

The property is not in an area for which a notice has been given under section 41 of the Coal Industry Act 1994, revoking the entitlement to withdraw support.

Working Facilities Orders

The property is not in an area for which an Order has been made under the provisions of the Mines (Working Facilities and Support) Acts 1923 and 1966 or any statutory modification or amendment thereof.

Payments to Owners of Former Copyhold Land

The property is not in an area for which a relevant notice has been published under the Coal Industry Act 1975/Coal Industry Act 1994.

Comments on Coal Authority information

In view of the mining circumstances a prudent developer would seek appropriate technical advice before any works are undertaken.

Therefore if development proposals are being considered, technical advice relating to both the investigation of coal and former coal mines and their treatment should be obtained before beginning work on site. All proposals should apply good engineering practice developed for mining areas. No development should be undertaken that intersects, disturbs or interferes with any coal or mines of coal without the permission of the Coal Authority. Developers should be aware that the investigation of coal seams/ former mines of coal may have the potential to generate and/or displace underground gases and these risks both under and adjacent to the development should be fully considered in developing any proposals. The need for effective measures to prevent gases entering into public properties either during investigation or after development also needs to be assessed and properly addressed. This is necessary due to the public safety implications of any development in these circumstances.

Information from the Cheshire Brine Subsidence Compensation Board

The property lies outside the Cheshire Brine Compensation District.

Additional remarks

This report is prepared in accordance with the Law Society's Guidance Notes 2006, the User Guide 2006 and the Coal Authority and Cheshire Brine Board's Terms and Conditions 2006. The report is compliant with Home Information Pack requirements.

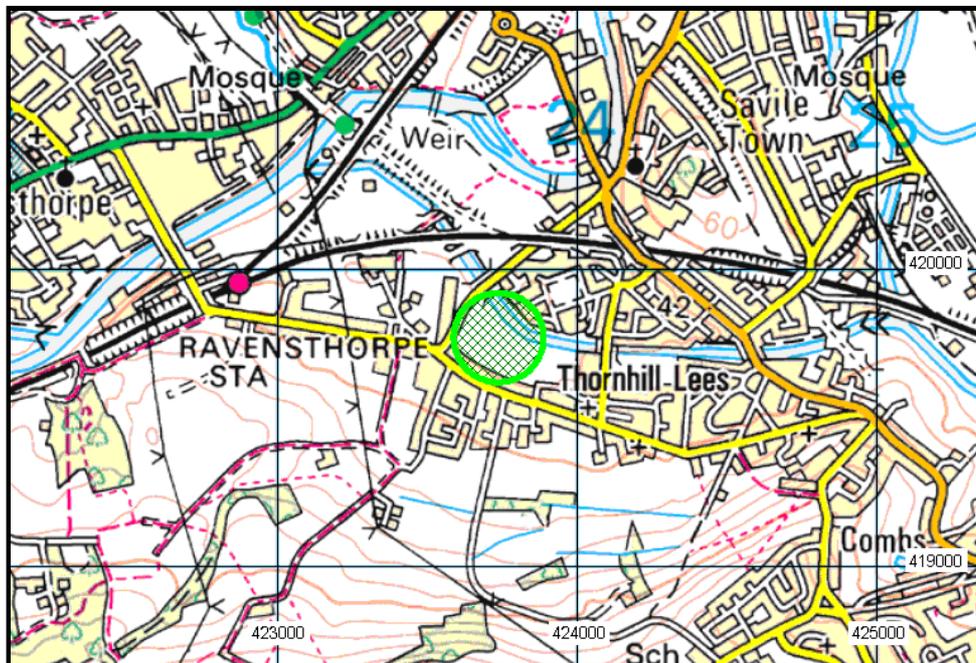
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Issued by:	The Coal Authority, 200 Lichfield Lane, Mansfield, Nottinghamshire, NG18 4RG
Date:	15 Sep 2010
Coal and Brine Report at:	Forge Lane, Thornhill Lees, Dewsbury, West Yorkshire
Reference number:	00040697-10
Cost:	£64.00
Plus VAT:	£11.20
Total received:	£75.20
VAT registration number:	598 5850 68

Location map



Approximate position of property

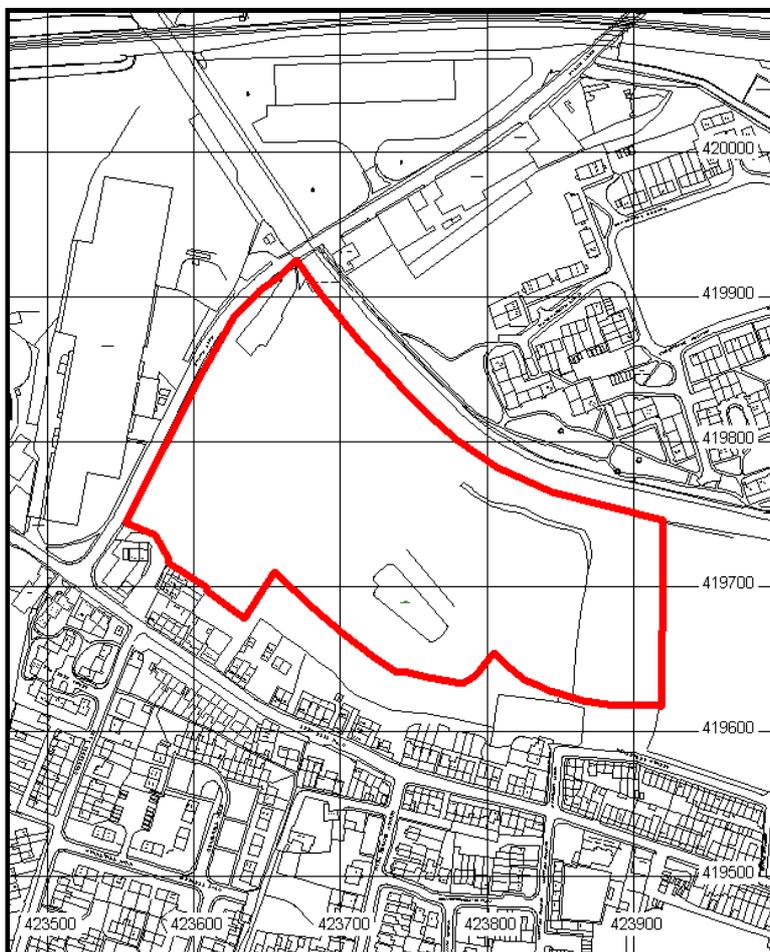


Enquiry boundary

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Key

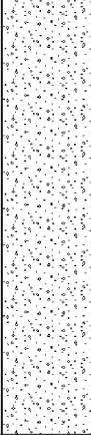
Approximate position of enquiry boundary shown



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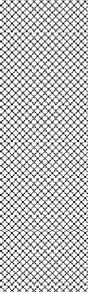
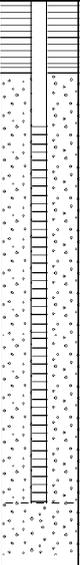
Appendix G
Exploratory Hole Logs

Site: Forge Lane	Location: Forge Lane, Thornhill Lees, West Yorkshire, WF12 9EN	Ground Level (mASD):38.28	Hole Diameter (mm): -	Scale 1:30
Client: Kirklees Council		Easting: 423643 Northing: 41973	Well Diameter (mm): 50	Logged by: JJH
Project: 96234.01	Date: 14/02/2011	Method: Percussive sampling		Checked by:

STRATA RECORD		IN SITU TESTS / SAMPLES							Sheet 1 of 1	
Description	Legend	Depth (m bgl)	Level (mASD)	Sample Type	Sample Depth (m)	PID (ppm)	PPT (kPa)	SPT N Value	Well Details	Water Level
MADE GROUND: CONCRETE.		0.11	38.17							
MADE GROUND: Black sandy GRAVEL of angular to subangular fine to coarse bitumen and brick and occasional concrete. ---Below 0.50 slightly clayey.		0.70	37.58	D	0.50-0.70 0.50	<1				
Soft to firm light brown slightly gravelly sandy CLAY. ---0.70-0.80 firm and red brown.		1.00	37.28	D	0.90-1.00 1.00	<1		N=12 (2,3/2,2,4,4)		▽ 1
Medium dense to dense light brown very gravelly SAND. Gravel is subangular to rounded fine to coarse of sandstone and mudstone. ---2.6-3.0m dark brown.				D	1.50	<1				
				D	2.00	<1		N=30 (2,2/8,7,7,8)		2
				D	2.50-3.00 2.50	<1		34/150mm (15,16/17,17 for 75mm)		
End of Borehole at 3.00 m		3.00	35.28	D	3.00	<1				3
										4
										5

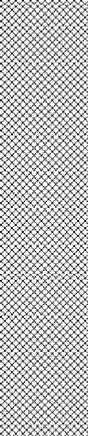
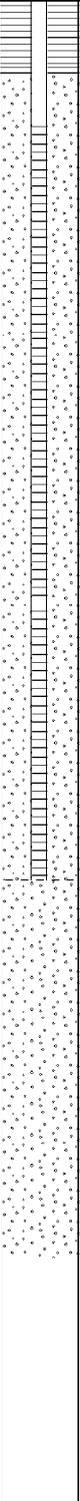
Key: D Disturbed Sample PPT Pocket Penetrometer Test B Bulk Sample PID Photoionisation Detector U Undisturbed Sample SPT Standard Penetration Test (Uncorrected) J Jar Sample  Water Strike  Standing Water Level	Remarks: Collapsing back to 2.30m. Wet in natural.
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Site: Forge Lane	Location: Forge Lane, Thornhill Lees, West Yorkshire, WF12 9EN	Ground Level (mASD):38.73	Hole Diameter (mm): -	Scale 1:30
Client: Kirklees Council		Easting: 423619 Northing: 419814	Well Diameter (mm): 50	Logged by: JJH
Project: 96234.01	Date: 14/02/2011	Method: Percussive sampling		Checked by:

STRATA RECORD		IN SITU TESTS / SAMPLES							Sheet 1 of 1	
Description	Legend	Depth (m bgl)	Level (mASD)	Sample Type	Sample Depth (m)	PID (ppm)	PPT (kPa)	SPT N Value	Well Details	Water Level
MADE GROUND: CONCRETE.										
MADE GROUND: Brown sandy GRAVEL of subangular to subrounded sandstone.		0.20	38.53							
MADE GROUND: Black sandy GRAVEL of angular to subangular fine to coarse bitumen, coal, brick and clinker.		0.40	38.33	D	0.50	<1				
---Wet at 1.20m				D	0.80-1.00			N=12 (1.0/0.0,4,8)		1
				D	0.90					
				D	1.00	<1				
MADE GROUND: Sandstone.		1.60	37.13	D	1.40-1.60					
MADE GROUND: Brown very soft CLAY with gravel of bitumen.		1.75	36.98							
MADE GROUND: Sandstone (assumed cobble/boulder).		1.85	36.88							
End of Borehole at 2.20 m		2.20	36.53					33/150mm (25,23/15,18 for 75mm)		2
										3
										4
										5

