboratory:

Asbestos Team Leader

J E Job No.	Batch	Sample ID	Depth	J E Sample No.	Date Of Analysis	Analysis	Result
15/17326	10	BH109	1.00-1.20	335	24/12/2015	Mass of Dry Sample	49.9 (g)
					24/12/2015	General Description (Bulk Analysis)	Soil/Stone/Brick
					24/12/2015	Asbestos Containing Material	None
					24/12/2015	Asbestos Containing Material (2)	None
					24/12/2015	Asbestos Screen	NAD
					24/12/2015	Asbestos Screen (2)	NAD
					24/12/2015	Asbestos Level	NAD
					24/12/2015	Waste Limit	<0.1%

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

JE Job No.: 15/17326

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. 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.

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.

WATERS

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

ISO17025 (UKAS) accreditation applies to surface water and groundwater and 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

Samples must be received in a condition appropriate to the requested analyses. All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. If this is not the case you will be informed and any test results that may be compromised highlighted on your deviating samples report.

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.

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.

Please include all sections of this report if it is reproduced

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS) accredited - UK.
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.
++	Result outside calibration range, results should be considered as indicative only and are not accredited.
*	Analysis subcontracted to a Jones Environmental 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

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.				
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes	Yes	AR	Yes
TM5/TM36	TM005: Modified USEPA 8015B. Determination of solvent Extractable Petroleum Hydrocarbons (EPH) including column fractionation in the carbon range of C10-35 into aliphatic and aromatic fractions by GC-FID. TM036: Modified USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-10 by headspace GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
PM13	A visual examination of the solid sample is carried out to ascertain sample make up, colour and any other inclusions. This is not a geotechnical description.	PM0	No preparation is required.			AR	
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes
TM17	Modified US EPA method 8270. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM21	Modified USEPA 415.1. Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.	Yes		AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes	Yes	AD	Yes
TM31	Modified USEPA 8015B. Determination of Methylterbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM31	Modified USEPA 8015B. Determination of Methylterbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.			AR	
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.	Yes		AR	
TM73	Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes	Yes	AR	No
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM32	Hot water soluble boron is extracted from dried and ground samples using a 20:1 ratio.	Yes	Yes	AD	Yes
TM89	Modified USEPA method OIA-1667. Determination of cyanide by Flow Injection Analyser.	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide and Thiocyanate analysis.	Yes	Yes	AR	Yes



Jones Environmental Laboratory

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Attention :

Date : 6th January, 2016

Your reference : PN153428

Our reference : Test Report 15/17326 Batch 11

Location : Stockport Bus Station

Date samples received : 18th December, 2015

Status : Final report

Issue : 1

Five samples were received for analysis on 18th December, 2015 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.

Compiled By:

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact:
 JE Job No.: 15/17326

Report : Solid
 Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	349-351	355																		
Sample ID	WS218A	WS218A																		
Depth	0.50	1.20																		
COC No / misc																				
Containers	V J	V																		
Sample Date	<>	<>																		
Sample Type	Soil	Soil																		
Batch Number	11	11																		
Date of Receipt	18/12/2015	18/12/2015																		
Arsenic ^{#M}	0.9	1.5																		
Cadmium ^{#M}	12.5	5.4																		
Chromium ^{#M}	17.6	55.9																		
Copper ^{#M}	12	14																		
Lead ^{#M}	42	31																		
Mercury ^{#M}	<0.1	<0.1																		
Nickel ^{#M}	5.5	11.4																		
Selenium ^{#M}	<1	<1																		
Vanadium	4	12																		
Water Soluble Boron ^{#M}	0.2	0.2																		
Zinc ^{#M}	32	42																		
PAH MS																				
Naphthalene ^{#M}	<0.04	<0.04																		
Acenaphthylene	<0.03	<0.03																		
Acenaphthene ^{#M}	<0.05	<0.05																		
Fluorene ^{#M}	<0.04	<0.04																		
Phenanthrene ^{#M}	<0.03	<0.03																		
Anthracene #	<0.04	<0.04																		
Fluoranthene ^{#M}	<0.03	<0.03																		
Pyrene #	<0.03	<0.03																		
Benzo(a)anthracene #	<0.06	<0.06																		
Chrysene ^{#M}	0.02	0.02																		
Benzo(bk)fluoranthene ^{#M}	<0.07	<0.07																		
Benzo(a)pyrene #	<0.04	<0.04																		
Indeno(123cd)pyrene ^{#M}	<0.04	<0.04																		
Dibenzo(ah)anthracene #	<0.04	<0.04																		
Benzo(ghi)perylene #	<0.04	<0.04																		
PAH 16 Total	<0.6	<0.6																		
Benzo(b)fluoranthene	<0.05	<0.05																		
Benzo(k)fluoranthene	<0.02	<0.02																		
PAH Surrogate % Recovery	114	103																		
Methyl Tertiary Butyl Ether ^{#M}	<6	-																		
Benzene ^{#M}	<5	-																		
Toluene ^{#M}	9	-																		
Ethylbenzene ^{#M}	<3	-																		
p/m-Xylene ^{#M}	<4	-																		
o-Xylene ^{#M}	<4	-																		
Surrogate Recovery Toluene D8	114	-																		
Surrogate Recovery 4-Bromofluorobenzene	139	-																		

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:
JE Job No.: 15/17326

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

J E Sample No.	349-351	355																		LOD/LOR	Units	Method No.	
Sample ID	WS218A	WS218A																					
Depth	0.50	1.20																					
COC No / misc																							
Containers	V J	V																					
Sample Date	<>	<>																					
Sample Type	Soil	Soil																					
Batch Number	11	11																					
Date of Receipt	18/12/2015	18/12/2015																					
TPH CWG																							
Aliphatics																							
>C5-C6 ^{#M}	<0.1	<0.1																		<0.1	mg/kg	TM36/PM12	
>C6-C8 ^{#M}	<0.1	<0.1																		<0.1	mg/kg	TM36/PM12	
>C8-C10	<0.1	<0.1																		<0.1	mg/kg	TM36/PM12	
>C10-C12 ^{#M}	<0.2	<0.2																		<0.2	mg/kg	TM5/PM16	
>C12-C16 ^{#M}	<4	<4																		<4	mg/kg	TM5/PM16	
>C16-C21 ^{#M}	<7	<7																		<7	mg/kg	TM5/PM16	
>C21-C35 ^{#M}	<7	<7																		<7	mg/kg	TM5/PM16	
>C35-C44	<7	<7																		<7	mg/kg	TM5/PM16	
Total aliphatics C5-44	<26	<26																		<26	mg/kg	TM5/TM36/PM16	
Aromatics																							
>C5-EC7	<0.1	<0.1																		<0.1	mg/kg	TM36/PM12	
>EC7-EC8	<0.1	<0.1																		<0.1	mg/kg	TM36/PM12	
>EC8-EC10 ^{#M}	<0.1	<0.1																		<0.1	mg/kg	TM36/PM12	
>EC10-EC12	<0.2	<0.2																		<0.2	mg/kg	TM5/PM16	
>EC12-EC16	<4	<4																		<4	mg/kg	TM5/PM16	
>EC16-EC21	<7	<7																		<7	mg/kg	TM5/PM16	
>EC21-EC35	<7	<7																		<7	mg/kg	TM5/PM16	
>EC35-EC44	<7	<7																		<7	mg/kg	TM5/PM16	
Total aromatics C5-44	<26	<26																		<26	mg/kg	TM5/TM36/PM16	
Total aliphatics and aromatics(C5-44)	<52	<52																		<52	mg/kg	TM5/TM36/PM16	
MTBE [#]	-	<5																		<5	ug/kg	TM31/PM12	
Benzene [#]	-	<5																		<5	ug/kg	TM31/PM12	
Toluene [#]	-	<5																		<5	ug/kg	TM31/PM12	
Ethylbenzene [#]	-	<5																		<5	ug/kg	TM31/PM12	
m/p-Xylene [#]	-	<5																		<5	ug/kg	TM31/PM12	
o-Xylene [#]	-	<5																		<5	ug/kg	TM31/PM12	
PCB 28 [#]	<5	-																		<5	ug/kg	TM17/PM8	
PCB 52 [#]	<5	-																		<5	ug/kg	TM17/PM8	
PCB 101 [#]	<5	-																		<5	ug/kg	TM17/PM8	
PCB 118 [#]	<5	-																		<5	ug/kg	TM17/PM8	
PCB 138 [#]	<5	-																		<5	ug/kg	TM17/PM8	
PCB 153 [#]	<5	-																		<5	ug/kg	TM17/PM8	
PCB 180 [#]	<5	-																		<5	ug/kg	TM17/PM8	
Total 7 PCBs [#]	<35	-																		<35	ug/kg	TM17/PM8	
2-Chlorophenol	<10	<10																		<10	ug/kg	TM16/PM8	
Natural Moisture Content	1.3	13.2																		<0.1	%	PM4/PM0	
2-Methylphenol	<10	<10																		<10	ug/kg	TM16/PM8	

Jones Environmental Laboratory

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:
JE Job No.: 15/17326

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	349-351	355																	
Sample ID	WS218A	WS218A																	
Depth	0.50	1.20																	
COC No / misc																			
Containers	V J	V																	
Sample Date	<>	<>																	
Sample Type	Soil	Soil																	
Batch Number	11	11																	
Date of Receipt	18/12/2015	18/12/2015																	
														LOD/LOR	Units	Method No.			
2-Nitrophenol	<10	<10												<10	ug/kg	TM16/PM8			
2,4-Dichlorophenol	<10	<10												<10	ug/kg	TM16/PM8			
2,4-Dimethylphenol	<10	<10												<10	ug/kg	TM16/PM8			
2,4,5-Trichlorophenol	<10	<10												<10	ug/kg	TM16/PM8			
2,4,6-Trichlorophenol	<10	<10												<10	ug/kg	TM16/PM8			
4-Chloro-3-methylphenol	<10	<10												<10	ug/kg	TM16/PM8			
4-Methylphenol	<10	<10												<10	ug/kg	TM16/PM8			
4-Nitrophenol	<10	<10												<10	ug/kg	TM16/PM8			
Pentachlorophenol	<10	<10												<10	ug/kg	TM16/PM8			
Phenol	<10	<10												<10	ug/kg	TM16/PM8			
Total Speciated Phenols MS	<10	<10												<10	ug/kg	TM16/PM8			
Hexavalent Chromium #	<0.3	<0.3												<0.3	mg/kg	TM38/PM20			
Chromium III	17.6	55.9												<0.5	mg/kg	NONE/NONE			
Total Cyanide #M	<0.5	<0.5												<0.5	mg/kg	TM89/PM45			
Total Organic Carbon #	<0.02	0.24												<0.02	%	TM21/PM24			
pH #M	12.46	9.54												<0.01	pH units	TM73/PM11			
Sample Type	Sand	Sand													None	PM13/PM0			
Sample Colour	Light Brown	Medium Brown													None	PM13/PM0			
Other Items	stones	stones													None	PM13/PM0			

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:
JE Job No.: 15/17326

SVOC Report : Solid

J E Sample No.	349-351									LOD/LOR	Units	Method No.
Sample ID	WS218A											
Depth	0.50											
COC No / misc												
Containers	V J											
Sample Date	<>											
Sample Type	Soil											
Batch Number	11											
Date of Receipt	18/12/2015											
Please see attached notes for all abbreviations and acronyms												
SVOC MS												
Phenols												
2-Chlorophenol ^{#M}	<10									<10	ug/kg	TM16/PM8
2-Methylphenol	<10									<10	ug/kg	TM16/PM8
2-Nitrophenol	<10									<10	ug/kg	TM16/PM8
2,4-Dichlorophenol ^{#M}	<10									<10	ug/kg	TM16/PM8
2,4-Dimethylphenol	<10									<10	ug/kg	TM16/PM8
2,4,5-Trichlorophenol	<10									<10	ug/kg	TM16/PM8
2,4,6-Trichlorophenol	<10									<10	ug/kg	TM16/PM8
4-Chloro-3-methylphenol	<10									<10	ug/kg	TM16/PM8
4-Methylphenol	<10									<10	ug/kg	TM16/PM8
4-Nitrophenol	<10									<10	ug/kg	TM16/PM8
Pentachlorophenol	<10									<10	ug/kg	TM16/PM8
Phenol ^{#M}	<10									<10	ug/kg	TM16/PM8
PAHs												
2-Chloronaphthalene ^{#M}	<10									<10	ug/kg	TM16/PM8
2-Methylnaphthalene ^{#M}	<10									<10	ug/kg	TM16/PM8
Phthalates												
Bis(2-ethylhexyl) phthalate	<100									<100	ug/kg	TM16/PM8
Butylbenzyl phthalate	<100									<100	ug/kg	TM16/PM8
Di-n-butyl phthalate	<100									<100	ug/kg	TM16/PM8
Di-n-Octyl phthalate	<100									<100	ug/kg	TM16/PM8
Diethyl phthalate	<100									<100	ug/kg	TM16/PM8
Dimethyl phthalate ^{#M}	<100									<100	ug/kg	TM16/PM8
Other SVOCs												
1,2-Dichlorobenzene	<10									<10	ug/kg	TM16/PM8
1,2,4-Trichlorobenzene ^{#M}	<10									<10	ug/kg	TM16/PM8
1,3-Dichlorobenzene	<10									<10	ug/kg	TM16/PM8
1,4-Dichlorobenzene	<10									<10	ug/kg	TM16/PM8
2-Nitroaniline	<10									<10	ug/kg	TM16/PM8
2,4-Dinitrotoluene	<10									<10	ug/kg	TM16/PM8
2,6-Dinitrotoluene	<10									<10	ug/kg	TM16/PM8
3-Nitroaniline	<10									<10	ug/kg	TM16/PM8
4-Bromophenylphenylether ^{#M}	<10									<10	ug/kg	TM16/PM8
4-Chloroaniline	<10									<10	ug/kg	TM16/PM8
4-Chlorophenylphenylether	<10									<10	ug/kg	TM16/PM8
4-Nitroaniline	<10									<10	ug/kg	TM16/PM8
Azobenzene	<10									<10	ug/kg	TM16/PM8
Bis(2-chloroethoxy)methane	<10									<10	ug/kg	TM16/PM8
Bis(2-chloroethyl)ether	<10									<10	ug/kg	TM16/PM8
Carbazole	13									<10	ug/kg	TM16/PM8
Dibenzofuran ^{#M}	<10									<10	ug/kg	TM16/PM8
Hexachlorobenzene	<10									<10	ug/kg	TM16/PM8
Hexachlorobutadiene ^{#M}	<10									<10	ug/kg	TM16/PM8
Hexachlorocyclopentadiene	<10									<10	ug/kg	TM16/PM8
Hexachloroethane	<10									<10	ug/kg	TM16/PM8
Isophorone ^{#M}	<10									<10	ug/kg	TM16/PM8
N-nitrosodi-n-propylamine ^{#M}	<10									<10	ug/kg	TM16/PM8
Nitrobenzene ^{#M}	<10									<10	ug/kg	TM16/PM8

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:
JE Job No.: 15/17326

VOC Report : Solid

J E Sample No.	349-351											
Sample ID	WS218A											
Depth	0.50											
COC No / misc												
Containers	V J											
Sample Date	<>											
Sample Type	Soil											
Batch Number	11											
Date of Receipt	18/12/2015											
										LOD/LOR	Units	Method No.
Please see attached notes for all abbreviations and acronyms												
VOC MS												
Dichlorodifluoromethane	<2									<2	ug/kg	TM15/PM10
Methyl Tertiary Butyl Ether #M	<6									<6	ug/kg	TM15/PM10
Chloromethane #	<3									<3	ug/kg	TM15/PM10
Vinyl Chloride	<2									<2	ug/kg	TM15/PM10
Bromomethane	<1									<1	ug/kg	TM15/PM10
Chloroethane #M	<6									<6	ug/kg	TM15/PM10
Trichlorofluoromethane #M	<3									<3	ug/kg	TM15/PM10
1,1-Dichloroethene (1,1 DCE) #M	<6									<6	ug/kg	TM15/PM10
Dichloromethane (DCM) #	<7									<7	ug/kg	TM15/PM10
trans-1,2-Dichloroethene #	<3									<3	ug/kg	TM15/PM10
1,1-Dichloroethane #M	<6									<6	ug/kg	TM15/PM10
cis-1,2-Dichloroethene #M	<7									<7	ug/kg	TM15/PM10
2,2-Dichloropropane	<4									<4	ug/kg	TM15/PM10
Bromochloromethane #M	<4									<4	ug/kg	TM15/PM10
Chloroform #M	<5									<5	ug/kg	TM15/PM10
1,1,1-Trichloroethane #M	<5									<5	ug/kg	TM15/PM10
1,1-Dichloropropene #	<3									<3	ug/kg	TM15/PM10
Carbon tetrachloride #M	<4									<4	ug/kg	TM15/PM10
1,2-Dichloroethane #M	<5									<5	ug/kg	TM15/PM10
Benzene #M	<5									<5	ug/kg	TM15/PM10
Trichloroethene (TCE) #M	<5									<5	ug/kg	TM15/PM10
1,2-Dichloropropane #M	<4									<4	ug/kg	TM15/PM10
Dibromomethane #M	<4									<4	ug/kg	TM15/PM10
Bromodichloromethane #M	<4									<4	ug/kg	TM15/PM10
cis-1-3-Dichloropropene	<4									<4	ug/kg	TM15/PM10
Toluene #M	9									<3	ug/kg	TM15/PM10
trans-1-3-Dichloropropene	<3									<3	ug/kg	TM15/PM10
1,1,2-Trichloroethane #M	<4									<4	ug/kg	TM15/PM10
Tetrachloroethene (PCE) #	<3									<3	ug/kg	TM15/PM10
1,3-Dichloropropane #M	<4									<4	ug/kg	TM15/PM10
Dibromochloromethane #M	<5									<5	ug/kg	TM15/PM10
1,2-Dibromoethane #	<3									<3	ug/kg	TM15/PM10
Chlorobenzene #M	<4									<4	ug/kg	TM15/PM10
1,1,1,2-Tetrachloroethane #M	<5									<5	ug/kg	TM15/PM10
Ethylbenzene #M	<3									<3	ug/kg	TM15/PM10
p/m-Xylene #M	<4									<4	ug/kg	TM15/PM10
o-Xylene #M	<4									<4	ug/kg	TM15/PM10
Styrene	<3									<3	ug/kg	TM15/PM10
Bromofom	<4									<4	ug/kg	TM15/PM10
Isopropylbenzene #	<3									<3	ug/kg	TM15/PM10
1,1,2,2-Tetrachloroethane #M	<3									<3	ug/kg	TM15/PM10
Bromobenzene	<2									<2	ug/kg	TM15/PM10
1,2,3-Trichloropropane #M	<4									<4	ug/kg	TM15/PM10
Propylbenzene #	<4									<4	ug/kg	TM15/PM10
2-Chlorotoluene	<3									<3	ug/kg	TM15/PM10
1,3,5-Trimethylbenzene #	<3									<3	ug/kg	TM15/PM10
4-Chlorotoluene	<3									<3	ug/kg	TM15/PM10
tert-Butylbenzene #	<5									<5	ug/kg	TM15/PM10
1,2,4-Trimethylbenzene #	<6									<6	ug/kg	TM15/PM10
sec-Butylbenzene #	<4									<4	ug/kg	TM15/PM10
4-Isopropyltoluene #	<4									<4	ug/kg	TM15/PM10
1,3-Dichlorobenzene #M	<4									<4	ug/kg	TM15/PM10
1,4-Dichlorobenzene #	<4									<4	ug/kg	TM15/PM10
n-Butylbenzene #	<4									<4	ug/kg	TM15/PM10
1,2-Dichlorobenzene #M	<4									<4	ug/kg	TM15/PM10
1,2-Dibromo-3-chloropropane #	<4									<4	ug/kg	TM15/PM10
1,2,4-Trichlorobenzene #	<7									<7	ug/kg	TM15/PM10
Hexachlorobutadiene	<4									<4	ug/kg	TM15/PM10
Naphthalene	<27									<27	ug/kg	TM15/PM10
1,2,3-Trichlorobenzene #	<7									<7	ug/kg	TM15/PM10
Surrogate Recovery Toluene D8	114									<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	139									<0	%	TM15/PM10

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:

Note:
 Analysis was carried out in accordance with our documented in-house methods PM042 and TM065 and HSG 248 by Stereo and Polarised Light Microscopy using Dispersion Staining Techniques and is covered by our UKAS accreditation. Samples are retained for not less than 6 months from the date of analysis unless specifically requested.
 Opinions lie outside the scope of our UKAS accreditation.

Where the sample is not taken by a Jones Environmental Laboratory consultant, Jones Environmental Laboratory cannot be responsible for inaccurate or unrepresentative sampling.

Any questionable sample will automatically be assumed to have breached the Waste Limit and further testing may be required.

Signed on behalf of Jones Environmental Laboratory:

Asbestos Team Leader

J E Job No.	Batch	Sample ID	Depth	J E Sample No.	Date Of Analysis	Analysis	Result
15/17326	11	WS218A	0.50	350	24/12/2015	Mass of Dry Sample	56.2 (g)
					24/12/2015	General Description (Bulk Analysis)	Stones/Soil
					24/12/2015	Asbestos Containing Material	None
					24/12/2015	Asbestos Containing Material (2)	None
					24/12/2015	Asbestos Screen	NAD
					24/12/2015	Asbestos Screen (2)	NAD
					24/12/2015	Asbestos Level	NAD
					24/12/2015	Waste Limit	<0.1%

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

JE Job No.: 15/17326

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. 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.

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.