Key: D Disturbed Sample PPT Pocket Penetrometer Test B Bulk Sample PID Photoionisation Detector U Undisturbed Sample SPT Standard Penetration Test (Uncorrected) J Jar Sample  Water Strike  Standing Water Level	Remarks: Refusal in made ground on sandstone at 2.70m. Wet below 1.20m.
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Site: Forge Lane	Location: Forge Lane, Thornhill Lees, West Yorkshire, WF12 9EN	Ground Level (mASD):38.65	Hole Diameter (mm): -	Scale 1:30
Client: Kirklees Council		Easting: 423654 Northing: 419854	Well Diameter (mm): 50	Logged by: JJH
Project: 96234.01	Date: 14/02/2011	Method: Percussive sampling		Checked by:

STRATA RECORD		IN SITU TESTS / SAMPLES							Sheet 1 of 1	
Description	Legend	Depth (m bgl)	Level (mASD)	Sample Type	Sample Depth (m)	PID (ppm)	PPT (kPa)	SPT N Value	Well Details	Water Level
MADE GROUND: CONCRETE with rebar.		0.20	38.45							
MADE GROUND: Black and red mottled sandy GRAVEL. Gravel is angular to subangular fine to coarse of mixed lithologies.				D	0.50	<1				
				D	0.60-0.80	<1				
				D	1.00	<1		N=11 (3,3/2,3,4,2)		1
				D D	1.50 1.60-1.80	<1				
Soft black CLAY with occasional fine sandstone gravel and plant matter.		2.00	36.65	D	2.00	<1		N=7 (2,2/2,1,2,2)		2
				D	2.50	<1				
				D	2.70	<1				
				D	3.00	<1		N=5 (0,1/1,1,1,2)	3	
Medium dense brown sandy GRAVEL of subangular to rounded fine to coarse sandstone.		4.00	34.65	D	4.00	<1		N=21 (6,7/7,6,3,5)		4
End of Borehole at 5.00 m		5.00	33.65					N=25 (1,3/5,6,6,8)		5

Key: D Disturbed Sample PPT Pocket Penetrometer Test B Bulk Sample PID Photoionisation Detector U Undisturbed Sample SPT Standard Penetration Test (Uncorrected) J Jar Sample  Water Strike  Standing Water Level	Remarks: Collapsing in sand. Groundwater at approx.3m.
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Site: Forge Lane	Location: Forge Lane, Thornhill Lees, West Yorkshire, WF12 9EN	Ground Level (mASD):38.00	Hole Diameter (mm): -	Scale 1:30
Client: Kirklees Council		Easting: 423677 Northing: 419760	Well Diameter (mm): 50	Logged by: JJH
Project: 96234.01	Date: 15/02/2011	Method: Percussive sampling		Checked by:

STRATA RECORD		IN SITU TESTS / SAMPLES							Sheet 1 of 1	
Description	Legend	Depth (m bgl)	Level (mASD)	Sample Type	Sample Depth (m)	PID (ppm)	PPT (kPa)	SPT N Value	Well Details	Water Level
MADE GROUND: CONCRETE.		0.15	37.85							
MADE GROUND: Brown gravelly CLAY. Gravel is angular to subangular fine to medium of brick and sandstone.		0.30	37.70	D	0.30-0.70					
MADE GROUND: Black sandy GRAVEL of angular to subangular fine to medium clinker, slag and coal.				D	0.50	<1				
Firm stiff brown slightly gravelly CLAY. Gravel is angular to subangular fine of sandstone.		0.70	37.30	D	0.90					
				D	1.00	<1		N=39 (2,5/10,9,10,10)		1
Light brown sandy GRAVEL of subangular to sub rounded fine to coarse sandstone.		1.30	36.70	D	1.50-1.70	<1				
				D	1.50					
				D	2.00	<1		41/150mm (11,13/16,25 for 75mm)		2
End of Borehole at 2.30 m		2.30	35.70							
										3
										4
										5

Key: D Disturbed Sample PPT Pocket Penetrometer Test B Bulk Sample PID Photoionisation Detector U Undisturbed Sample SPT Standard Penetration Test (Uncorrected) J Jar Sample  Water Strike  Standing Water Level	Remarks: SPT refused at 2.30m. Aborted hole.
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Site: Forge Lane	Location: Forge Lane, Thornhill Lees, West Yorkshire, WF12 9EN	Ground Level (mASD):38.41	Hole Diameter (mm): -	Scale 1:30
Client: Kirklees Council		Easting: 423613 Northing: 419744	Well Diameter (mm): 50	Logged by: JJH
Project: 96234.01	Date: 15/02/2011	Method: Percussive sampling		Checked by:

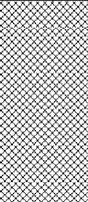
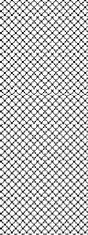
STRATA RECORD		IN SITU TESTS / SAMPLES							Sheet 1 of 1	
Description	Legend	Depth (m bgl)	Level (mASD)	Sample Type	Sample Depth (m)	PID (ppm)	PPT (kPa)	SPT N Value	Well Details	Water Level
TOPSOIL: Grass over dark brown sandy SILT.		0.10	38.31							
MADE GROUND: Brown very clayey very gravelly SAND. Gravel is angular to subangular fine to coarse of brick and stone.		0.40	38.01							
MADE GROUND: Sandstone.		0.60	37.81	D	0.50	<1				
MADE GROUND: Dark brown slightly gravelly sandy CLAY. Gravel is angular to subangular fine of sandstone, coal and occasional brick.				D	0.80-1.00					
				D	1.00	<1		N=6 (1,2/1,1,2, 2)		1
---Pocket of sand 1.10 - 1.15m.				D	1.50	<1				
		1.80	36.61							
Firm, soft in places, green grey mottled dark grey sandy CLAY.				D	2.00	<1		N=1 (0,0/0,0,0, 1)		2
				D	2.30-2.50					
				D	2.50	<1				
				D	2.60-2.90					
		2.95	35.46							
Loose to dense light brown gravelly SAND. Gravel is subangular to subrounded fine to coarse of sandstone. Occasional layers of clay.				D	3.00	<1		N=7 (0,0/2,2,1, 2)		3
				D	3.50	<1				
				D	4.00	<1				4
				D	4.50	<1				
				D	4.70-4.90			N=63 (8,10/13,16, 16,18)		
		5.00	33.41							5
End of Borehole at 5.00 m				D	5.00	<1				

Key: D Disturbed Sample PPT Pocket Penetrometer Test B Bulk Sample PID Photoionisation Detector U Undisturbed Sample SPT Standard Penetration Test J Jar Sample (Uncorrected) Water Strike Standing Water Level	Remarks:
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Site: Forge Lane	Location: Forge Lane, Thornhill Lees, West Yorkshire, WF12 9EN	Ground Level (mASD):38.35	Hole Diameter (mm): -	Scale 1:30
Client: Kirklees Council		Easting: 423737 Northing: 419804	Well Diameter (mm): 50	Logged by: JJH
Project: 96234.01	Date: 15/02/2011	Method: Percussive sampling		Checked by:

STRATA RECORD
IN SITU TESTS / SAMPLES

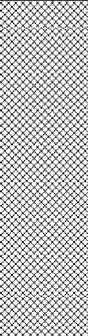
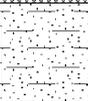
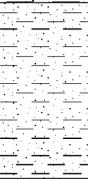
Sheet 1 of 1

Description	Legend	Depth (m bgl)	Level (mASD)	Sample Type	Sample Depth (m)	PID (ppm)	PPT (kPa)	SPT N Value	Well Details	Water Level
MADE GROUND: CONCRETE with rebar.		0.15	38.20							
MADE GROUND: Dark brown sandy gravelly CLAY. Gravel is angular to subangular fine to coarse of brick concrete and sandstone. Occasional clay layers and cobbles of sandstone and slag.				D	0.50	<1				
				D	0.70-1.00					
---0.9-1.3m mottled white (possibly chalk).				D	1.00	<1		N=30 (2,3/6,7,9,8)		1
				D	1.50-1.70 1.50	<1				
Medium dense brown very gravelly SAND. Gravel is subangular to subrounded fine to coarse sandstone.		1.90	36.45	D	2.00	<1		N=12 (2,2/2,3,3,4)		2
				D	2.30-2.50					
				D	2.50	<1				
				D	3.00	<1		N=25 (5,7/6,6,6,7)		3
				D	3.50	<1				
End of Borehole at 4.00 m		4.00	34.35							4
										5

Key:			
D	Disturbed Sample	PPT	Pocket Penetrometer Test
B	Bulk Sample	PID	Photoionisation Detector
U	Undisturbed Sample	SPT	Standard Penetration Test (Uncorrected)
J	Jar Sample		
	Water Strike		
	Standing Water Level		

Remarks: Collapsing in sand.

Site: Forge Lane	Location: Forge Lane, Thornhill Lees, West Yorkshire, WF12 9EN	Ground Level (mASD):38.53	Hole Diameter (mm): -	Scale 1:30
Client: Kirklees Council		Easting: 423697 Northing: 419843	Well Diameter (mm): 50	Logged by: JJH
Project: 96234.01	Date: 15/02/2011	Method: Percussive sampling		Checked by:

STRATA RECORD		IN SITU TESTS / SAMPLES							Sheet 1 of 1	
Description	Legend	Depth (m bgl)	Level (mASD)	Sample Type	Sample Depth (m)	PID (ppm)	PPT (kPa)	SPT N Value	Well Details	Water Level
MADE GROUND: CONCRETE.		0.15	38.38							
MADE GROUND: Brown and black very gravelly SAND with occasional brick cobbles. Gravel is angular to subangular fine to coarse of brick, slag, clinker and stone.				D	0.50	<1				
				D	0.70-1.00					
				D	1.00	<1		N=14 (1,3/4,3,4, 3)		1
MADE GROUND: Brown sandy gravelly CLAY. Gravel is angular to subangular fine to coarse sandstone.		1.50	37.03	D	1.50	<1				
Medium dense brown clayey SAND.		1.90	36.63	D	2.00	<1		N=0 (0,0/0,0,0, 0)		2
Soft green grey mottled black slightly sandy CLAY.		2.30	36.23	D	2.50					
Brown gravelly SAND. Gravel of subangular to subrounded fine to coarse sandstone.		3.00	35.53					N=26 (6,7/7,6,6, 7)		3
End of Borehole at 4.00 m		4.00	34.53					N=18 (2,2/4,3,5, 6)		4
										5

Key: D Disturbed Sample PPT Pocket Penetrometer Test B Bulk Sample PID Photoionisation Detector U Undisturbed Sample SPT Standard Penetration Test J Jar Sample (Uncorrected)  Water Strike  Standing Water Level	Remarks:
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Site: Forge Lane	Location: Forge Lane, Thornhill Lees, West Yorkshire, WF12 9EN	Ground Level (mASD):37.86	Hole Diameter (mm): -	Scale 1:30
Client: Kirklees Council		Easting: 423671 Northing: 419717	Well Diameter (mm): 50	Logged by: JJH
Project: 96234.01	Date: 16/02/2011	Method: Percussive sampling		Checked by:

STRATA RECORD		IN SITU TESTS / SAMPLES							Sheet 1 of 1	
Description	Legend	Depth (m bgl)	Level (mASD)	Sample Type	Sample Depth (m)	PID (ppm)	PPT (kPa)	SPT N Value	Well Details	Water Level
TOPSOIL: Grass covered brown sandy CLAY.		0.05	37.81							
MADE GROUND: Light brown gravelly SAND. Gravel of subangular to subrounded fine to coarse sandstone.		0.30	37.56							
MADE GROUND: Dark brown grey slightly clayey very gravelly AND. Gravel is angular to subangular fine to coarse of brick, concrete and slag.		0.60	37.26	D	0.60-0.75					
MADE GROUND: Dark grey slightly gravelly very silty SAND. Gravel is angular to subangular fine to medium of sandstone and brick.		0.75	37.11	D	0.80					
Light brown very sandy CLAY (very clayey SAND in parts).				D	1.00-1.30			N=7 (2,2/1,1,2,3)		1
Dense light brown clayey SAND.		2.00	35.86					N=51 (4,7/9,12,14,16)		2
Light brown very gravelly SAND.		2.60	35.26							
End of Borehole at 3.00 m		3.00	34.86							3
										4
										5

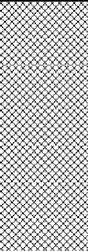
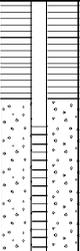
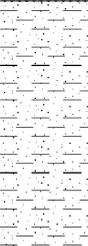
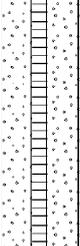
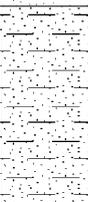
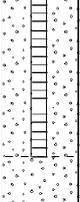
Key: D Disturbed Sample PPT Pocket Penetrometer Test B Bulk Sample PID Photoionisation Detector U Undisturbed Sample SPT Standard Penetration Test (Uncorrected) J Jar Sample  Water Strike  Standing Water Level	Remarks: Refused on cobble at 3m.
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Site: Forge Lane	Location: Forge Lane, Thornhill Lees, West Yorkshire, WF12 9EN	Ground Level (mASD):37.84	Hole Diameter (mm): -	Scale 1:30
Client: Kirklees Council		Easting: 423706 Northing: 419740	Well Diameter (mm): 50	Logged by: JJH
Project: 96234.01	Date: 16/02/2011	Method: Percussive sampling		Checked by:

STRATA RECORD		IN SITU TESTS / SAMPLES							Sheet 1 of 1	
Description	Legend	Depth (m bgl)	Level (mASD)	Sample Type	Sample Depth (m)	PID (ppm)	PPT (kPa)	SPT N Value	Well Details	Water Level
TOPSOIL: Dark brown sandy CLAY with rootlets.		0.05	37.79							
MADE GROUND: Brown and grey very clayey very sandy GRAVEL/very gravelly sandy CLAY. Gravel is angular to subangular fine to coarse of mixed lithologies.				D	0.50	<1				
MADE GROUND: Very soft brown slightly gravelly sandy CLAY. Very poor recovery.		1.00	36.84	D	1.00-2.00			N=4 (1,1/0,1,1,2)		1
				D	1.50	<1				
MADE GROUND: Very soft black and dark brown sandy CLAY/SILT.		2.00	35.84					N=3 (0,1/1,0,1,1)		2
				D	2.50-2.80 2.50	<1				
				D	2.80-3.00					
				D	3.00	<1		N=2 (0,1/1,0,0,1)		3
MADE GROUND: Soft green grey silty CLAY.		3.50	34.34	D	3.50	<1				
				D	3.60-3.80					
---Firm below 4.0m.				D	4.00	<1		N=22 (6,6/6,5,6,5)		4
Brown gravelly SAND. Gravel is sub angular to subrounded fine of sandstone.		4.30	33.54							
End of Borehole at 5.00 m		5.00	32.84	D	5.00	<1				5

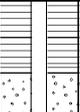
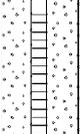
Key: D Disturbed Sample PPT Pocket Penetrometer Test B Bulk Sample PID Photoionisation Detector U Undisturbed Sample SPT Standard Penetration Test (Uncorrected) J Jar Sample Water Strike Standing Water Level	Remarks:
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Site: Forge Lane	Location: Forge Lane, Thornhill Lees, West Yorkshire, WF12 9EN	Ground Level (mASD):37.77	Hole Diameter (mm): -	Scale 1:30
Client: Kirklees Council		Easting: 423886 Northing: 419628	Well Diameter (mm): 50	Logged by: JJH
Project: 96234.01	Date: 16/02/2011	Method: Percussive sampling		Checked by:

STRATA RECORD		IN SITU TESTS / SAMPLES							Sheet 1 of 1	
Description	Legend	Depth (m bgl)	Level (mASD)	Sample Type	Sample Depth (m)	PID (ppm)	PPT (kPa)	SPT N Value	Well Details	Water Level
MADE GROUND: Brown and green grey slightly sandy CLAY with occasional brick fragments. Very poor recovery.				D	0.50-1.00	<1				
Soft to firm light brown very sandy CLAY with occasional sandstone gravel. Poor recovery.		1.00	36.77	D	1.50-2.00	<1		N=0 (0,0/0,0,0,0)		1
Medium dense light brown slightly clayey SAND.		2.00	35.77					N=19 (1,2/2,5,5,7)		2
Light brown sandy GRAVEL of subangular to subrounded fine to coarse sandstone.		2.80	34.97							
End of Borehole at 3.00 m		3.00	34.77							3
										4
										5

Key: D Disturbed Sample PPT Pocket Penetrometer Test B Bulk Sample PID Photoionisation Detector U Undisturbed Sample SPT Standard Penetration Test (Uncorrected) J Jar Sample  Water Strike  Standing Water Level	Remarks: Collapsing in gravel.
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Site: Forge Lane	Location: Forge Lane, Thornhill Lees, West Yorkshire, WF12 9EN	Ground Level (mASD):37.58	Hole Diameter (mm): -	Scale 1:30
Client: Kirklees Council		Easting: 423901 Northing: 419660	Well Diameter (mm): 50	Logged by: JJH
Project: 96234.01	Date: 16/02/2011	Method: Percussive sampling		Checked by:

STRATA RECORD		IN SITU TESTS / SAMPLES							Sheet 1 of 1	
Description	Legend	Depth (m bgl)	Level (mASD)	Sample Type	Sample Depth (m)	PID (ppm)	PPT (kPa)	SPT N Value	Well Details	Water Level
TOPSOIL: Dark brown sandy CLAY with rootlets.										
Firm brown very sandy CLAY.		0.45	37.13	D	0.70-1.00					
Medium dense brown gravelly SAND. Gravel is subangular to subrounded fine to coarse of sandstone.		1.00	36.58	D	1.50-1.80			N=10 (1,1/1,2.5,2)		1
								N=24 (1,3/5,7.5,7)		2
End of Borehole at 3.00 m		3.00	34.58							3
										4
										5

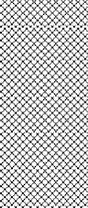
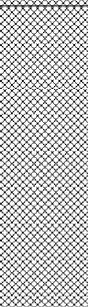
Key: D Disturbed Sample PPT Pocket Penetrometer Test B Bulk Sample PID Photoionisation Detector U Undisturbed Sample SPT Standard Penetration Test (Uncorrected) J Jar Sample  Water Strike  Standing Water Level	Remarks: Collapsing in sand.
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Site: Forge Lane	Location: Forge Lane, Thornhill Lees, West Yorkshire, WF12 9EN	Ground Level (mASD):37.28	Hole Diameter (mm): -	Scale 1:30
Client: Kirklees Council		Easting: 423905 Northing: 419718	Well Diameter (mm): 50	Logged by: JJH
Project: 96234.01	Date: 16/02/2011	Method: Percussive sampling		Checked by:

STRATA RECORD		IN SITU TESTS / SAMPLES								Sheet 1 of 1	
Description	Legend	Depth (m bgl)	Level (mASD)	Sample Type	Sample Depth (m)	PID (ppm)	PPT (kPa)	SPT N Value	Well Details	Water Level	
MADE GROUND: Brown grey slightly gravelly CLAY with rootlets. Gravel is angular to subangular of pottery and coal.											
Soft to firm orange brown and grey mottled sandy CLAY.		0.50	36.78	D	0.50	<1					
Medium dense light brown and grey mottled clayey SAND.		1.00	36.28	D	1.00	<1		N=3 (1,1/1,0,1,1)		1	
				D	1.50	<1					
				D	2.00	<1		N=24 (2,6/6,7,6,5)		2	
Light brown very gravelly SAND. Gravel is subangular to subrounded fine to coarse of sandstone.		2.50	34.78	D	2.50	<1					
End of Borehole at 3.00 m		3.00	34.28	D	3.00	<1				3	
										4	
										5	

Key: D Disturbed Sample PPT Pocket Penetrometer Test B Bulk Sample PID Photoionisation Detector U Undisturbed Sample SPT Standard Penetration Test (Uncorrected) J Jar Sample Water Strike Standing Water Level	Remarks: Collapsing in sand.
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Site: Forge Lane	Location: Forge Lane, Thornhill Lees, West Yorkshire, WF12 9EN	Ground Level (mASD):40.96	Hole Diameter (mm): -	Scale 1:30
Client: Kirklees Council		Easting: 423668 Northing: 419894	Well Diameter (mm): 50	Logged by: JJH
Project: 96234.01	Date: 17/02/2011	Method: Percussive sampling		Checked by:

STRATA RECORD		IN SITU TESTS / SAMPLES								Sheet 1 of 1	
Description	Legend	Depth (m bgl)	Level (mASD)	Sample Type	Sample Depth (m)	PID (ppm)	PPT (kPa)	SPT N Value	Well Details	Water Level	
TOPSOIL: Grass over dark brown sandy CLAY. 0.1m of sandstone cobble recovered. Very poor recovery.		0.10	40.86								
MADE GROUND: Brown and black very sandy very gravelly CLAY (becoming less sandy and gravelly below 1.5m) Gravel is angular to subangular fine to coarse of mixed lithologies.		1.00	39.96					N=14 (2,2/3,6,3,2)		1	
				D	1.50-2.00 1.50	<1					
				D	2.00	<1		N=6 (1,1/2,1,1,2)		2	
MADE GROUND: (Firm) Brown slightly gravelly CLAY. Gravel is angular to subangular fine to coarse of brick, sandstone and coal.		2.20	38.76								
				D	2.50	<1					
MADE GROUND: Black very gravelly CLAY. Gravel is angular to subangular fine to coarse coal.		2.95	38.01							3	
				D	3.00	<1		N=8 (1,2/3,2,2,1)			
Medium dense light brown very gravelly SAND. Gravel is subangular to rounded fine to coarse of sandstone.		3.50	37.46							4	
				D	3.50-4.00 3.50	<1					
				D	4.00	<1		N=27 (1,3/7,6,8,6)			
Firm green grey mottled black slightly sandy CLAY.		4.80	36.16								
				D	4.80-5.00	<1					
End of Borehole at 5.00 m		5.00	35.96							5	
				D	5.00	<1					

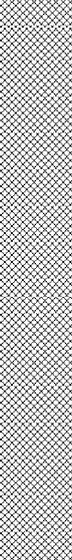
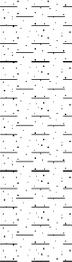
Key: D Disturbed Sample PPT Pocket Penetrometer Test B Bulk Sample PID Photoionisation Detector U Undisturbed Sample SPT Standard Penetration Test (Uncorrected) J Jar Sample  Water Strike  Standing Water Level	Remarks: Wet bellow 4m.
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Site: Forge Lane	Location: Forge Lane, Thornhill Lees, West Yorkshire, WF12 9EN	Ground Level (mASD):38.61	Hole Diameter (mm): -	Scale 1:30
Client: Kirklees Council		Easting: 423780 Northing: 419787	Well Diameter (mm): 50	Logged by: JJH
Project: 96234.01	Date: 17/02/2011	Method: Percussive sampling		Checked by:

STRATA RECORD		IN SITU TESTS / SAMPLES							Sheet 1 of 1	
Description	Legend	Depth (m bgl)	Level (mASD)	Sample Type	Sample Depth (m)	PID (ppm)	PPT (kPa)	SPT N Value	Well Details	Water Level
TOPSOIL: Dark brown sandy CLAY with rootlets and brick fragments.		0.05	38.56							
MADE GROUND: Red GRAVEL of brick.		0.20	38.41							
MADE GROUND: (Stiff) Brown slightly sandy slightly gravelly CLAY. Gravel is angular to subangular fine to coarse of coal and sandstone.				D	0.50-1.00 0.50	<1				
				D	1.00	<1		N=8 (2,2/2,2,2, 2)		1
				D	1.30-1.50					
				D	1.50	<1				
				D	2.00	<1		N=7 (1,2/2,2,1, 2)		2
				D	2.50-2.70 2.50	<1				
				D	3.00	<1		N=10 (3,3/2,2,2, 4)		3
Soft to firm green grey mottled black slightly sandy CLAY.		3.40	35.21	D	3.50 3.50-4.00	<1				
End of Borehole at 4.00 m		4.00	34.61	D	4.00	<1		N=3 (2,1/1,1,0, 1)		4
										5

Key: D Disturbed Sample PPT Pocket Penetrometer Test B Bulk Sample PID Photoionisation Detector U Undisturbed Sample SPT Standard Penetration Test J Jar Sample (Uncorrected) Water Strike Standing Water Level	Remarks: Collapsing in sand.
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Site: Forge Lane	Location: Forge Lane, Thornhill Lees, West Yorkshire, WF12 9EN	Ground Level (mASD):39.52	Hole Diameter (mm): -	Scale 1:30
Client: Kirklees Council		Easting: 423857 Northing: 419752	Well Diameter (mm): 50	Logged by: JJH
Project: 96234.01	Date: 17/02/2011	Method: Percussive sampling		Checked by:

STRATA RECORD		IN SITU TESTS / SAMPLES							Sheet 1 of 1	
Description	Legend	Depth (m bgl)	Level (mASD)	Sample Type	Sample Depth (m)	PID (ppm)	PPT (kPa)	SPT N Value	Well Details	Water Level
TOPSOIL: Dark brown sandy CLAY with rootlets.		0.10	39.42							
MADE GROUND: (Stiff) Grey becoming brown grey slightly sandy slightly gravelly CLAY. Gravel is angular to subangular fine to coarse of mixed lithologies.				D	0.50	<1				
---Below 1.0m orange brown.				D	1.00	<1		N=5 (1,1/1,1,1,2)		1
				D D	1.50 1.60-1.90	<1				
				D	2.00	<1		N=8 (0,1/2,2,2,2)		2
Stiff blue green sandy CLAY with occasional sandstone gravel.		2.40	37.12	D	2.50	<1				
				D	3.00	<1		N=10 (2,2/2,2,3,3)		3
Medium dense light brown clayey SAND.		3.50	36.02	D D	3.50 3.60-3.70	<1				
				D	4.00	<1		N=12 (1,2/3,3,3,3)		4
End of Borehole at 4.45 m		4.45	35.07							5

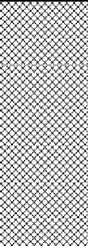
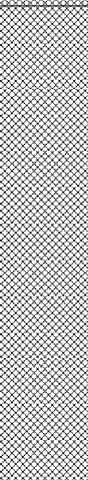
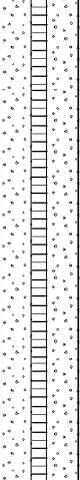
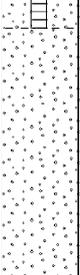
Key: D Disturbed Sample PPT Pocket Penetrometer Test B Bulk Sample PID Photoionisation Detector U Undisturbed Sample SPT Standard Penetration Test (Uncorrected) J Jar Sample  Water Strike  Standing Water Level	Remarks: Collapsing in sand.
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Site: Forge Lane	Location: Forge Lane, Thornhill Lees, West Yorkshire, WF12 9EN	Ground Level (mASD):38.10	Hole Diameter (mm): -	Scale 1:30
Client: Kirklees Council		Easting: 423796 Northing: 419737	Well Diameter (mm): 50	Logged by: JJH
Project: 96234.01	Date: 17/02/2011	Method: Percussive sampling		Checked by:

STRATA RECORD		IN SITU TESTS / SAMPLES								Sheet 1 of 1	
Description	Legend	Depth (m bgl)	Level (mASD)	Sample Type	Sample Depth (m)	PID (ppm)	PPT (kPa)	SPT N Value	Well Details	Water Level	
TOPSOIL: Brown sandy CLAY with rootlets.		0.10	38.00								
MADE GROUND: Brick, rubble.		0.25	37.85								
MADE GROUND: Black very gravelly SAND. Gravel is angular to subangular fine to coarse of slag, coal and clinker.				D	0.30						
				D	0.50	<1					
				D	0.80						
				D	1.00	<1			N=14 (2,3/3,4,4,3)		1
MADE GROUND: Dark grey slightly gravelly CLAY. Gravel is subangular fine to medium of sandstone.		1.30	36.80								
Firm brown and grey mottled sandy CLAY with occasional sandstone gravel.		1.50	36.60								
				D	2.00	<1		N=8 (2,2/1,2,3,2)		2	
Dense brown and grey mottled clayey SAND.		2.20	35.90								
				D	2.40-2.60						
Brown SAND and GRAVEL of subangular to rounded sandstone.				D	3.00	<1		N=49 (3,7/6,12,16,15)		3	
End of Borehole at 4.00 m		3.90	34.20								
		4.00	34.10	D	4.00	<1				4	
										5	

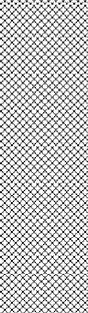
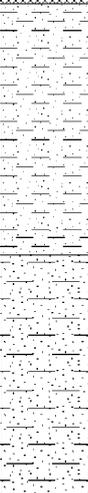
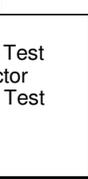
Key: D Disturbed Sample PPT Pocket Penetrometer Test B Bulk Sample PID Photoionisation Detector U Undisturbed Sample SPT Standard Penetration Test (Uncorrected) J Jar Sample Water Strike Standing Water Level	Remarks:
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Site: Forge Lane	Location: Forge Lane, Thornhill Lees, West Yorkshire, WF12 9EN	Ground Level (mASD):38.87	Hole Diameter (mm): -	Scale 1:30
Client: Kirklees Council		Easting: 423846 Northing: 419687	Well Diameter (mm): 50	Logged by: JJH
Project: 96234.01	Date: 18/02/2011	Method: Percussive sampling		Checked by:

STRATA RECORD		IN SITU TESTS / SAMPLES							Sheet 1 of 1	
Description	Legend	Depth (m bgl)	Level (mASD)	Sample Type	Sample Depth (m)	PID (ppm)	PPT (kPa)	SPT N Value	Well Details	Water Level
MADE GROUND: Black and brown clayey very gravelly SAND.				D	0.60-0.90					
MADE GROUND: Clayey gravelly SAND. Very poor recovery.		1.00	37.87	D	1.00	<1		N=6 (2,1/2,1,1,2)		1
				D	2.00	<1		N=15 (2,3/4,4,4,3)		2
Medium dense brown very gravelly SAND. Gravel is subangular to rounded fine to coarse of sandstone.		2.90	35.97	D	3.00	<1		N=20 (2,3/4,6,5,5)		3
				D	3.50					
End of Borehole at 4.00 m		4.00	34.87	D	4.00	<1				4
										5

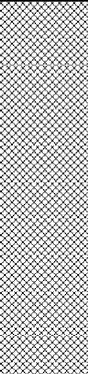
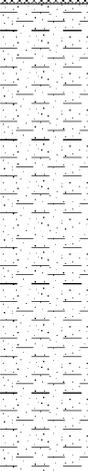
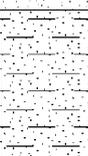
Key: D Disturbed Sample PPT Pocket Penetrometer Test B Bulk Sample PID Photoionisation Detector U Undisturbed Sample SPT Standard Penetration Test (Uncorrected) J Jar Sample  Water Strike  Standing Water Level	Remarks:
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Site: Forge Lane	Location: Forge Lane, Thornhill Lees, West Yorkshire, WF12 9EN	Ground Level (mASD):38.39	Hole Diameter (mm): -	Scale 1:30
Client: Kirklees Council		Easting: 423800 Northing: 419708	Well Diameter (mm): 50	Logged by: JJH
Project: 96234.01	Date: 18/02/2011	Method: Percussive sampling		Checked by:

STRATA RECORD		IN SITU TESTS / SAMPLES							Sheet 1 of 1	
Description	Legend	Depth (m bgl)	Level (mASD)	Sample Type	Sample Depth (m)	PID (ppm)	PPT (kPa)	SPT N Value	Well Details	Water Level
TOPSOIL: Grass over dark brown sandy CLAY with rootlets.		0.10	38.29							
MADE GROUND: Brown, grey and black clayey very gravelly SAND (sandy gravel CLAY in parts). Gravel is angular to subangular fine to coarse of brick, slag and sandstone.				D	0.50-0.70 0.50	<1				
---Below 0.90m sandy GRAVEL.				D	1.00	<1		N=5 (1,0/1,2,1, 1)		1
Firm brown sandy CLAY becoming very sandy at depth.		1.50	36.89	D	1.50-1.70					
				D	2.00-2.50 2.00	<1		N=10 (1,2/2,2,3, 3)		2
Brown clayey SAND.		2.50	35.89							
				D	3.00	<1		N=20 (3,2/4,5,5, 6)		3
Medium dense orange brown very gravelly SAND. Gravel is subangular to subrounded fine to coarse sandstone.		3.50	34.89							
End of Borehole at 4.00 m		4.00	34.39							4

Key: D Disturbed Sample PPT Pocket Penetrometer Test B Bulk Sample PID Photoionisation Detector U Undisturbed Sample SPT Standard Penetration Test (Uncorrected) J Jar Sample  Water Strike  Standing Water Level	Remarks:
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Site: Forge Lane	Location: Forge Lane, Thornhill Lees, West Yorkshire, WF12 9EN	Ground Level (mASD):38.64	Hole Diameter (mm): -	Scale 1:30
Client: Kirklees Council		Easting: 423710 Northing: 419679	Well Diameter (mm): 50	Logged by: JJH
Project: 96234.01	Date: 18/02/2011	Method: Percussive sampling		Checked by:

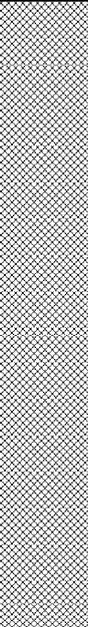
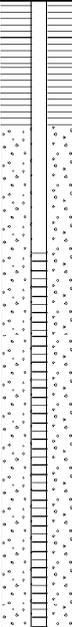
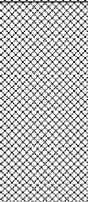
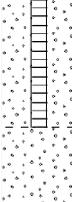
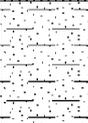
STRATA RECORD		IN SITU TESTS / SAMPLES							Sheet 1 of 1	
Description	Legend	Depth (m bgl)	Level (mASD)	Sample Type	Sample Depth (m)	PID (ppm)	PPT (kPa)	SPT N Value	Well Details	Water Level
MADE GROUND: Black slightly gravelly sandy CLAY/SILT with frequent rootlets and occasional plant matter. Gravel of fine and medium sandstone.				D	0.30-0.50					
				D	0.80-1.00					
				D	1.00	<1		N=6 (0,0/0,1,3,2)		1
Firm light brown sandy CLAY with occasional plant matter.		1.50	37.14	D	1.50-1.70 1.50	<1				
---Soft and very sandy below 2.0m.				D	2.00	<1		N=0 (0,0/0,0,0,0)		2
---Mottled grey and green below 2.3m.				D	2.50-2.70					
				D	3.00	<1				3
Brown slightly clayey SAND.		3.40	35.24							
---Brown SAND below 3.6m.										
---Gravelly SAND below 3.9m.										
End of Borehole at 4.00 m		4.00	34.64	D	4.00	<1				4
				D	5.00	<1				5

Key: D Disturbed Sample PPT Pocket Penetrometer Test B Bulk Sample PID Photoionisation Detector U Undisturbed Sample SPT Standard Penetration Test (Uncorrected) J Jar Sample  Water Strike  Standing Water Level	Remarks: Collapsing in sand.
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Site: Forge Lane	Location: Forge Lane, Thornhill Lees, West Yorkshire, WF12 9EN	Ground Level (mASD):39.76	Hole Diameter (mm): -	Scale 1:30
Client: Kirklees Council		Easting: 423731 Northing: 419667	Well Diameter (mm): 50	Logged by: JJH
Project: 96234.01	Date: 18/02/2011	Method: Percussive sampling		Checked by:

STRATA RECORD
IN SITU TESTS / SAMPLES

Sheet 1 of 1

Description	Legend	Depth (m bgl)	Level (mASD)	Sample Type	Sample Depth (m)	PID (ppm)	PPT (kPa)	SPT N Value	Well Details	Water Level
MADE GROUND: Black slightly sandy silty CLAY with frequent gravel and orange staining.										
MADE GROUND: Black clayey sandy GRAVEL of angular to subangular fine to coarse stone. Hydrocarbon odour.		2.50	37.26							
Brown clayey SAND.		3.30	36.46							
Brown slightly gravelly SAND.		3.80	35.96							
End of Borehole at 4.00 m		4.00	35.76							

Key:			
D	Disturbed Sample	PPT	Pocket Penetrometer Test
B	Bulk Sample	PID	Photoionisation Detector
U	Undisturbed Sample	SPT	Standard Penetration Test (Uncorrected)
J	Jar Sample		
	Water Strike		
	Standing Water Level		

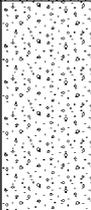
Remarks: Collapsing in sand.

Site: Forge Lane	Location: Forge Lane, Thornhill Lees, West Yorkshire, WF12 9EN	Ground Level (mASD): 37.69	Trial pit width (m): 0.60 Trial pit length (m): 3.00 Support Method: None used Pit Stability: Collapsing in sand/gravel	Scale 1:25
Client: Kirklees Council		Easting: 423887 Northing: 419629		Logged By: AS
Project No: 96234.01	Date: 16/02/2011	Excavation Method: 360 Excavator		Checked By:

STRATA RECORD		IN SITU TESTS / SAMPLES						Sheet 1 of 1
Description	Legend	Depth (m)	Level (mASD)	Sample Type	Sample Depth (m)	PID (ppm)	PPT (kPa)	Water Level
TOPSOIL: Dark brown sandy CLAY with rootlets.				D	0.20-0.30			
Light brown SAND and GRAVEL.		0.40	0.40	B	0.40-0.60			
End of Trial Pit at 0.60 m		0.70	0.70					

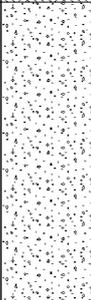
Key: D Disturbed Sample PPT Pocket Penetrometer Test B Bulk Sample PID Photoionisation Detector J Jar Sample  Water Strike  Standing Water Level	Groundwater: Remarks: Trial Pit terminated at 0.7 mbgl due to collapse
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Site: Forge Lane	Location: Forge Lane, Thornhill Lees, West Yorkshire, WF12 9EN	Ground Level (mASD): 37.48	Trial pit width (m): 0.60 Trial pit length (m): 3.00 Support Method: None used Pit Stability: Collapsing in sand/gravel	Scale 1:25
Client: Kirklees Council		Easting: 423890 Northing: 419655		Logged By: AS
Project No: 96234.01	Date: 16/02/2011	Excavation Method: 360 Excavator		Checked By:

STRATA RECORD			IN SITU TESTS / SAMPLES					Sheet 1 of 1
Description	Legend	Depth (m)	Level (mASD)	Sample Type	Sample Depth (m)	PID (ppm)	PPT (kPa)	Water Level
TOPSOIL: Dark brown sandy CLAY with rootlets.		0.30	0.30	D	0.20-0.30			
Brown SAND and GRAVEL. Gravel is fine to coarse and subrounded.				B	0.40-0.80			
End of Trial Pit at 1.00 m		1.00	1.00					1
								2
								3
								4

Key: D Disturbed Sample PPT Pocket Penetrometer Test B Bulk Sample PID Photoionisation Detector J Jar Sample  Water Strike  Standing Water Level	Groundwater: Remarks:
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Site: Forge Lane	Location: Forge Lane, Thornhill Lees, West Yorkshire, WF12 9EN	Ground Level (mASD): 37.42	Trial pit width (m): 0.60 Trial pit length (m): 3.00 Support Method: None used Pit Stability: Collapsing in sand	Scale 1:25
Client: Kirklees Council		Easting: 423892 Northing: 419688		Logged By: AS
Project No: 96234.01	Date: 16/02/2011	Excavation Method: 360 Excavator		Checked By:

STRATA RECORD		IN SITU TESTS / SAMPLES						Sheet 1 of 1
Description	Legend	Depth (m)	Level (mASD)	Sample Type	Sample Depth (m)	PID (ppm)	PPT (kPa)	Water Level
TOPSOIL: Dark brown sandy CLAY with rootlets.				D	0.50-0.60	<1		
Yellow/orange/brown slightly gravelly SAND becoming light grey.		1.00	1.00	B	1.50-2.00	<1		1
End of Trial Pit at 2.00 m		2.00	2.00					2
								3
								4

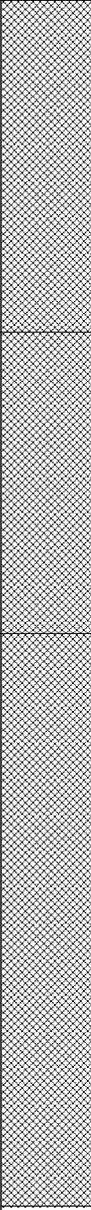
Key: D Disturbed Sample PPT Pocket Penetrometer Test B Bulk Sample PID Photoionisation Detector J Jar Sample  Water Strike  Standing Water Level	Groundwater: Remarks:
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Site: Forge Lane	Location: Forge Lane, Thornhill Lees, West Yorkshire, WF12 9EN	Ground Level (mASD): 37.76	Trial pit width (m): 0.60 Trial pit length (m): 3.00 Support Method: None used Pit Stability:	Scale 1:25
Client: Kirklees Council		Easting: 423717 Northing: 419704		Logged By: AS
Project No: 96234.01	Date: 18/02/2011	Excavation Method: JCB		Checked By:

STRATA RECORD			IN SITU TESTS / SAMPLES					Sheet 1 of 1
Description	Legend	Depth (m)	Level (mASD)	Sample Type	Sample Depth (m)	PID (ppm)	PPT (kPa)	Water Level
MADE GROUND: Black grey sandy gravelly SILT. Gravel is fine to coarse brick and concrete. Much organic material and decayed timber. Plastic bags, glass, bottles, metal wire, part of brick wall, window frame.				D	0.20-0.30	2.3		
MADE GROUND: Black very soft organic rich SILT.		1.00	1.00					1
					D	2.00-2.50	2.5	
End of Trial Pit at 3.50 m		3.00	3.00					3
								4

Key: D Disturbed Sample PPT Pocket Penetrometer Test B Bulk Sample PID Photoionisation Detector J Jar Sample  Water Strike  Standing Water Level	Groundwater: Remarks:
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Site: Forge Lane	Location: Forge Lane, Thornhill Lees, West Yorkshire, WF12 9EN	Ground Level (mASD): 37.66	Trial pit width (m): 0.60 Trial pit length (m): 3.00 Support Method: None used Pit Stability:	Scale 1:25
Client: Kirklees Council		Easting: 423690 Northing: 419723		Logged By: AS
Project No: 96234.01	Date: 18/02/2011	Excavation Method: JCB		Checked By:

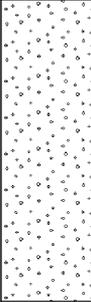
STRATA RECORD			IN SITU TESTS / SAMPLES					Sheet 1 of 1
Description	Legend	Depth (m)	Level (mASD)	Sample Type	Sample Depth (m)	PID (ppm)	PPT (kPa)	Water Level
MADE GROUND: Black and grey clayey gravelly SAND. Cobbles of concrete and sandstone. Large boulder of concrete (~1m bgl) and brick fragments.		1.10	1.10	B	0.50-1.50	2		1
MADE GROUND: Black clayey silty sandy GRAVEL. Gravel is fine to coarse angular of mixed lithology.				D	1.00-1.50			
MADE GROUND: Black very soft SILT.				B D	3.50-4.00			
End of Trial Pit at 4.00 m		4.00	4.00					4

Key:

D	Disturbed Sample	PPT	Pocket Penetrometer Test
B	Bulk Sample	PID	Photoionisation Detector
J	Jar Sample		
	Water Strike		
	Standing Water Level		

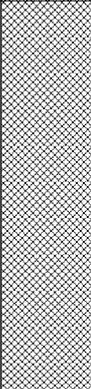
Groundwater:
Remarks: Trial Pit terminated at 4.0 mbgl

Site: Forge Lane	Location: Forge Lane, Thornhill Lees, West Yorkshire, WF12 9EN	Ground Level (mASD): 37.93	Trial pit width (m): 0.60 Trial pit length (m): 3.00 Support Method: None used Pit Stability: Collapsing in sand/gravel	Scale 1:25
Client: Kirklees Council		Easting: 423677 Northing: 419724		Logged By: AS
Project No: 96234.01	Date: 18/02/2011	Excavation Method: JCB		Checked By:

STRATA RECORD		IN SITU TESTS / SAMPLES						Sheet 1 of 1
Description	Legend	Depth (m)	Level (mASD)	Sample Type	Sample Depth (m)	PID (ppm)	PPT (kPa)	Water Level
TOPSOIL: Dark brown sandy CLAY with rootlets.		0.40	0.40					
Brown medium SAND.		1.50	1.50					
Brown sandy GRAVEL. Gravel is fine to coarse, rounded of sandstone.		2.50	2.50	B	2.00-2.50			
End of Trial Pit at 2.50 m								