WATERS

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

ISO17025 (UKAS) accreditation applies to surface water and groundwater and 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

Samples must be received in a condition appropriate to the requested analyses. All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. If this is not the case you will be informed and any test results that may be compromised highlighted on your deviating samples report.

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.

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.

Please include all sections of this report if it is reproduced

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS) accredited - UK.
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.
++	Result outside calibration range, results should be considered as indicative only and are not accredited.
*	Analysis subcontracted to a Jones Environmental 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

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.				
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes	Yes	AR	Yes
TM5/TM36	TM005: Modified USEPA 8015B. Determination of solvent Extractable Petroleum Hydrocarbons (EPH) including column fractionation in the carbon range of C10-35 into aliphatic and aromatic fractions by GC-FID. TM036: Modified USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-10 by headspace GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
PM13	A visual examination of the solid sample is carried out to ascertain sample make up, colour and any other inclusions. This is not a geotechnical description.	PM0	No preparation is required.			AR	
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes
TM17	Modified US EPA method 8270. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM21	Modified USEPA 415.1. Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.	Yes		AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes	Yes	AD	Yes
TM31	Modified USEPA 8015B. Determination of Methylterbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM31	Modified USEPA 8015B. Determination of Methylterbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes
TM38	Soluble Ion analysis using the Thermo Aquakem Photometric Automatic Analyser. Modified US EPA methods 325.2, 375.4, 365.2, 353.1, 354.1	PM20	Extraction of dried and ground samples with deionised water in a 2:1 water to solid ratio for anions. Extraction of as received samples with deionised water in a 2:1 water to solid ratio for ammoniacal nitrogen. Samples are extracted using an orbital shaker.	Yes		AR	Yes
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.			AR	
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.	Yes		AR	
TM73	Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes	Yes	AR	No
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM32	Hot water soluble boron is extracted from dried and ground samples using a 20:1 ratio.	Yes	Yes	AD	Yes
TM89	Modified USEPA method OIA-1667. Determination of cyanide by Flow Injection Analyser.	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide and Thiocyanate analysis.	Yes	Yes	AR	Yes
NONE	No Method Code	NONE	No Method Code			AR	Yes



Jones Environmental Laboratory

Registered Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA. UK

Unit 3 Deeside Point
Zone 3
Deeside Industrial Park
Deeside
CH5 2UA

Geotechnics
Unit 1B
Borders Industrial Park
River Lane
Chester
Cheshire
CH4 8RJ

Tel: +44 (0) 1244 833780
Fax: +44 (0) 1244 833781



Attention :

Date : 8th January, 2016
Your reference : PN153428
Our reference : Test Report 15/17326 Batch 12
Location : Stockport Bus Station
Date samples received : 4th January, 2016
Status : Final report
Issue : 1

One sample were received for analysis on 4th January, 2016 of which one 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.

Compiled By:

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:
JE Job No.: 15/17326

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

JE Sample No.	356																					
Sample ID	WS223																					
Depth	2.00																					
COC No / misc																						
Containers	T																					
Sample Date	<>																					
Sample Type	Soil																					
Batch Number	12																					
Date of Receipt	04/01/2016																					
Arsenic #M	14.6																					
Chromium #M	35.2																					
Copper #M	150																					
Lead #M	272																					
Mercury #M	0.4																					
Nickel #M	22.6																					
Selenium #M	<1																					
Vanadium	23																					
Water Soluble Boron #M	0.9																					
Zinc #M	103																					
PAH MS																						
Naphthalene #M	<0.04																					
Acenaphthylene	<0.03																					
Acenaphthene #M	<0.05																					
Fluorene #M	<0.04																					
Phenanthrene #M	<0.03																					
Anthracene #	<0.04																					
Fluoranthene #M	<0.03																					
Pyrene #	<0.03																					
Benzo(a)anthracene #	<0.06																					
Chrysene #M	<0.02																					
Benzo(b)fluoranthene #M	<0.07																					
Benzo(a)pyrene #	<0.04																					
Indeno(123cd)pyrene #M	<0.04																					
Dibenzo(ah)anthracene #	<0.04																					
Benzo(ghi)perylene #	<0.04																					
PAH 16 Total	<0.6																					
Benzo(b)fluoranthene	<0.05																					
Benzo(k)fluoranthene	<0.02																					
PAH Surrogate % Recovery	104																					
TPH CWG																						
Aliphatics																						
>C5-C6 #M	<0.1																					
>C6-C8 #M	<0.1																					
>C8-C10	<0.1																					
>C10-C12 #M	<0.2																					
>C12-C16 #M	<4																					
>C16-C21 #M	<7																					
>C21-C35 #M	<7																					
>C35-C44	<7																					
Total aliphatics C5-44	<26																					

Please see attached notes for all abbreviations and acronyms

LOD/LOR	Units	Method No.
<0.5	mg/kg	TM30/PM15
<0.5	mg/kg	TM30/PM15
<1	mg/kg	TM30/PM15
<5	mg/kg	TM30/PM15
<0.1	mg/kg	TM30/PM15
<0.7	mg/kg	TM30/PM15
<1	mg/kg	TM30/PM15
<1	mg/kg	TM30/PM15
<0.1	mg/kg	TM74/PM32
<5	mg/kg	TM30/PM15
<0.04	mg/kg	TM4/PM8
<0.03	mg/kg	TM4/PM8
<0.05	mg/kg	TM4/PM8
<0.04	mg/kg	TM4/PM8
<0.03	mg/kg	TM4/PM8
<0.04	mg/kg	TM4/PM8
<0.03	mg/kg	TM4/PM8
<0.03	mg/kg	TM4/PM8
<0.06	mg/kg	TM4/PM8
<0.02	mg/kg	TM4/PM8
<0.07	mg/kg	TM4/PM8
<0.04	mg/kg	TM4/PM8
<0.04	mg/kg	TM4/PM8
<0.04	mg/kg	TM4/PM8
<0.04	mg/kg	TM4/PM8
<0.6	mg/kg	TM4/PM8
<0.05	mg/kg	TM4/PM8
<0.02	mg/kg	TM4/PM8
<0	%	TM4/PM8
<0.1	mg/kg	TM36/PM12
<0.1	mg/kg	TM36/PM12
<0.1	mg/kg	TM36/PM12
<0.2	mg/kg	TM5/PM16
<4	mg/kg	TM5/PM16
<7	mg/kg	TM5/PM16
<7	mg/kg	TM5/PM16
<7	mg/kg	TM5/PM16
<26	mg/kg	TM5/PM16

Jones Environmental Laboratory

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:
JE Job No.: 15/17326

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

J E Sample No.	356																		LOD/LOR	Units	Method No.
Sample ID	WS223																				
Depth	2.00																				
COC No / misc																					
Containers	T																				
Sample Date	<>																				
Sample Type	Soil																				
Batch Number	12																				
Date of Receipt	04/01/2016																				
TPH CWG																					
Aromatics																					
>C5-EC7	<0.1																		<0.1	mg/kg	TM36/PM12
>EC7-EC8	<0.1																		<0.1	mg/kg	TM36/PM12
>EC8-EC10 ^{#M}	<0.1																		<0.1	mg/kg	TM36/PM12
>EC10-EC12	<0.2																		<0.2	mg/kg	TM5/PM16
>EC12-EC16	<4																		<4	mg/kg	TM5/PM16
>EC16-EC21	<7																		<7	mg/kg	TM5/PM16
>EC21-EC35	<7																		<7	mg/kg	TM5/PM16
>EC35-EC44	<7																		<7	mg/kg	TM5/PM16
Total aromatics C5-44	<26																		<26	mg/kg	TM5/TM36/PM16
Total aliphatics and aromatics(C5-44)	<52																		<52	mg/kg	TM5/TM36/PM16
MTBE [#]	<5																		<5	ug/kg	TM31/PM12
Benzene [#]	<5																		<5	ug/kg	TM31/PM12
Toluene [#]	<5																		<5	ug/kg	TM31/PM12
Ethylbenzene [#]	<5																		<5	ug/kg	TM31/PM12
m/p-Xylene [#]	<5																		<5	ug/kg	TM31/PM12
o-Xylene [#]	<5																		<5	ug/kg	TM31/PM12
2-Chlorophenol	<10																		<10	ug/kg	TM16/PM8
Natural Moisture Content	14.5																		<0.1	%	PM4/PM0
2-Methylphenol	<10																		<10	ug/kg	TM16/PM8
2-Nitrophenol	<10																		<10	ug/kg	TM16/PM8
2,4-Dichlorophenol	<10																		<10	ug/kg	TM16/PM8
2,4-Dimethylphenol	<10																		<10	ug/kg	TM16/PM8
2,4,5-Trichlorophenol	<10																		<10	ug/kg	TM16/PM8
2,4,6-Trichlorophenol	<10																		<10	ug/kg	TM16/PM8
4-Chloro-3-methylphenol	<10																		<10	ug/kg	TM16/PM8
4-Methylphenol	<10																		<10	ug/kg	TM16/PM8
4-Nitrophenol	<10																		<10	ug/kg	TM16/PM8
Pentachlorophenol	<10																		<10	ug/kg	TM16/PM8
Phenol	<10																		<10	ug/kg	TM16/PM8
Total Speciated Phenols MS	<10																		<10	ug/kg	TM16/PM8
Hexavalent Chromium [#]	<0.3																		<0.3	mg/kg	TM38/PM20
Chromium III	35.2																		<0.5	mg/kg	NONE/NONE
Total Cyanide ^{#M}	<0.5																		<0.5	mg/kg	TM89/PM45
Total Organic Carbon [#]	4.96																		<0.02	%	TM21/PM24

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:
JE Job No.: 15/17326

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.										Please see attached notes for all abbreviations and acronyms		
Sample ID	WS223											
Depth	2.00											
COC No / misc												
Containers	T											
Sample Date	<>											
Sample Type	Soil											
Batch Number	12											
Date of Receipt	04/01/2016									LOD/LOR	Units	Method No.
pH ^{#M}	8.15									<0.01	pH units	TM73/PM11
Sample Type	Clayey Loam										None	PM13/PM0
Sample Colour	Dark Brown										None	PM13/PM0
Other Items	roots, grass, stones										None	PM13/PM0

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

JE Job No.: 15/17326

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. 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.

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.

WATERS

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

ISO17025 (UKAS) accreditation applies to surface water and groundwater and 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

Samples must be received in a condition appropriate to the requested analyses. All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. If this is not the case you will be informed and any test results that may be compromised highlighted on your deviating samples report.

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.

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.

Please include all sections of this report if it is reproduced

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS) accredited - UK.
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.
++	Result outside calibration range, results should be considered as indicative only and are not accredited.
*	Analysis subcontracted to a Jones Environmental 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

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.				
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes	Yes	AR	Yes
TM5/TM36	TM005: Modified USEPA 8015B. Determination of solvent Extractable Petroleum Hydrocarbons (EPH) including column fractionation in the carbon range of C10-35 into aliphatic and aromatic fractions by GC-FID. TM036: Modified USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-10 by headspace GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
PM13	A visual examination of the solid sample is carried out to ascertain sample make up, colour and any other inclusions. This is not a geotechnical description.	PM0	No preparation is required.			AR	
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM21	Modified USEPA 415.1. Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.	Yes		AD	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes	Yes	AD	Yes
TM31	Modified USEPA 8015B. Determination of Methyltertbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM31	Modified USEPA 8015B. Determination of Methyltertbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes
TM38	Soluble Ion analysis using the Thermo Aquakem Photometric Automatic Analyser. Modified US EPA methods 325.2, 375.4, 365.2, 353.1, 354.1	PM20	Extraction of dried and ground samples with deionised water in a 2:1 water to solid ratio for anions. Extraction of as received samples with deionised water in a 2:1 water to solid ratio for ammoniacal nitrogen. Samples are extracted using an orbital shaker.	Yes		AR	Yes
TM73	Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes	Yes	AR	No
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM32	Hot water soluble boron is extracted from dried and ground samples using a 20:1 ratio.	Yes	Yes	AD	Yes
TM89	Modified USEPA method OIA-1667. Determination of cyanide by Flow Injection Analyser.	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide and Thiocyanate analysis.	Yes	Yes	AR	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
NONE	No Method Code	NONE	No Method Code			AR	Yes



Jones Environmental Laboratory

Registered Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA. UK

Unit 3 Deeside Point
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Attention :

Date : 5th February, 2016
Your reference : PN153428
Our reference : Test Report 16/3162 Batch 3
Location : Stockport Bus Station
Date samples received : 26th January, 2016
Status : Final report
Issue : 1

Eight samples were received for analysis on 26th January, 2016 of which eight 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.

Compiled By:

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:
JE Job No.: 16/3162

Report : Liquid

Liquids/products: V=40ml vial, G=glass bottle, P=plastic bottle
H=H₂SO₄, Z=ZnAc, N=NaOH, HN=HNO₃

J E Sample No.	36-40	41-45	46-50	51-55	56-60	61-65	66-70	71-75						
Sample ID	BH101	BH102	BH103	BH105	BH106	BH108	BH109	BH112						
Depth														
COC No / misc														
Containers	V P G	V P G	V P G	V P G	V P G	V P G	V P G	V P G						
Sample Date	26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016	25/01/2016	26/01/2016						
Sample Type	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water						
Batch Number	3	3	3	3	3	3	3	3						
Date of Receipt	26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016						
											LOD/LOR	Units	Method No.	
Dissolved Arsenic #	<2.5	3.2	3.0	4.1	<2.5	3.2	<2.5	<2.5			<2.5	ug/l	TM30/PM14	
Dissolved Boron	73	57	146	61	62	16	19	40			<12	ug/l	TM30/PM14	
Dissolved Cadmium #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	ug/l	TM30/PM14	
Total Dissolved Chromium #	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5			<1.5	ug/l	TM30/PM14	
Dissolved Copper #	<7	<7	<7	<7	<7	<7	<7	<7			<7	ug/l	TM30/PM14	
Dissolved Lead #	<5	<5	<5	<5	<5	<5	<5	<5			<5	ug/l	TM30/PM14	
Dissolved Mercury #	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM30/PM14	
Dissolved Nickel #	8	<2	8	6	<2	<2	4	<2			<2	ug/l	TM30/PM14	
Dissolved Selenium #	<3	14	<3	<3	<3	<3	<3	<3			<3	ug/l	TM30/PM14	
Dissolved Vanadium #	1.8	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5			<1.5	ug/l	TM30/PM14	
Dissolved Zinc #	5	15	<3	<3	<3	<3	<3	<3			<3	ug/l	TM30/PM14	
PAH MS														
Naphthalene #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1			<0.1	ug/l	TM4/PM30	
Acenaphthylene #	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013			<0.013	ug/l	TM4/PM30	
Acenaphthene #	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013			<0.013	ug/l	TM4/PM30	
Fluorene #	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014			<0.014	ug/l	TM4/PM30	
Phenanthrene #	0.020	0.020	<0.011	<0.011	<0.011	<0.011	0.020	<0.011			<0.011	ug/l	TM4/PM30	
Anthracene #	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013			<0.013	ug/l	TM4/PM30	
Fluoranthene #	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012			<0.012	ug/l	TM4/PM30	
Pyrene #	<0.013	0.040	<0.013	<0.013	<0.013	<0.013	0.040	<0.013			<0.013	ug/l	TM4/PM30	
Benzo(a)anthracene #	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015			<0.015	ug/l	TM4/PM30	
Chrysene #	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011			<0.011	ug/l	TM4/PM30	
Benzo(b)fluoranthene #	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018			<0.018	ug/l	TM4/PM30	
Benzo(a)pyrene #	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016			<0.016	ug/l	TM4/PM30	
Indeno(123cd)pyrene #	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011			<0.011	ug/l	TM4/PM30	
Dibenzo(ah)anthracene #	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01			<0.01	ug/l	TM4/PM30	
Benzo(ghi)perylene #	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011			<0.011	ug/l	TM4/PM30	
PAH 16 Total #	<0.195	<0.195	<0.195	<0.195	<0.195	<0.195	<0.195	<0.195			<0.195	ug/l	TM4/PM30	
Benzo(b)fluoranthene	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01			<0.01	ug/l	TM4/PM30	
Benzo(k)fluoranthene	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01			<0.01	ug/l	TM4/PM30	
PAH Surrogate % Recovery	86	85	90	90	89	86	83	88			<0	%	TM4/PM30	
Methyl Tertiary Butyl Ether #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1			<0.1	ug/l	TM15/PM10	
Benzene #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	ug/l	TM15/PM10	
Toluene #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2.2	<0.5			<0.5	ug/l	TM15/PM10	
Ethylbenzene #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	ug/l	TM15/PM10	
p/m-Xylene #	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM15/PM10	
o-Xylene #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	ug/l	TM15/PM10	
Surrogate Recovery Toluene D8	97	96	97	97	96	97	95	98			<0	%	TM15/PM10	
Surrogate Recovery 4-Bromofluorobenzene	114	114	115	115	115	113	111	101			<0	%	TM15/PM10	

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact:
 JE Job No.: 16/3162

Report : Liquid

Liquids/products: V=40ml vial, G=glass bottle, P=plastic bottle
 H=H₂SO₄, Z=ZnAc, N=NaOH, HN=HNO₃

J E Sample No.	36-40	41-45	46-50	51-55	56-60	61-65	66-70	71-75						
Sample ID	BH101	BH102	BH103	BH105	BH106	BH108	BH109	BH112						
Depth														
COC No / misc														
Containers	V P G	V P G	V P G	V P G	V P G	V P G	V P G	V P G						
Sample Date	26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016	25/01/2016	26/01/2016						
Sample Type	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water						
Batch Number	3	3	3	3	3	3	3	3						
Date of Receipt	26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016						
											LOD/LOR	Units	Method No.	
TPH CWG														
Aliphatics														
>C5-C6 #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/l	TM36/PM12	
>C6-C8 #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/l	TM36/PM12	
>C8-C10 #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/l	TM36/PM12	
>C10-C12 #	<5	<5	<5	<5	<5	<5	9	<5	<5	<5	<5	ug/l	TM5/PM30	
>C12-C16 #	<10	<10	<10	<10	<10	<10	1280	<10	<10	<10	<10	ug/l	TM5/PM30	
>C16-C21 #	<10	<10	<10	<10	<10	<10	10	<10	<10	<10	<10	ug/l	TM5/PM30	
>C21-C35 #	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/l	TM5/PM30	
Total aliphatics C5-35 #	<10	<10	<10	<10	<10	<10	1299	<10	<10	<10	<10	ug/l	TM5/TM36/PM30	
Aromatics														
>C5-EC7 #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/l	TM36/PM12	
>EC7-EC8 #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/l	TM36/PM12	
>EC8-EC10 #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/l	TM36/PM12	
>EC10-EC12 #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/l	TM5/PM30	
>EC12-EC16 #	<10	<10	<10	<10	<10	<10	80	<10	<10	<10	<10	ug/l	TM5/PM30	
>EC16-EC21 #	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/l	TM5/PM30	
>EC21-EC35 #	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/l	TM5/PM30	
Total aromatics C5-35 #	<10	<10	<10	<10	<10	<10	80	<10	<10	<10	<10	ug/l	TM5/PM30	
Total aliphatics and aromatics(C5-35) #	<10	<10	<10	<10	<10	<10	1379	<10	<10	<10	<10	ug/l	TM5/TM36/PM30	
PCBs														
PCB 28	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ug/l	TM17/PM30	
PCB 52	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ug/l	TM17/PM30	
PCB 101	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ug/l	TM17/PM30	
PCB 118	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ug/l	TM17/PM30	
PCB 138	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ug/l	TM17/PM30	
PCB 153	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ug/l	TM17/PM30	
PCB 180	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ug/l	TM17/PM30	
Total 7 PCBs	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	ug/l	TM17/PM30	
Phenols														
Resorcinol	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM26/PM0	
Catechol	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM26/PM0	
Phenol	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM26/PM0	
m/p-cresol	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM26/PM0	
o-cresol	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM26/PM0	
Total cresols	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM26/PM0	
Xylenols														
1-naphthol	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM26/PM0	
2,3,5-trimethyl phenol	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM26/PM0	
2-isopropylphenol	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM26/PM0	
Total Speciated Phenols HPLC	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/l	TM26/PM0	
Sulphate														
Sulphate #	92.76	71.35	169.71	62.72	38.55	25.69	31.61	33.03			<0.05	mg/l	TM38/PM0	
Nitrate as NO3 #	4.9	2.5	1.9	7.4	10.7	0.8	0.6	1.7			<0.2	mg/l	TM38/PM0	