Key: D Disturbed Sample PPT Pocket Penetrometer Test B Bulk Sample PID Photoionisation Detector J Jar Sample  Water Strike  Standing Water Level	Groundwater: Remarks: Terminated at 2.5 mbgl. Collapsing from 1.0 mbgl
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Site: Forge Lane	Location: Forge Lane, Thornhill Lees, West Yorkshire, WF12 9EN	Ground Level (mASD): 37.78	Trial pit width (m): 0.60 Trial pit length (m): 3.00 Support Method: None used Pit Stability:	Scale 1:25
Client: Kirklees Council		Easting: 423681 Northing: 419724		Logged By: AS
Project No: 96234.01	Date: 18/02/2011	Excavation Method: JCB		Checked By:

STRATA RECORD		IN SITU TESTS / SAMPLES						Sheet 1 of 1
Description	Legend	Depth (m)	Level (mASD)	Sample Type	Sample Depth (m)	PID (ppm)	PPT (kPa)	Water Level
MADE GROUND: Yellow brown sandy GRAVEL. Gravel is fine to coarse angular of sandstone.		0.30	0.30					
MADE GROUND: Firm to stiff black CLAY/SILT (dry). Becoming soft and very soft with depth (associated with groundwater level). ---0.3-1.6m Natural ground (sand and gravel) noted to be sloping in from south-west showing line of former gravel pit. ---0.4-1.0m large pocket of Brown gravelly SAND within silt. Gravel of brick, concrete and sandstone.		1.60	1.60					1
Brown SAND and GRAVEL.		1.80	1.80					2
End of Trial Pit at 1.80 m								3
								4

Key: D Disturbed Sample PPT Pocket Penetrometer Test B Bulk Sample PID Photoionisation Detector J Jar Sample  Water Strike  Standing Water Level	Groundwater: Remarks:
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Site: Forge Lane	Location: Forge Lane, Thornhill Lees, West Yorkshire, WF12 9EN	Ground Level (mASD): 37.68	Trial pit width (m): 0.60 Trial pit length (m): 3.00 Support Method: None used Pit Stability:	Scale 1:25
Client: Kirklees Council		Easting: 423690 Northing: 419707		Logged By: AS
Project No: 96234.01	Date: 18/02/2011	Excavation Method: JCB		Checked By:

STRATA RECORD		IN SITU TESTS / SAMPLES						Sheet 1 of 1
Description	Legend	Depth (m)	Level (mASD)	Sample Type	Sample Depth (m)	PID (ppm)	PPT (kPa)	Water Level
TOPSOIL: Dark brown sandy CLAY with rootlets.		0.30	0.30	D	0.20-0.30			
MADE GROUND: Grey clayey gravelly SAND. Gravel is angular fine to coarse of mixed lithologies. ---0.3-2.8m Natural ground (sand and gravel) noted to be sloping in from west showing line of former gravel pit.		1.00	1.00	B	0.50-0.80			
MADE GROUND: Soft black SILT.		2.70	2.70	D	2.50-2.70			
Brown SAND and GRAVEL.		2.80	2.80					
End of Trial Pit at 2.80 m								

Key:

D	Disturbed Sample	PPT	Pocket Penetrometer Test
B	Bulk Sample	PID	Photoionisation Detector
J	Jar Sample		
	Water Strike		
	Standing Water Level		

Groundwater:
Remarks:

Site: Forge Lane	Location: Forge Lane, Thornhill Lees, West Yorkshire, WF12 9EN	Ground Level (mASD): 39.55	Trial pit width (m): 0.60 Trial pit length (m): 3.00 Support Method: None used Pit Stability:	Scale 1:25
Client: Kirklees Council		Easting: 423739 Northing: 419662		Logged By: AS
Project No: 96234.01	Date: 18/02/2011	Excavation Method: JCB		Checked By:

STRATA RECORD		IN SITU TESTS / SAMPLES						Sheet 1 of 1
Description	Legend	Depth (m)	Level (mASD)	Sample Type	Sample Depth (m)	PID (ppm)	PPT (kPa)	Water Level
MADE GROUND: Black clayey sandy SILT with occasional gravel. Slurry pit dredgings.		0.00 - 2.50	0.00 - 2.50	D	0.20-0.30	3		0
				D B	1.50-1.60 1.50-2.00	6		
MADE GROUND: Gravelly sand. Gravel is fine to coarse mixed lithology. Hydrocarbon odour, some cinder fragments.		2.50	2.50	D	2.60-2.70	15		2.50
Yellow brown sandy CLAY with hydrocarbon odour.		3.00	3.00	D	3.10-3.20	15		3.00
End of Trial Pit at 3.50 m		3.50	3.50					3.50

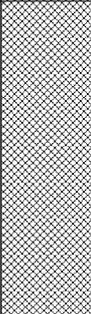
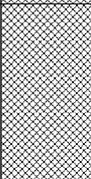
Key:

D	Disturbed Sample	PPT	Pocket Penetrometer Test
B	Bulk Sample	PID	Photoionisation Detector
J	Jar Sample		
	Water Strike		
	Standing Water Level		

Groundwater:

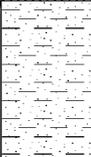
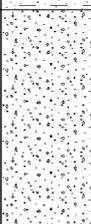
Remarks:

Site: Forge Lane	Location: Forge Lane, Thornhill Lees, West Yorkshire, WF12 9EN	Ground Level (mASD): 37.93	Trial pit width (m): 0.60 Trial pit length (m): 3.00 Support Method: None used Pit Stability: Collapsing in silt/clay	Scale 1:25
Client: Kirklees Council		Easting: 423696 Northing: 419741		Logged By: JJH
Project No: 96234.01	Date: 21/02/2011	Excavation Method: JCB		Checked By:

STRATA RECORD		IN SITU TESTS / SAMPLES						Sheet 1 of 1
Description	Legend	Depth (m)	Level (mASD)	Sample Type	Sample Depth (m)	PID (ppm)	PPT (kPa)	Water Level
TOPSOIL: Dark brown sandy CLAY with rootlets.		0.20	0.20					
MADE GROUND: Brown sandy gravelly CLAY with occasional cobbles and boulders of sandstone.		0.65	0.65					
MADE GROUND: Green and dark grey black mottled sandy CLAY with organic odour.		1.70	1.70					
MADE GROUND: Black sandy gravelly CLAY with occasional cobble and blocks of wood. ---Odour noticed (possibly hydrocarbon) below 2.0 mbgl.		2.30	2.30	D	2.20	<1		
MADE GROUND: Soft black silty CLAY.		2.30	2.30					
				D	3.00			
Brown SAND and GRAVEL.		3.80	3.80					
End of Trial Pit at 4.00 m		4.00	4.00					

Key: D Disturbed Sample PPT Pocket Penetrometer Test B Bulk Sample PID Photoionisation Detector J Jar Sample  Water Strike  Standing Water Level	Groundwater: Remarks:
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Site: Forge Lane	Location: Forge Lane, Thornhill Lees, West Yorkshire, WF12 9EN	Ground Level (mASD): 38.20	Trial pit width (m): 0.60 Trial pit length (m): 3.00 Support Method: None used Pit Stability: Collapsing in sand/gravel	Scale 1:25
Client: Kirklees Council		Easting: 423624 Northing: 419781		Logged By: JJH
Project No: 96234.01	Date: 21/02/2011	Excavation Method: JCB		Checked By:

STRATA RECORD			IN SITU TESTS / SAMPLES					Sheet 1 of 1
Description	Legend	Depth (m)	Level (mASD)	Sample Type	Sample Depth (m)	PID (ppm)	PPT (kPa)	Water Level
MADE GROUND: Concrete with rebar.								
MADE GROUND: Black brown slightly clayey, very gravelly SAND with frequent cobbles of brick, concrete and slag. Gravel is angular to sub angular fine to coarse of brick, concrete, coal and slag.		0.25	0.25	D	0.30	<1		
Firm brown sandy CLAY with occasional sandstone gravel and plant matter.		0.50	0.50					
Brown very gravelly SAND. Gravel is subangular to rounded of fine to coarse sandstone. Frequent cobbles of sandstone.		1.05	1.05					1
				B	1.50	<1		
End of Trial Pit at 1.80 m		1.80	1.80					2
								3
								4

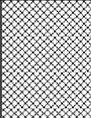
Key:

D	Disturbed Sample	PPT	Pocket Penetrometer Test
B	Bulk Sample	PID	Photoionisation Detector
J	Jar Sample		
	Water Strike		
	Standing Water Level		

Groundwater:

Remarks:

Site: Forge Lane	Location: Forge Lane, Thornhill Lees, West Yorkshire, WF12 9EN	Ground Level (mASD): 38.17	Trial pit width (m): 0.60 Trial pit length (m): 3.00 Support Method: None used Pit Stability: Collapsing in made ground	Scale 1:25
Client: Kirklees Council		Easting: 423669 Northing: 419796		Logged By: JJH
Project No: 96234.01	Date: 21/02/2011	Excavation Method: JCB		Checked By:

STRATA RECORD			IN SITU TESTS / SAMPLES					Sheet 1 of 1
Description	Legend	Depth (m)	Level (mASD)	Sample Type	Sample Depth (m)	PID (ppm)	PPT (kPa)	Water Level
MADE GROUND: Concrete.		0.20	0.20					
MADE GROUND: Red brown slightly clayey very gravelly SAND. Gravel is angular to subangular, fine to coarse of brick and concrete.		0.60	0.60	D	0.50	<1		
MADE GROUND: Dark red and black very sandy GRAVEL of angular to subangular fine to coarse concrete sandstone and slag. Cobbles of slag.		1.90	1.90	B	1.00	<1		1
				D	1.40	<1		
End of Trial Pit at 1.90 m								2
								3
								4

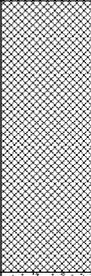
Key: D Disturbed Sample PPT Pocket Penetrometer Test B Bulk Sample PID Photoionisation Detector J Jar Sample  Water Strike  Standing Water Level	Groundwater: Remarks:
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Site: Forge Lane	Location: Forge Lane, Thornhill Lees, West Yorkshire, WF12 9EN	Ground Level (mASD): 38.16	Trial pit width (m): 0.60 Trial pit length (m): 3.00 Support Method: None used Pit Stability: Collapsing in made ground	Scale 1:25
Client: Kirklees Council		Easting: 423645 Northing: 419767		Logged By: JJH
Project No: 96234.01	Date: 21/02/2011	Excavation Method: JCB		Checked By:

STRATA RECORD			IN SITU TESTS / SAMPLES					Sheet 1 of 1
Description	Legend	Depth (m)	Level (mASD)	Sample Type	Sample Depth (m)	PID (ppm)	PPT (kPa)	Water Level
MADE GROUND: Concrete with rebar.		0.30	0.30					
MADE GROUND: Black and red mottled very gravelly SAND with occasional cobbles of brick and concrete. Gravel is angular to subangular of mixed lithologies.		1.10	1.10	D B	0.60 0.70	<1 <1		1
MADE GROUND: White, red and black mottled clayey very gravelly SAND. Gravel is angular to subangular, fine to coarse of mixed lithologies including lime waste/chalk.		1.80	1.80	D D	1.20 1.30	<1		2
End of Trial Pit at 1.80 m								3
								4