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:
JE Job No.: 16/3162

SVOC Report : Liquid

J E Sample No.	36-40	41-45	46-50	51-55	56-60	61-65	66-70	71-75					
Sample ID	BH101	BH102	BH103	BH105	BH106	BH108	BH109	BH112					
Depth													
COC No / misc Containers	VPG	VPG	VPG	VPG	VPG	VPG	VPG	VPG					
Sample Date	26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016	25/01/2016	26/01/2016					
Sample Type	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water					
Batch Number	3	3	3	3	3	3	3	3					
Date of Receipt	26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016					
											LOD/LOR	Units	Method No.
SVOC MS													
Phenols													
2-Chlorophenol #	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
2-Methylphenol #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	ug/l	TM16/PM30
2-Nitrophenol	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	ug/l	TM16/PM30
2,4-Dichlorophenol #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	ug/l	TM16/PM30
2,4-Dimethylphenol	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
2,4,5-Trichlorophenol #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	ug/l	TM16/PM30
2,4,6-Trichlorophenol	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
4-Chloro-3-methylphenol #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	ug/l	TM16/PM30
4-Methylphenol	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
4-Nitrophenol	<10	<10	<10	<10	<10	<10	<10	<10			<10	ug/l	TM16/PM30
Pentachlorophenol	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
Phenol	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
PAHs													
2-Chloronaphthalene #	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
2-Methylnaphthalene #	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
Phthalates													
Bis(2-ethylhexyl) phthalate	<5	<5	<5	<5	<5	<5	<5	<5			<5	ug/l	TM16/PM30
Butylbenzyl phthalate	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
Di-n-butyl phthalate #	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5			<1.5	ug/l	TM16/PM30
Di-n-Octyl phthalate	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
Diethyl phthalate #	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
Dimethyl phthalate	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
Other SVOCs													
1,2-Dichlorobenzene #	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
1,2,4-Trichlorobenzene #	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
1,3-Dichlorobenzene #	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
1,4-Dichlorobenzene #	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
2-Nitroaniline	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
2,4-Dinitrotoluene #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	ug/l	TM16/PM30
2,6-Dinitrotoluene	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
3-Nitroaniline	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
4-Bromophenylphenylether #	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
4-Chloroaniline	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
4-Chlorophenylphenylether #	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
4-Nitroaniline	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	ug/l	TM16/PM30
Azobenzene #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	ug/l	TM16/PM30
Bis(2-chloroethoxy)methane #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	ug/l	TM16/PM30
Bis(2-chloroethyl)ether #	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
Carbazole #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	ug/l	TM16/PM30
Dibenzofuran #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	ug/l	TM16/PM30
Hexachlorobenzene #	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
Hexachlorobutadiene #	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
Hexachlorocyclopentadiene	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
Hexachloroethane #	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
Isophorone #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	ug/l	TM16/PM30
N-nitrosodi-n-propylamine #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	ug/l	TM16/PM30
Nitrobenzene #	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact:
JE Job No.: 16/3162

VOC Report : Liquid

J E Sample No.	36-40	41-45	46-50	51-55	56-60	61-65	66-70	71-75				
Sample ID	BH101	BH102	BH103	BH105	BH106	BH108	BH109	BH112				
Depth												
COC No / misc												
Containers	VPG	VPG	VPG	VPG	VPG	VPG	VPG	VPG				
Sample Date	26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016	25/01/2016	26/01/2016				
Sample Type	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water				
Batch Number	3	3	3	3	3	3	3	3				
Date of Receipt	26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016				
										LOD/LOR	Units	Method No.
VOC MS												
Dichlorodifluoromethane	<2	<2	<2	<2	<2	<2	<2	<2		<2	ug/l	TM15/PM10
Methyl Tertiary Butyl Ether #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		<0.1	ug/l	TM15/PM10
Chloromethane #	<3	<3	<3	<3	<3	<3	<3	<3		<3	ug/l	TM15/PM10
Vinyl Chloride #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		<0.1	ug/l	TM15/PM10
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1		<1	ug/l	TM15/PM10
Chloroethane #	<3	<3	<3	<3	<3	<3	<3	<3		<3	ug/l	TM15/PM10
Trichlorofluoromethane #	<3	<3	<3	<3	<3	<3	<3	<3		<3	ug/l	TM15/PM10
1,1-Dichloroethene (1,1 DCE) #	<3	<3	<3	<3	<3	<3	<3	<3		<3	ug/l	TM15/PM10
Dichloromethane (DCM) #	<3	<3	<3	<3	<3	<3	<3	<3		<3	ug/l	TM15/PM10
trans-1-2-Dichloroethene #	<3	<3	<3	<3	<3	<3	<3	<3		<3	ug/l	TM15/PM10
1,1-Dichloroethane #	<3	<3	<3	<3	<3	<3	<3	<3		<3	ug/l	TM15/PM10
cis-1-2-Dichloroethene #	<3	<3	<3	<3	<3	<3	<3	<3		<3	ug/l	TM15/PM10
2,2-Dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1		<1	ug/l	TM15/PM10
Bromochloromethane #	<2	<2	<2	<2	<2	<2	<2	<2		<2	ug/l	TM15/PM10
Chloroform #	<2	<2	<2	<2	<2	<2	5	<2		<2	ug/l	TM15/PM10
1,1,1-Trichloroethane #	<2	<2	<2	<2	<2	<2	<2	<2		<2	ug/l	TM15/PM10
1,1-Dichloropropene #	<3	<3	<3	<3	<3	<3	<3	<3		<3	ug/l	TM15/PM10
Carbon tetrachloride #	<2	<2	<2	<2	<2	<2	<2	<2		<2	ug/l	TM15/PM10
1,2-Dichloroethane #	<2	<2	<2	<2	<2	<2	<2	<2		<2	ug/l	TM15/PM10
Benzene #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	ug/l	TM15/PM10
Trichloroethene (TCE) #	<3	<3	<3	<3	<3	<3	<3	<3		<3	ug/l	TM15/PM10
1,2-Dichloropropane #	<2	<2	<2	<2	<2	<2	<2	<2		<2	ug/l	TM15/PM10
Dibromomethane #	<3	<3	<3	<3	<3	<3	<3	<3		<3	ug/l	TM15/PM10
Bromodichloromethane #	<2	<2	<2	<2	<2	<2	<2	<2		<2	ug/l	TM15/PM10
cis-1-3-Dichloropropene	<2	<2	<2	<2	<2	<2	<2	<2		<2	ug/l	TM15/PM10
Toluene #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2.2	<0.5		<0.5	ug/l	TM15/PM10
trans-1-3-Dichloropropene	<2	<2	<2	<2	<2	<2	<2	<2		<2	ug/l	TM15/PM10
1,1,2-Trichloroethane #	<2	<2	<2	<2	<2	<2	<2	<2		<2	ug/l	TM15/PM10
Tetrachloroethene (PCE) #	<3	<3	<3	<3	<3	<3	<3	<3		<3	ug/l	TM15/PM10
1,3-Dichloropropane #	<2	<2	<2	<2	<2	<2	<2	<2		<2	ug/l	TM15/PM10
Dibromochloromethane #	<2	<2	<2	<2	<2	<2	<2	<2		<2	ug/l	TM15/PM10
1,2-Dibromoethane #	<2	<2	<2	<2	<2	<2	<2	<2		<2	ug/l	TM15/PM10
Chlorobenzene #	<2	<2	<2	<2	<2	<2	<2	<2		<2	ug/l	TM15/PM10
1,1,1,2-Tetrachloroethane #	<2	<2	<2	<2	<2	<2	<2	<2		<2	ug/l	TM15/PM10
Ethylbenzene #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	ug/l	TM15/PM10
p/m-Xylene #	<1	<1	<1	<1	<1	<1	<1	<1		<1	ug/l	TM15/PM10
o-Xylene #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	ug/l	TM15/PM10
Styrene	<2	<2	<2	<2	<2	<2	<2	<2		<2	ug/l	TM15/PM10
Bromoform #	<2	<2	<2	<2	<2	<2	<2	<2		<2	ug/l	TM15/PM10
Isopropylbenzene #	<3	<3	<3	<3	<3	<3	<3	<3		<3	ug/l	TM15/PM10
1,1,2,2-Tetrachloroethane	<4	<4	<4	<4	<4	<4	<4	<4		<4	ug/l	TM15/PM10
Bromobenzene #	<2	<2	<2	<2	<2	<2	<2	<2		<2	ug/l	TM15/PM10
1,2,3-Trichloropropane #	<3	<3	<3	<3	<3	<3	<3	<3		<3	ug/l	TM15/PM10
Propylbenzene #	<3	<3	<3	<3	<3	<3	<3	<3		<3	ug/l	TM15/PM10
2-Chlorotoluene #	<3	<3	<3	<3	<3	<3	<3	<3		<3	ug/l	TM15/PM10
1,3,5-Trimethylbenzene #	<3	<3	<3	<3	<3	<3	<3	<3		<3	ug/l	TM15/PM10
4-Chlorotoluene #	<3	<3	<3	<3	<3	<3	<3	<3		<3	ug/l	TM15/PM10
tert-Butylbenzene #	<3	<3	<3	<3	<3	<3	<3	<3		<3	ug/l	TM15/PM10
1,2,4-Trimethylbenzene #	<3	<3	<3	<3	<3	<3	<3	<3		<3	ug/l	TM15/PM10
sec-Butylbenzene #	<3	<3	<3	<3	<3	<3	<3	<3		<3	ug/l	TM15/PM10
4-Isopropyltoluene #	<3	<3	<3	<3	<3	<3	<3	<3		<3	ug/l	TM15/PM10
1,3-Dichlorobenzene #	<3	<3	<3	<3	<3	<3	<3	<3		<3	ug/l	TM15/PM10
1,4-Dichlorobenzene #	<3	<3	<3	<3	<3	<3	<3	<3		<3	ug/l	TM15/PM10
n-Butylbenzene #	<3	<3	<3	<3	<3	<3	<3	<3		<3	ug/l	TM15/PM10
1,2-Dichlorobenzene #	<3	<3	<3	<3	<3	<3	<3	<3		<3	ug/l	TM15/PM10
1,2-Dibromo-3-chloropropane	<2	<2	<2	<2	<2	<2	<2	<2		<2	ug/l	TM15/PM10
1,2,4-Trichlorobenzene	<3	<3	<3	<3	<3	<3	<3	<3		<3	ug/l	TM15/PM10
Hexachlorobutadiene	<3	<3	<3	<3	<3	<3	<3	<3		<3	ug/l	TM15/PM10
Naphthalene	<2	<2	<2	<2	<2	<2	<2	<2		<2	ug/l	TM15/PM10
1,2,3-Trichlorobenzene	<3	<3	<3	<3	<3	<3	<3	<3		<3	ug/l	TM15/PM10
Surrogate Recovery Toluene D8	97	96	97	97	96	97	95	98		<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	114	114	115	115	115	113	111	101		<0	%	TM15/PM10

Please see attached notes for all abbreviations and acronyms

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

JE Job No.: 16/3162

SOILS

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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. 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.

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.

WATERS

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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

Samples must be received in a condition appropriate to the requested analyses. All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. If this is not the case you will be informed and any test results that may be compromised highlighted on your deviating samples report.

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.

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.

Please include all sections of this report if it is reproduced

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS) accredited - UK.
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.
++	Result outside calibration range, results should be considered as indicative only and are not accredited.
*	Analysis subcontracted to a Jones Environmental 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

JE Job No: 16/3162

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.				
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.	Yes			
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.	Yes			
TM5/TM36	TM005: Modified USEPA 8015B. Determination of solvent Extractable Petroleum Hydrocarbons (EPH) including column fractionation in the carbon range of C10-35 into aliphatic and aromatic fractions by GC-FID. TM036: Modified USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-10 by headspace GC-FID.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.	Yes			
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.				
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes			
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.				
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.	Yes			
TM17	Modified US EPA method 8270. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.				
TM26	Determination of phenols by Reversed Phased High Performance Liquid Chromatography and Electro-Chemical Detection.	PM0	No preparation is required.				

JE Job No: 16/3162

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM14	Analysis of waters and leachates for metals by ICP OES. Samples are filtered for dissolved metals and acidified if required.				
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM14	Analysis of waters and leachates for metals by ICP OES. Samples are filtered for dissolved metals and acidified if required.	Yes			
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes			
TM38	Soluble Ion analysis using the Thermo Aquakem Photometric Automatic Analyser. Modified US EPA methods 325.2, 375.4, 365.2, 353.1, 354.1	PM0	No preparation is required.	Yes			
TM60	Modified USEPA 9060. Determination of TOC by calculation from Total Carbon and Inorganic Carbon using a TOC analyser, the carbon in the sample is converted to CO2 and then passed through a non-dispersive infrared gas analyser (NDIR).	PM0	No preparation is required.	Yes			
TM73	Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.	PM0	No preparation is required.	Yes			
TM89	Modified USEPA method OIA-1667. Determination of cyanide by Flow Injection Analyser.	PM0	No preparation is required.	Yes			
TM106	Determination of Sulphide by Skalar Continuous Flow Analyser	PM0	No preparation is required.				
NONE	No Method Code	NONE	No Method Code				



Jones Environmental Laboratory

Registered Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA. UK

Unit 3 Deeside Point
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CH4 8RJ

Tel: +44 (0) 1244 833780
Fax: +44 (0) 1244 833781

Attention :

Date : 26th February, 2016
Your reference : PN153428
Our reference : Test Report 15/17326 Batch 1 Schedule B
Location : Stockport Bus Station
Date samples received : 3rd December, 2015
Status : Final report
Issue : 1

Twenty six samples were received for analysis on 3rd December, 2015 of which three 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.

Compiled By:

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

JE Job No.: 15/17326

SOILS

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DEVIATING SAMPLES

Samples must be received in a condition appropriate to the requested analyses. All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. If this is not the case you will be informed and any test results that may be compromised highlighted on your deviating samples report.

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.

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.

Please include all sections of this report if it is reproduced

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS) accredited - UK.
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.
++	Result outside calibration range, results should be considered as indicative only and are not accredited.
*	Analysis subcontracted to a Jones Environmental 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

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.			AR	Yes
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.			AR	

APPENDIX 13
Exploratory Hole Location Plan

- Key**
- Borehole
 - CT
 - Dynamic Probe
 - Trial Pit
 - Hand Pit
 - Dynamic Sample Borehole

Hole ID	Easting (m)	Northing (mN)	Level (mOD)
BH101	389283.299	390265.094	45.218
BH102	389276.751	390259.978	43.345
BH103	389205.655	390216.422	42.422
BH104	389178.078	390228.877	42.473
BH105	389234.786	390221.942	42.624
BH106	389248.707	390249.657	42.445
BH107	389205.789	390252.392	42.265
BH108	389157.818	390267.979	42.717
BH109	389154.490	390216.960	42.360
BH111	389253.456	390080.226	50.919
BH112	389295.702	390239.877	43.703
CT1	389186.670	390309.530	42.240
CT1A	389139.000	390309.600	42.150
CT3	389139.940	390305.200	42.110
CT4	389146.580	390314.810	42.070
CT5	389154.697	390268.627	42.732
CT6	389161.890	390271.340	42.660
CT6A	389162.230	390271.690	42.590
CT8	389163.474	390271.412	42.662
CT7	389156.186	390263.329	42.754
CT8	389163.796	390266.428	42.721
DP1	389135.620	390312.530	42.300
DP2	389141.140	390310.370	42.130
DP3	389138.080	390305.580	42.130
DP4	389142.570	390304.560	42.070
DP5	389149.490	390269.830	42.730
DP6	389156.840	390270.940	42.620
DP7	389161.680	390271.310	42.590
DP8	389152.880	390259.980	42.850
DP9	389159.150	390263.750	42.710
DP10	389164.140	390266.860	42.650
HP101	389288.636	390260.602	48.577
HP102	389310.624	390281.273	52.835
TP1	389129.760	390307.010	42.250
TP2	389138.240	390302.500	42.090
TP3	389145.520	390305.290	42.070
TP4	389151.170	390306.650	42.120
TP5	389148.570	390317.490	42.160
TP6A/TP6B	389154.855	390259.244	42.863
TP7A/TP7B	389151.875	390270.319	42.705
TP8	389165.304	390276.628	42.802
TP9	389152.081	390264.391	42.789
WS201	389210.666	390145.901	45.614
WS203	389159.132	390201.040	43.011
WS204	389161.807	390212.600	42.851
WS205	389162.101	390221.783	42.391
WS206	389278.750	390194.812	48.125
WS208	389241.331	390271.366	42.350
WS209	389242.280	390284.319	42.673
WS210	389315.993	390273.770	44.431
WS211	389332.987	390302.677	44.884
WS212	389284.728	390377.074	45.736
WS214	389280.915	390351.942	46.345
WS217	389229.781	390254.966	42.295
WS218	389254.700	390238.100	42.750
WS218A	389253.900	390239.000	42.710
WS219	389259.609	390175.323	45.127
WS220	389143.232	390224.649	44.686
WS221	389275.017	390086.165	51.031
WS223	389227.657	390204.856	43.392
WS224	389229.663	390206.414	53.306

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Client:
TFGM

Project:
Stockport Bus Station

Drawing Title:
Exploratory Hole Location Plan

Drawing 1 of 2

Scale: 1:500@A1

Date:
February 2016

Project No:
PN153428

File Name:
Geo-PN153428-001(1)



- Key**
- Borehole
 - ◆ CT
 - ⊗ Dynamic Probe
 - Trial Pit
 - Hand Pit
 - Dynamic Sample Borehole

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BH111	389253.456	390080.226	50.919
BH112	389295.702	390293.877	43.703
CT1	389146.670	390309.530	42.240
CT1A	389139.000	390309.600	42.150
CT3	389139.940	390305.200	42.110
CT4	389146.580	390314.810	42.070
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WS208	389241.331	390271.366	42.350
WS209	389242.280	390284.319	42.673
WS210	389155.993	390273.770	44.431
WS211	38932.987	390302.677	44.884
WS212	389284.728	390377.074	45.736
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WS220	389143.232	390224.649	44.686
WS221	389275.017	390086.165	51.031
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Exploratory Hole Location Plan

Drawing 2 of 2

Scale: 1:500@A1

Date:
February 2016

Project No:
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File Name:
Geo-PN153428-001(2)

APPENDIX 14

Investigation Techniques and General Notes

INTRODUCTION

The following brief review of Ground Investigation techniques, generally used as part of most Site Investigations in the UK, summarises their methodology, advantages and limitations. Detailed descriptions of the techniques are available and can be provided on request. This review should be read in conjunction with the accompanying General Notes.

TRIAL PITS

The trial pit is amongst the most simple yet effective means of identifying shallow ground conditions on a site. Its advantages include simplicity, speed, potential accuracy and cost-effectiveness. The trial pit is most commonly formed using a back-acting excavator which can typically determine ground conditions to some 4 metres below ground level. Hand excavation is often used to locate, expose and detail existing foundations, features or services. In general, it is difficult to extend pits significantly below the water table in predominantly granular soils, where flows can cause instability. Unless otherwise stated, the trial pits will not have been provided with temporary side support during their construction. Under such circumstances ground conditions to some 1.20 metres can be closely inspected, subject to stability assessment, but below this depth, entrance into the pit is not permitted in the absence of shoring and hence observations will have been made from ground surface and samples taken from the excavator bucket.

Trends in strata type, level and thickness can be determined, shear surfaces identified and the behaviour of plant, excavation sides and excavated materials can be related to the construction process. They are particularly valuable in land slip investigations. Some types of in situ test can be undertaken in such pits and large disturbed or block samples obtained.

CABLE PERCUSSION BORING

The light Cable Percussion technique of soft ground boring, typically at a diameter of 150mm, is a well-established simple and flexible method of boring vertical holes and generally allows data to be obtained in respect of strata conditions other than rock. A tubular cutter (for cohesive soils) or shell with a flap valve (for granular soils) is repeatedly lifted and dropped using a winch and rope operating from an "A" frame. Soil which enters these tools is regularly removed and either sampled for subsequent examination or test, or laid to one side for backfilling. Steel casing will have been used to prevent collapse of the borehole sides where necessary. A degree of disturbance of soil and mixing of layers is inevitable and the presence of very thin layers of different soils within a particular stratum may not be identified. Changes in strata type can only be detected on recognition of a change in soil samples at surface, after the interface has been passed. For the foregoing reasons, depth measurements should not be considered to be more accurate than 0.10 metre.

In cohesive soils cylindrical samples are retrieved by driving or pushing in 100mm nominal diameter tubes. In soft soils, piston sampling or vane testing may be undertaken. In granular soils and often in cohesive materials, insitu Standard Penetration Tests (SPT's) are performed. The SPT records the number of standard blows required to drive a 50mm diameter open or cone ended probe for 300mm after an initial 150mm penetration. A modified method of recording is used in more dense strata. Small disturbed samples are obtained throughout.

The technique can determine ground conditions to depths in excess of 30 metres under suitable circumstances and usually causes less surface disturbance than trial pitting.

ROTARY DRILLING

Rotary Drilling to produce cores by rotating an annular diamond-impregnated tube or barrel into the ground is the technique most appropriate to the forming of site investigation boreholes through rock or other hard strata. It has the advantage of being able to be used vertically or at an angle. Core diameters of less than 100mm are most common for site investigation purposes. Core is normally retrieved in plastic lining tubes. A flushing fluid such as air, water or foam is used to cool the bit and carry cuttings to the surface.

Examination of cores allows detailed rock description and generally enables angled discontinuity surfaces to be observed. However, vertical holes do not necessarily reveal the presence of vertical or near-vertical fissures or joint discontinuities. The core type and/or techniques used. Where open hole rotary drilling is employed, descriptions of strata result from examination at surface of small particles ejected from the borehole in the flushing medium. In consequence, no indication of fissuring, bedding, consistency or degree of weathering can be obtained. Small scale plant can be used for auger drilling to limited depths where access is constrained.

Depths in excess of 60 metres can be achieved under suitable circumstances using rotary techniques, with minimal surface disturbance.

WINDOW SAMPLING

This technique involves the driving of an open-ended tube into the ground and retrieval of the soil which enters the tube. The term "window sample" arose from the original device which had a "window" or slot cut into the side of the tube through which samples were taken. This has now been superseded by the use of a thin-walled plastic liner within a sampler which has a solid wall. Diameters range from 36 to 86mm. Such samples can be used for qualitative logging, selection of samples for classification and chemical analysis and for obtaining a rudimentary assessment of strength.

Driving devices can be hand-held or machine mounted and the drive tubes are typically in 1m lengths. The hole formed is not cased, however, and hence the success of this technique is limited when soils and groundwater conditions are such that the sides of the hole collapse on withdrawal of the sampler. Obstructions within the ground, the density of the material or its strength can also limit the depth and rate of penetration of this light-weight investigation technique. Nevertheless, it is a valuable tool where access is constrained such as within buildings or on embankments. Depths of up to 8m can be achieved in suitable circumstances but depths of 4m to 6m are more common.