Key: D Disturbed Sample PPT Pocket Penetrometer Test B Bulk Sample PID Photoionisation Detector J Jar Sample  Water Strike  Standing Water Level	Groundwater: Remarks:
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Site: Forge Lane	Location: Forge Lane, Thornhill Lees, West Yorkshire, WF12 9EN	Ground Level (mASD): 38.54	Trial pit width (m): 0.60 Trial pit length (m): 3.00 Support Method: None used Pit Stability: Collapsing in sand/gravel	Scale 1:25
Client: Kirklees Council		Easting: 423680 Northing: 419821		Logged By: JJH
Project No: 96234.01	Date: 21/02/2011	Excavation Method: JCB		Checked By:

STRATA RECORD			IN SITU TESTS / SAMPLES					Sheet 1 of 1
Description	Legend	Depth (m)	Level (mASD)	Sample Type	Sample Depth (m)	PID (ppm)	PPT (kPa)	Water Level
MADE GROUND: Concrete with rebar.								
MADE GROUND: Layers of brick and sandstone cobbles/ railway sleepers at X end.		0.30	0.30					
MADE GROUND: Brown, black and red very clayey very gravely SAND. Gravel is angular to subangular fine to coarse of mixed lithologies. Occasional cobbles and boulders.		0.50	0.50					
				D	1.00			1
Brown slightly clayey very gravely SAND with frequent rounded cobbles. Gravel is subangular to rounded fine to coarse of sandstone.		1.40	1.40					
				B	2.00			2
End of Trial Pit at 2.30 m		2.30	2.30	D	2.30			
								3
								4

Key: D Disturbed Sample PPT Pocket Penetrometer Test B Bulk Sample PID Photoionisation Detector J Jar Sample  Water Strike  Standing Water Level	Groundwater: Remarks:
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Site: Forge Lane	Location: Forge Lane, Thornhill Lees, West Yorkshire, WF12 9EN	Ground Level (mASD): 39.22	Trial pit width (m): 0.60 Trial pit length (m): 3.00 Support Method: None used Pit Stability:	Scale 1:25
Client: Kirklees Council		Easting: 423652 Northing: 419863		Logged By: JJH
Project No: 96234.01	Date: 21/02/2011	Excavation Method: JCB		Checked By:

STRATA RECORD			IN SITU TESTS / SAMPLES					Sheet 1 of 1
Description	Legend	Depth (m)	Level (mASD)	Sample Type	Sample Depth (m)	PID (ppm)	PPT (kPa)	Water Level
MADE GROUND: Concrete with rebar.		0.25	0.25					
MADE GROUND: Black and brown clayey very gravely SAND with frequent cobbles and boulders of brick, concrete, masonry and sandstone. Below 2.0m black.				D	1.00			1
				B	2.00			2
MADE GROUND: Firm grey and green mottled orange slightly sandy CLAY with occasional cobbles of mudstone.		2.50	2.50	D	2.90			3
Firm green grey mottled black silty CLAY.		3.20	3.20					
End of Trial Pit at 3.50 m		3.50	3.50	D	3.50		92	4

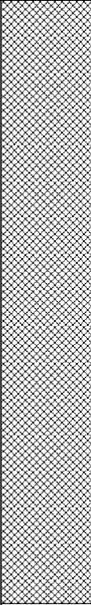
Key:

D	Disturbed Sample	PPT	Pocket Penetrometer Test
B	Bulk Sample	PID	Photoionisation Detector
J	Jar Sample		
	Water Strike		
	Standing Water Level		

Groundwater:

Remarks:

Site: Forge Lane	Location: Forge Lane, Thornhill Lees, West Yorkshire, WF12 9EN	Ground Level (mASD): 40.48	Trial pit width (m): 0.60 Trial pit length (m): 3.00 Support Method: None used Pit Stability:	Scale 1:25
Client: Kirklees Council		Easting: 423677 Northing: 419878		Logged By: JJH
Project No: 96234.01	Date: 23/02/2011	Excavation Method: JCB		Checked By:

STRATA RECORD		IN SITU TESTS / SAMPLES						Sheet 1 of 1
Description	Legend	Depth (m)	Level (mASD)	Sample Type	Sample Depth (m)	PID (ppm)	PPT (kPa)	Water Level
MADE GROUND: Brown very sandy very clayey very cobbly GRAVEL with frequent boulders of concrete. Gravel is angular to subangular fine to coarse of mixed lithologies.								
		2.00	2.00					
				D	1.00	<1		1
				D	1.50	<1		
								2
								3
								4

Key: D Disturbed Sample PPT Pocket Penetrometer Test B Bulk Sample PID Photoionisation Detector J Jar Sample  Water Strike  Standing Water Level	Groundwater: Remarks: Concrete slab at base. Trial pit terminated.
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---concrete slab at 2.0m.
 End of Trial Pit at 2.00 m

Site: Forge Lane	Location: Forge Lane, Thornhill Lees, West Yorkshire, WF12 9EN	Ground Level (mASD): 38.53	Trial pit width (m): 0.60 Trial pit length (m): 3.00 Support Method: None used Pit Stability: Collapsing in sand/gravel	Scale 1:25
Client: Kirklees Council		Easting: 423716 Northing: 419830		Logged By: JJH
Project No: 96234.01	Date: 23/02/2011	Excavation Method: JCB		Checked By:

STRATA RECORD			IN SITU TESTS / SAMPLES					Sheet 1 of 1
Description	Legend	Depth (m)	Level (mASD)	Sample Type	Sample Depth (m)	PID (ppm)	PPT (kPa)	Water Level
MADE GROUND: Concrete.		0.25	0.25					
MADE GROUND: Black and brown clayey very gravelly SAND with frequent cobbles and boulders of brick, masonry and concrete.		0.25 - 1.30	0.25 - 1.30	D B	0.40 0.50	<1 <1		
Firm brown slightly sandy CLAY with occasional plant matter and subrounded sandstone gravel.		1.30 - 2.60	1.30 - 2.60	D D	1.80 2.40	<1	36 21	
Brown SAND and GRAVEL of subangular to subrounded firm to coarse sandstone with occasional cobbles of rounded sandstone.		2.60 - 2.80	2.60 - 2.80	B	2.70			
End of Trial Pit at 2.80 m								

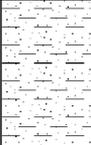
Key:

D	Disturbed Sample	PPT	Pocket Penetrometer Test
B	Bulk Sample	PID	Photoionisation Detector
J	Jar Sample		
	Water Strike		
	Standing Water Level		

Groundwater:

Remarks:

Site: Forge Lane	Location: Forge Lane, Thornhill Lees, West Yorkshire, WF12 9EN	Ground Level (mASD): 38.06	Trial pit width (m): 0.60 Trial pit length (m): 3.00 Support Method: None used Pit Stability: Collapsing in sand	Scale 1:25
Client: Kirklees Council		Easting: 423757 Northing: 419765		Logged By: JJH
Project No: 96234.01	Date: 23/02/2011	Excavation Method: JCB		Checked By:

STRATA RECORD			IN SITU TESTS / SAMPLES					Sheet 1 of 1
Description	Legend	Depth (m)	Level (mASD)	Sample Type	Sample Depth (m)	PID (ppm)	PPT (kPa)	Water Level
TOPSOIL: Brown sandy CLAY with rootlets.		0.25	0.25	D	0.30			
MADE GROUND: Dark brown clayey very gravelly SAND with brick and concrete cobbles. ---Below 0.8 mbgl very clayey and wet.		1.50	1.50	D	0.80		19	1
Soft firm very sandy CLAY with occasional plant matter.		2.00	2.00					2
Light brown very clayey SAND.		2.40	2.40	D	2.20			2
End of Trial Pit at 2.40 m								3
								4

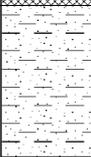
Key:

D	Disturbed Sample	PPT	Pocket Penetrometer Test
B	Bulk Sample	PID	Photoionisation Detector
J	Jar Sample		
	Water Strike		
	Standing Water Level		

Groundwater:

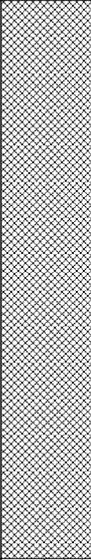
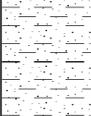
Remarks:

Site: Forge Lane	Location: Forge Lane, Thornhill Lees, West Yorkshire, WF12 9EN	Ground Level (mASD): 38.78	Trial pit width (m): 0.60 Trial pit length (m): 3.00 Support Method: None used Pit Stability:	Scale 1:25
Client: Kirklees Council		Easting: 423828 Northing: 419721		Logged By: JJH
Project No: 96234.01	Date: 23/02/2011	Excavation Method: JCB		Checked By:

STRATA RECORD			IN SITU TESTS / SAMPLES					Sheet 1 of 1
Description	Legend	Depth (m)	Level (mASD)	Sample Type	Sample Depth (m)	PID (ppm)	PPT (kPa)	Water Level
MADE GROUND: Dark grey very clayey, very gravelly SAND with frequent cobbles and boulders of concrete and brick.		0.50	0.50	D	0.40	<1		
MADE GROUND: Light brown sandy gravelly CLAY with occasional cobbles and boulders (up to 1.5m ²) of sandstone. Gravel is angular to subangular of sandstone and brick.		2.30	2.30	D	1.50	<1		
Soft to firm dark green and grey slightly sandy CLAY with organic odour.		2.80	2.80	D	2.50	<1		
End of Trial Pit at 2.80 m								

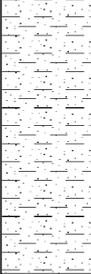
Key: D Disturbed Sample PPT Pocket Penetrometer Test B Bulk Sample PID Photoionisation Detector J Jar Sample  Water Strike  Standing Water Level	Groundwater: Remarks:
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Site: Forge Lane	Location: Forge Lane, Thornhill Lees, West Yorkshire, WF12 9EN	Ground Level (mASD): 38.68	Trial pit width (m): 0.60 Trial pit length (m): 3.00 Support Method: None used Pit Stability:	Scale 1:25
Client: Kirklees Council		Easting: 423841 Northing: 419674		Logged By: JJH
Project No: 96234.01	Date: 23/02/2011	Excavation Method: JCB		Checked By:

STRATA RECORD			IN SITU TESTS / SAMPLES					Sheet 1 of 1
Description	Legend	Depth (m)	Level (mASD)	Sample Type	Sample Depth (m)	PID (ppm)	PPT (kPa)	Water Level
TOPSOIL: Brown sandy CLAY with cobbles.		0.15	0.15					
MADE GROUND: Dark brown very clayey very gravelly SAND with frequent cobbles and boulders (up to 150cm x 150cm). Gravel is angular to subangular fine to coarse of mixed lithologies. (Cement bound asbestos tile noted).				D	0.30	<1		
				D	0.50	<1		
				D	1.00	<1		1
Firm brown very sandy CLAY with occasional plant matter.		2.00	2.00	D	2.10	<1		2
End of Trial Pit at 2.40 m		2.40	2.40					3
								4