EXPLORATORY HOLE RECORDS

The data obtained by these techniques are generally presented on Trial Pit, Borehole, Drillhole or Window Sample Records. The descriptions of strata result from information gathered from a number of sources which may include published geological data, preliminary field observations and descriptions, in situ test results, laboratory test results and specimen descriptions. A key to the symbols and abbreviations used accompanies the records. The descriptions on the exploratory hole records accommodate but may not necessarily be identical to those on any preliminary records or the laboratory summaries.

The records show ground conditions at the exploratory hole locations. The degree to which they can be used to represent conditions between or beyond such holes, however, is a matter for geological interpretation rather than factual reporting and the associated uncertainties must be recognised.

DYNAMIC PROBING

This technique typically measures the number of blows of a standard weight falling over a standard height to advance a cone-ended rod over sequential standard distances (typically 100mm). Some devices measure the penetration of the probe per standard blow. It is essentially a profiling tool and is best used in conjunction with other investigation techniques where site-specific correlation can be used to delineate the distribution of soft or loose soils or the upper horizon of a dense or strong layer such as rock.

Both machine-driven and hand-driven equipment is available, the selection depending upon access restrictions and the depth of penetration required. It is particularly useful where access for larger equipment is not available, disturbance is to be minimised or where there are cost constraints. No samples are recovered and some techniques leave a sacrificial cone head in the ground. As with other lightweight techniques, progress is limited in strong or dense soils. The results are presented both numerically and graphically. Depths of up to 10m are commonly achieved in suitable circumstances.

The hand-driven DCP probing device has been calibrated by the TRL to provide a profile of CBR values over a range of depths of up to 1.50m.

INSTRUMENTATION

The most common form of instrument used in site investigation is either the standpipe or else the standpipe piezometer which can be installed in investigation holes. They are used to facilitate monitoring of groundwater levels and water sampling over a period of time following site work. Normally a standpipe would be formed using rigid plastic tubing which has been perforated or slotted over much of its length whilst a standpipe piezometer would have a filter tip which would be placed at a selected level and the hole sealed above and sometimes below to isolate the zone of interest. Groundwater levels are determined using an electronic "dipmeter" to measure the depth to the water surface from ground level. Piezometers can also be used to measure permeability. They are simple and inexpensive instruments for long term monitoring but response times can limit their use in tidal areas and access to the ground surface at each instrument is necessary. Remote reading requires more sophisticated hydraulic, electronic or pneumatic equipment.

Settlement can be monitored using surface or buried target plates whilst lateral movement over a range of depths is monitored using slip indicator or inclinometer equipment.

1. The report is prepared for the exclusive use of the Client named in the document and copyright subsists with Geotechnics Limited. Prior written permission must be obtained to reproduce all or part of the report. It is prepared on the understanding that its contents are only disclosed to parties directly involved in the current investigation, preparation and development of the site.
2. Further copies may be obtained with the Client's written permission, from Geotechnics Limited with whom the master copy of the document will be retained.
3. The report and/or opinion is prepared for the specific purpose stated in the document and in relation to the nature and extent of proposals made available to Geotechnics Limited at that time. Re-consideration will be necessary should those details change. The recommendations should not be used for other schemes on or adjacent to the site without further reference to Geotechnics Limited.
4. The assessment of the significance of the factual data, where called for, is provided to assist the Client and his Engineer and/or Advisers in the preparation of their designs.
5. The report is based on the ground conditions encountered in the exploratory holes together with the results of field and laboratory testing in the context of the proposed development. The data from any commissioned desk study and site reconnaissance are also drawn upon. There may be special conditions appertaining to the site, however, which are not revealed by the investigation and which may not be taken into account in the report.
6. Methods of construction and/or design other than those proposed by the designers or referred to in the report may require consideration during the evolution of the proposals and further assessment of the geotechnical and any geoenvironmental data would be required to provide discussion and evaluations appropriate to these methods.
7. The accuracy of results reported depends upon the technique of measurement, investigation and test used and these values should not be regarded necessarily as characteristics of the strata as a whole (see accompanying notes on Investigation Techniques). Where such measurements are critical, the technique of investigation will need to be reviewed and supplementary investigation undertaken in accordance with the advice of the Company where necessary.
8. The samples selected for laboratory test are prepared and tested in accordance with the relevant Clauses of BS 1377 Parts 1 to 8, where appropriate, in Geotechnics Limited's UKAS accredited Laboratory, where possible. A list of tests is given.
9. Tests requiring the use of another laboratory having UKAS accreditation where possible are identified.
10. Any unavoidable variations from specified procedures are identified in the report.
11. Specimens are cut vertically, where this is relevant and can be identified, unless otherwise stated.
12. All the data required by the test procedures are recorded on individual test sheets but the results in the report are presented in summary form to aid understanding and assimilation for design purposes. Where all details are required, these can be made available.
13. Whilst the report may express an opinion on possible configurations of strata between or beyond exploratory holes, or on the possible presence of features based on either visual, verbal, written, cartographical, photographic or published evidence, this is for guidance only and no liability can be accepted for its accuracy.
14. Classification of materials as Made Ground is based on the inspection of retrieved samples or exposed excavations. Where it is obvious that foreign matter such as paper, plastic or metal is present, classification is clear. Frequently, however, for fill materials that arise from the adjacent ground or from the backfilling of excavations, their visual characteristics can closely resemble those of undisturbed ground. Other evidence such as site history, exploratory hole location or other tests may need to be drawn upon to provide clarification. For these reasons, classification of soils on the exploratory hole records as either Made Ground or naturally occurring strata, the boundary between them and any interpretation that this gives rise to should be regarded as provisional and subject to re-evaluation in the light of further data.
15. The classification of materials as Topsoil is generally based on visual description and should not be interpreted to mean that the material so described complies with the criteria for Topsoil used in BS 3882 (2007). Specific testing would be necessary where such definition is a requirement.
16. Ground conditions should be monitored during the construction of the works and the report should be re-evaluated in the light of these data by the supervising geotechnical engineers.
17. Any comments on groundwater conditions are based on observations made at the time of the investigation, unless specifically stated otherwise. It should be noted, however, that the observations are subject to the method and speed of boring, drilling or excavation and that groundwater levels will vary due to seasonal or other effects.
18. Any bearing capacities for conventional spread foundations which are given in the report and interpreted from the investigation are for bases at a minimum depth of 1m below finished ground level in naturally occurring strata and at broadly similar levels throughout individual structures, unless otherwise stated. The foundations should be designed in accordance with the good practice embodied in BS 8004:1986 - Foundations, supplemented for housing by NHBC Standards. Foundation design is an iterative process and bearing pressures may need adjustment or other measures may need to be taken in the context of final layouts and levels prior to finalisation of proposals.
19. Unless specifically stated, the investigation does not take account of the possible effects of mineral extraction or of gases from fill or natural sources within, below or outside the site.
20. The costs or economic viability of the proposals referred to in the report, or of the solutions put forward to any problems encountered, will depend on very many factors in addition to geotechnical or geoenvironmental considerations and hence their evaluation is outside the scope of the report.

Appendix D – Soils Screening Assessment

Appendix E – Controlled Waters Screening Assessment

Stockport Bus Station
Soils Leachate testing

> Threshold Value
±2x Threshold Value
>10x Threshold Value
Above LOD where no AGAC is available

Expository Hole	BH102		BH108	BH110	BH111	BH112	HP01	HP02	WS204	WS205	WS206	WS210	WS211	WS212	WS214	WS220	WS220	WS223
	2	1	4	0.20-0.40	1	0.2	0.2	0.2	0.5	0.5	1	0.2	1	0.5	0.2	1	1	
Depth																		
Target	Glacial Sands and Gravel		Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground
Determine	Gravel		Gravel	Gravel	Gravel	Gravel	Sand	Sand	Sand	Sand	Sand	Sand	Sand	Sand	Sand	Sand	Sand	Sand
Strata Logs	Unit																	
Metals																		
Arsenic	#N/A	#N/A	24.7	4.5	3.2	5.9	0.5	0.4	7.2	#N/A	#N/A	8	3.5	2.7	3.9	12.4	7.1	3
Cadmium	#N/A	#N/A	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Chromium III	#N/A	#N/A	0.006	0.009	0.006	0.006	0.006	0.007	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.013
Copper	#N/A	#N/A	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	12.6
Lead	#N/A	#N/A	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	23
Mercury	#N/A	#N/A	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Nickel	#N/A	#N/A	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Selenium	#N/A	#N/A	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Vanadium	#N/A	#N/A	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	2.6
Zinc	#N/A	#N/A	<12	<12	<12	<12	<12	<12	<12	<12	<12	<12	<12	<12	<12	<12	<12	4
Non Metals																		
Total Cyanide	#N/A	#N/A	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
pH	#N/A	#N/A	8.49	7.84	8.61	7.57	8.26	9.7	8.62	8.46	10.99	8.59	7.8	8.45	11.55	8.51	8.56	11.71
Dissolved Organic Carbon	#N/A	#N/A	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	5
TPH compounds																		
Benzene	#N/A	#N/A	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	#N/A	#N/A	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,4-Dichlorobenzene	#N/A	#N/A	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
o-Xylene	#N/A	#N/A	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
m-Xylene	#N/A	#N/A	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Methyl Tertiary Butyl Ether	#N/A	#N/A	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Aliphatics																		
Al -C5-C8	#N/A	#N/A	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Al -C9-C19	#N/A	#N/A	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Al -C10-C13	#N/A	#N/A	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Al -C12-C17	#N/A	#N/A	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Al -C16-C22	#N/A	#N/A	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Al -C21-C36	#N/A	#N/A	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Aliphatics >C35-C44	#N/A	#N/A	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Aromatics																		
Arom -EC5-EC7	#N/A	#N/A	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Arom -EC7-EC9	#N/A	#N/A	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Arom -EC9-EC11	#N/A	#N/A	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Arom -EC10-EC13	#N/A	#N/A	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Arom -EC12-EC17	#N/A	#N/A	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Arom -EC16-EC22	#N/A	#N/A	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Arom -EC21-EC36	#N/A	#N/A	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Aromatics >EC35-EC44	#N/A	#N/A	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
EPH (C8-240)	#N/A	#N/A	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
PCBs																		
Total 7 PCBs	#N/A	#N/A	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7
PCB 101	#N/A	#N/A	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB 118	#N/A	#N/A	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB 138	#N/A	#N/A	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB 183	#N/A	#N/A	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB 180	#N/A	#N/A	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB 28	#N/A	#N/A	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB 52	#N/A	#N/A	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenols																		
Phenol	#N/A	#N/A	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-Chlorophenol	#N/A	#N/A	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-Methylphenol	#N/A	#N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-Dichlorophenol	#N/A	#N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-Nitrophenol	#N/A	#N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-Trichlorophenol	#N/A	#N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-Chloro-3-methylphenol	#N/A	#N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-Methylphenol	#N/A	#N/A	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
4-Nitrophenol	#N/A	#N/A	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2,4-Dimethylphenol	#N/A	#N/A	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2,4,6-Trichlorophenol	#N/A	#N/A	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Poly Aromatic Hydrocarbons																		
Acenaphthene	#N/A	#N/A	<0.13	0.11	0.07	0.08	0.14	0.04	0.02	0.05	0.06	0.08	0.02	0.04	0.08	0.04	0.08	0.08
Acenaphthylene	#N/A	#N/A	<0.1	0.05	0.05	0.06	0.13	0.04	0.05	0.06	0.06	0.06	0.04	0.04	0.05	0.04	0.05	0.04
Anthracene	#N/A	#N/A	<0.011	0.09	0.06	0.05	0.09	0.05	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Benzo[a]anthracene	#N/A	#N/A	<0.013	0.11	0.08	0.05	0.12	0.04	0.01	0.12	0.04	0.15	0.02	0.11	0.02	0.15	0.02	0.15
Benzo[a]pyrene	#N/A	#N/A	<0.018	0.14	0.09	0.03	0.12	0.03	0.04	0.03	0.03	0.07	0.01	0.02	0.07	0.01	0.02	0.07
Benzo[b]fluoranthene	#N/A	#N/A	<0.01	0.08	0.01	0.03	0.09	0.06	0.01	0.06	0.03	0.07	0.01	0.01	0.07	0.01	0.01	0.07
Benzo[k]fluoranthene	#N/A	#N/A	<0.011	0.21	0.06	0.01	0.24	0.2	0.5	0.06	0.01	0.38	0.01	0.02	0.38	0.01	0.02	0.38
Benzo[e]fluoranthene	#N/A	#N/A	<0.195	0.15	0.04	0.09	0.23	0.14	0.36	0.04	0.17	0.06	0.01	0.01	0.27	0.01	0.01	0.27
Benzo[ghi]perylene	#N/A	#N/A	<0.07	0.08	<0.011	0.08	0.06	0.04	0.06	0.04	0.07	0.06	0.01	0.02	0.08	0.01	0.02	0.08
Chrysene	#N/A	#N/A	<0.015	0.13	0.07	0.05	0.12	0.05	0.08	0.05	0.11	0.06	0.01	0.02	0.19	0.01	0.02	0.19
Dibenz[ah]anthracene	#N/A	#N/A	<0.011	0.01	<0.01	0.02	0.16	0.01	0.02	0.01	0.01	0.02	0.01	0.01	0.02	0.01	0.01	0.02
Fluoranthene	#N/A	#N/A	<0.013	0.09	0.05	0.09	0.08											

Appendix F – Groundwater Screening Assessment

Exploratory Hole	Depth	BH101 BH102 BH103 BH105 BH106 BH108 BH109 BH112									
		5.00-7.00	8.00-10.00	11.00-14.00	9.50-12.00	5.00-7.00	18.00 - 21.00	18.00-20.00	12.80 - 14.80		
Target	LOD	Chester Pebble Beds	Chester Pebble Beds	Chester Pebble Beds	Chester Pebble Beds	Chester Pebble Beds	Chester Pebble Beds	Chester Pebble Beds	Chester Pebble Beds	Chester Pebble Beds	
2-Nitrophenol	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
4-Chloroaniline	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Nitrobenzene	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Isophorone	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
Hexachlorobutadiene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	
Hexachloroethane	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Butylbenzyl phthalate	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Diethyl phthalate	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Dimethyl phthalate	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	
4-Bromophenylphenylether	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,2,4-Trichlorobenzene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	
1,3-Dichlorobenzene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	
Bis(2-chloroethoxy)methane	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
4-Chlorophenylphenylether	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	
VOCS											
Vinyl Chloride	ug/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
Trichloroethene (TCE)	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	
Carbon tetrachloride	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	
Chlorobenzene	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	
Chloroform	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	
1,1,1,2-Tetrachloroethane	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	
1,1,1-Trichloroethane	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	
1,3-Dichlorobenzene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	
1,4-Dichlorobenzene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	
Tetrachloroethene (PCE)	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	
1,1,2-Trichloroethane	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	
1,1-Dichloroethane	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	
1,1-Dichloroethene (1,1 DCE)	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	
1,1-Dichloropropane	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	
1,2,3-Trichloropropane	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	
1,2,4-Trimethylbenzene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	
1,2-Dibromoethane	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	
1,2-Dichlorobenzene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	
1,2-Dichloroethane	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	
1,2-Dichloropropane	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	
1,3,5-Trimethylbenzene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	
1,3-Dichloropropane	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	
2,2-Dichloropropane	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	
2-Chlorotoluene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	
4-Chlorotoluene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	
Bromobenzene	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	
Bromochloromethane	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	
Bromodichloromethane	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	
Bromoform	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	
cis-1,2-Dichloroethane	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	
cis-1,3-Dichloropropene	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	
Dibromomethane	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	
4-Isopropyltoluene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	
Styrene	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	
trans-1,3-Dichloropropene	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	
1,1,2,2-Tetrachloroethane	ug/l	<4	<4	<4	<4	<4	<4	<4	<4	<4	
Bromomethane	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Chloroethane	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	
Chloromethane	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	
Isopropylbenzene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	
Dichlorodifluoromethane	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	
sec-Butylbenzene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	
tert-Butylbenzene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	
trans-1,2-Dichloroethane	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	
Dichloromethane (DCM)	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	
Trichlorofluoromethane	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	
1,2,3-Trichlorobenzene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	
1,2,4-Trichlorobenzene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	
1,2-Dibromo-3-chloropropane	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	
n-Butylbenzene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	
Dibromochloromethane	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	
Propylbenzene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	
1,2-Dibromo-3-chloropropane	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	
Others											
1-naphthol	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
2-isopropylphenol	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
Catechol	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
Resorcinol	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
Xylenols	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
m/p-cresol	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
o-cresol	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
Total cresols	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
2,3,5-trimethyl phenol	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	

Determinant	Unit	Minimum	Maximum	Count	Source	AGAC	Exceedances of AECOM GACs
2-Nitrophenol	ug/l	<LOD	<LOD	9	LOD	LOD	
4-Chloroaniline	ug/l	<LOD	<LOD	9	LOD	LOD	
Nitrobenzene	ug/l	<LOD	<LOD	9	WHO DWG 2011	30 ug/l	
Isophorone	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	78 ug/l	
Hexachlorobutadiene	ug/l	<LOD	<LOD	9	WHO DWG 2011	0.6 ug/l	
Hexachloroethane	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	0.33 ug/l	
Butylbenzyl phthalate	ug/l	<LOD	<LOD	9	WFD England/Wales, 2015 - Freshwater	7.5 ug/l	
Diethyl phthalate	ug/l	<LOD	<LOD	9	SEPA WAT-SG-53 Fresh EOS - AA - 201	200 ug/l	
Dimethyl phthalate	ug/l	<LOD	<LOD	9	LOD	LOD	
4-Bromophenylphenylether	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	13 ug/l	
1,2,4-Trichlorobenzene	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	1.1 ug/l	
1,3-Dichlorobenzene	ug/l	<LOD	<LOD	9	LOD	LOD	
Bis(2-chloroethoxy)methane	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	59 ug/l	
4-Chlorophenylphenylether	ug/l	<LOD	<LOD	9	AGAC	LOD	
VOCS							
Vinyl Chloride	ug/l	<LOD	<LOD	9	LOD	LOD	
Trichloroethene (TCE)	ug/l	<LOD	<LOD	9	LOD	LOD	
Carbon tetrachloride	ug/l	<LOD	<LOD	9	WS Regs 2010 (Eng/Wal)	3 ug/l	
Chlorobenzene	ug/l	<LOD	<LOD	9	WHO DWG 2011	300 ug/l	
Chloroform	ug/l	<LOD	<LOD	5	WFD England/Wales, 2015 - AA-EQS Ini	2.5 ug/l	1
1,1,1,2-Tetrachloroethane	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	0.57 ug/l	
1,1,1-Trichloroethane	ug/l	<LOD	<LOD	9	WHO DWG 2011	2000 ug/l	
1,3-Dichlorobenzene	ug/l	<LOD	<LOD	9	LOD	LOD	
1,4-Dichlorobenzene	ug/l	<LOD	<LOD	9	WHO DWG 2011	300 ug/l	
Tetrachloroethene (PCE)	ug/l	<LOD	<LOD	9	WFD England/Wales, 2015 - AA-EQS Ini	10 ug/l	
1,1,2-Trichloroethane	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	0.28 ug/l	
1,1-Dichloroethane	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	2.7 ug/l	
1,1-Dichloroethene (1,1 DCE)	ug/l	<LOD	<LOD	9	LOD	LOD	
1,1-Dichloropropane	ug/l	<LOD	<LOD	9	LOD	LOD	
1,2,3-Trichloropropane	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	0.00075 ug/l	
1,2,4-Trimethylbenzene	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	26100 ug/l	
1,2-Dibromoethane	ug/l	<LOD	<LOD	9	WHO DWG 2011	0.4 ug/l	
1,2-Dichlorobenzene	ug/l	<LOD	<LOD	9	WHO DWG 2011	1000 ug/l	
1,2-Dichloroethane	ug/l	<LOD	<LOD	9	WS Regs 2010 (Eng/Wal)	3 ug/l	
1,2-Dichloropropane	ug/l	<LOD	<LOD	9	WHO DWG 2011	40 ug/l	
1,3,5-Trimethylbenzene	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	120 ug/l	
1,3-Dichloropropane	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	370 ug/l	
2,2-Dichloropropane	ug/l	<LOD	<LOD	9	LOD	LOD	
2-Chlorotoluene	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	240 ug/l	
4-Chlorotoluene	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	250 ug/l	
Bromobenzene	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	62 ug/l	
Bromochloromethane	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	83 ug/l	
Bromodichloromethane	ug/l	<LOD	<LOD	9	LOD	LOD	
Bromoform	ug/l	<LOD	<LOD	9	LOD	LOD	
cis-1,2-Dichloroethane	ug/l	<LOD	<LOD	9	LOD	LOD	
cis-1,3-Dichloropropene	ug/l	<LOD	<LOD	9	LOD	LOD	
Dibromomethane	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	8 ug/l	
4-Isopropyltoluene	ug/l	<LOD	<LOD	9	LOD	LOD	
Styrene	ug/l	<LOD	<LOD	9	WHO DWG 2011	20 ug/l	
trans-1,3-Dichloropropene	ug/l	<LOD	<LOD	9	LOD	LOD	
1,1,2,2-Tetrachloroethane	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	7 ug/l	
Bromomethane	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	0.076 ug/l	
Chloroethane	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	21000 ug/l	
Chloromethane	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	190 ug/l	
Isopropylbenzene	ug/l	<LOD	<LOD	9	LOD	LOD	
Dichlorodifluoromethane	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	200 ug/l	
sec-Butylbenzene	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	2000 ug/l	
tert-Butylbenzene	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	6	



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