Key: D Disturbed Sample PPT Pocket Penetrometer Test B Bulk Sample PID Photoionisation Detector J Jar Sample  Water Strike  Standing Water Level	Groundwater: Remarks:
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Site: Forge Lane	Location: Forge Lane, Thornhill Lees, West Yorkshire, WF12 9EN	Ground Level (mASD): 37.51	Trial pit width (m): 0.60 Trial pit length (m): 3.00 Support Method: None used Pit Stability: Collapsing in sand/clay	Scale 1:25
Client: Kirklees Council		Easting: 423833 Northing: 419654		Logged By: JJH
Project No: 96234.01	Date: 23/02/2011	Excavation Method: JCB		Checked By:

STRATA RECORD		IN SITU TESTS / SAMPLES						Sheet 1 of 1
Description	Legend	Depth (m)	Level (mASD)	Sample Type	Sample Depth (m)	PID (ppm)	PPT (kPa)	Water Level
TOPSOIL: Dark brown sandy CLAY with rootlets.				D	0.25	<1		
Dark brown sandy CLAY with rootlets (relict topsoil).		0.40 0.50	0.40 0.50					
Light brown very sandy CLAY becoming very clayey SAND below 1.0m.				D	1.00	<1		1
End of Trial Pit at 1.50 m		1.50	1.50					2 3 4

Key:

D	Disturbed Sample	PPT	Pocket Penetrometer Test
B	Bulk Sample	PID	Photoionisation Detector
J	Jar Sample		
	Water Strike		
	Standing Water Level		

Groundwater:
Remarks:

Site: Forge Lane	Location: Forge Lane, Thornhill Lees, West Yorkshire, WF12 9EN	Ground Level (mASD): 37.81	Trial pit width (m): 0.60 Trial pit length (m): 3.00 Support Method: None used Pit Stability: Collapsing in sand/gravel	Scale 1:25
Client: Kirklees Council		Easting: 423717 Northing: 419754		Logged By: JJH
Project No: 96234.01	Date: 23/02/2011	Excavation Method: JCB		Checked By:

STRATA RECORD		IN SITU TESTS / SAMPLES						Sheet 1 of 1
Description	Legend	Depth (m)	Level (mASD)	Sample Type	Sample Depth (m)	PID (ppm)	PPT (kPa)	Water Level
TOPSOIL: Dark brown sandy CLAY with rootlets.		0.20	0.20					
MADE GROUND: Black and brown slightly clayey very gravely SAND. Gravel is angular to subangular fine to coarse of sandstone, ash and clinker.		0.75	0.75	D	0.30			
MADE GROUND: (Firm) grey and brown slightly gravely CLAY. Gravel is angular to subangular fine to coarse of pottery and brick.		0.90	0.90	D	0.80			
Firm brown sandy CLAY.		1.20	1.20	D	1.00			1
End of Trial Pit at 1.20 m								2
								3
								4

Key: D Disturbed Sample PPT Pocket Penetrometer Test B Bulk Sample PID Photoionisation Detector J Jar Sample  Water Strike  Standing Water Level	Groundwater: Remarks:
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Site: Forge Lane	Location: Forge Lane, Thornhill Lees, West Yorkshire, WF12 9EN	Ground Level (mASD): 38.14	Trial pit width (m): 0.60 Trial pit length (m): 3.00 Support Method: None used Pit Stability:	Scale 1:25
Client: Kirklees Council		Easting: 423626 Northing: 419733		Logged By: JJH
Project No: 96234.01	Date: 25/02/2011	Excavation Method: JCB		Checked By:

STRATA RECORD		IN SITU TESTS / SAMPLES						Sheet 1 of 1
Description	Legend	Depth (m)	Level (mASD)	Sample Type	Sample Depth (m)	PID (ppm)	PPT (kPa)	Water Level
TOPSOIL: Dark brown sandy CLAY with rootlets.		0.15	0.15					
MADE GROUND: Black, brown and red clayey very gravelly SAND with occasional cobbles and boulders of concrete, sandstone and brick.				D	0.40	<1		
---Below 0.90 mbgl very clayey and wet in places.				D	1.00	<1		1
Firm green/grey mottled black silty CLAY.		1.30	1.30					
				D	2.00	<1	36	2
End of Trial Pit at 2.20 m		2.20	2.20					3
								4

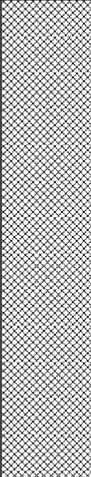
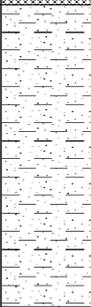
Key: D Disturbed Sample PPT Pocket Penetrometer Test B Bulk Sample PID Photoionisation Detector J Jar Sample  Water Strike  Standing Water Level	Groundwater: Remarks:
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Site: Forge Lane	Location: Forge Lane, Thornhill Lees, West Yorkshire, WF12 9EN	Ground Level (mASD): 39.29	Trial pit width (m): 0.60 Trial pit length (m): 3.00 Support Method: None used Pit Stability:	Scale 1:25
Client: Kirklees Council		Easting: 423691 Northing: 419852		Logged By: JJH
Project No: 96234.01	Date: 25/02/2011	Excavation Method: JCB		Checked By:

STRATA RECORD		IN SITU TESTS / SAMPLES						Sheet 1 of 1
Description	Legend	Depth (m)	Level (mASD)	Sample Type	Sample Depth (m)	PID (ppm)	PPT (kPa)	Water Level
TOPSOIL: Dark brown sandy CLAY with rootlets.		0.10	0.10					
MADE GROUND: Black and brown gravelly very clayey SAND with occasional cobbles of brick. Gravel is angular to subangular, fine to coarse of brick and tiles.		0.70	0.70	D	0.40			
MADE GROUND; Black and brown clayey very gravelly, very cobbly SAND with frequent boulders of masonry concrete and sandstone. Gravel is angular to subangular, fine to coarse and of mixed lithologies. Brick structure along northern end of pit.		3.00	3.00	D B	0.80 1.00			1 2 3 4
---concrete slab at 3.0m. End of Trial Pit at 3.00 m								

Key: D Disturbed Sample PPT Pocket Penetrometer Test B Bulk Sample PID Photoionisation Detector J Jar Sample  Water Strike  Standing Water Level	Groundwater: Remarks: Concrete slab at base. Trial pit terminated.
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Site: Forge Lane	Location: Forge Lane, Thornhill Lees, West Yorkshire, WF12 9EN	Ground Level (mASD): 38.55	Trial pit width (m): 0.60 Trial pit length (m): 3.00 Support Method: None used Pit Stability:	Scale 1:25
Client: Kirklees Council		Easting: 423736 Northing: 419796		Logged By: JJH
Project No: 96234.01	Date: 25/02/2011	Excavation Method: JCB		Checked By:

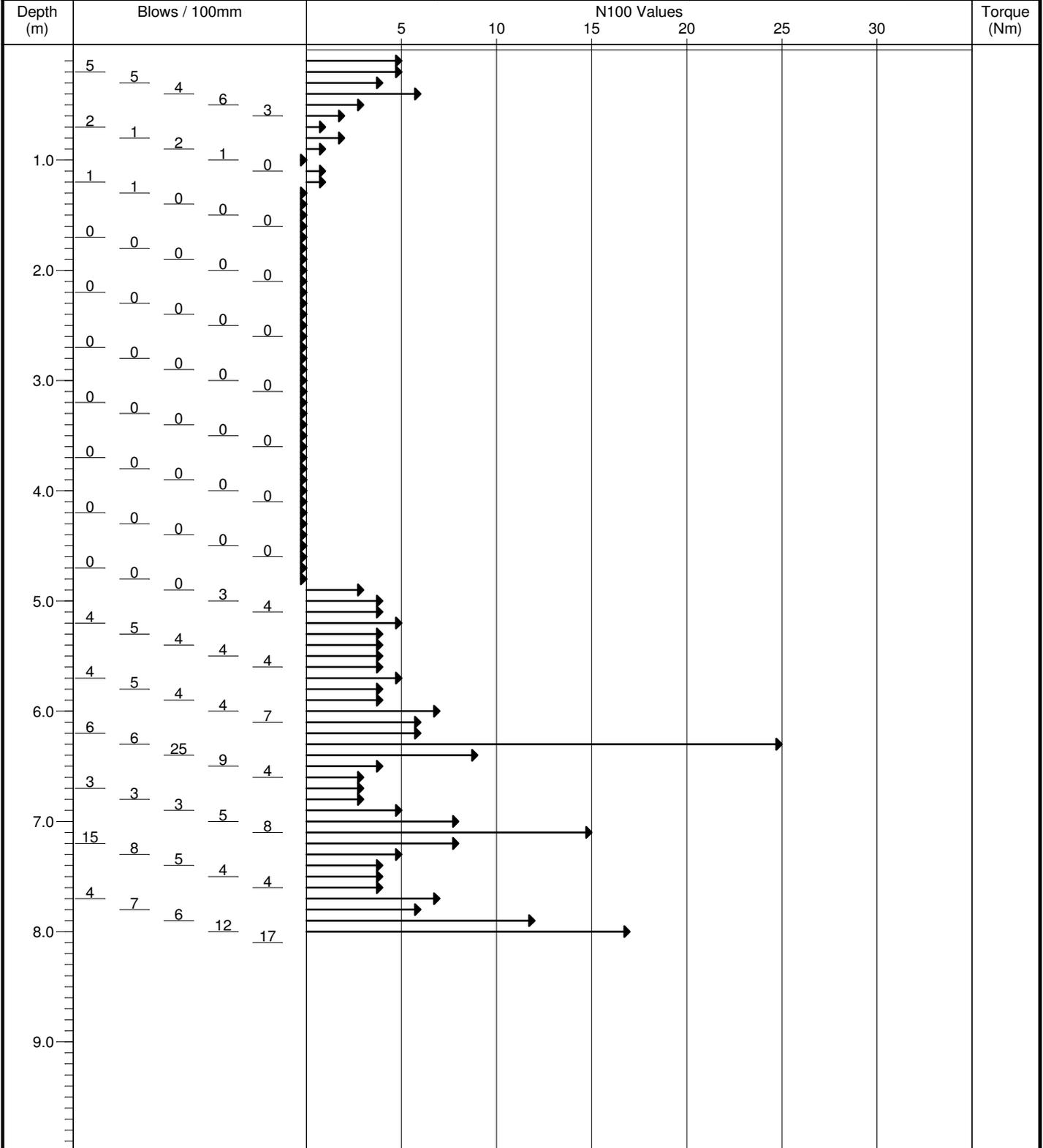
STRATA RECORD			IN SITU TESTS / SAMPLES					Sheet 1 of 1
Description	Legend	Depth (m)	Level (mASD)	Sample Type	Sample Depth (m)	PID (ppm)	PPT (kPa)	Water Level
MADE GROUND: Concrete.		0.20	0.20					
MADE GROUND: Black and brown clayey very gravelly SAND with frequent cobbles and boulders. Gravel is angular to subangular, fine to coarse and mixed lithologies.				D	0.50	<1		
				D	0.75	<1		
Firm brown mottled black sandy CLAY with slight odour.		1.80	1.80	D	2.00	<1		
End of Trial Pit at 2.80 m		2.80	2.80					

Key:

D	Disturbed Sample	PPT	Pocket Penetrometer Test
B	Bulk Sample	PID	Photoionisation Detector
J	Jar Sample		
	Water Strike		
	Standing Water Level		

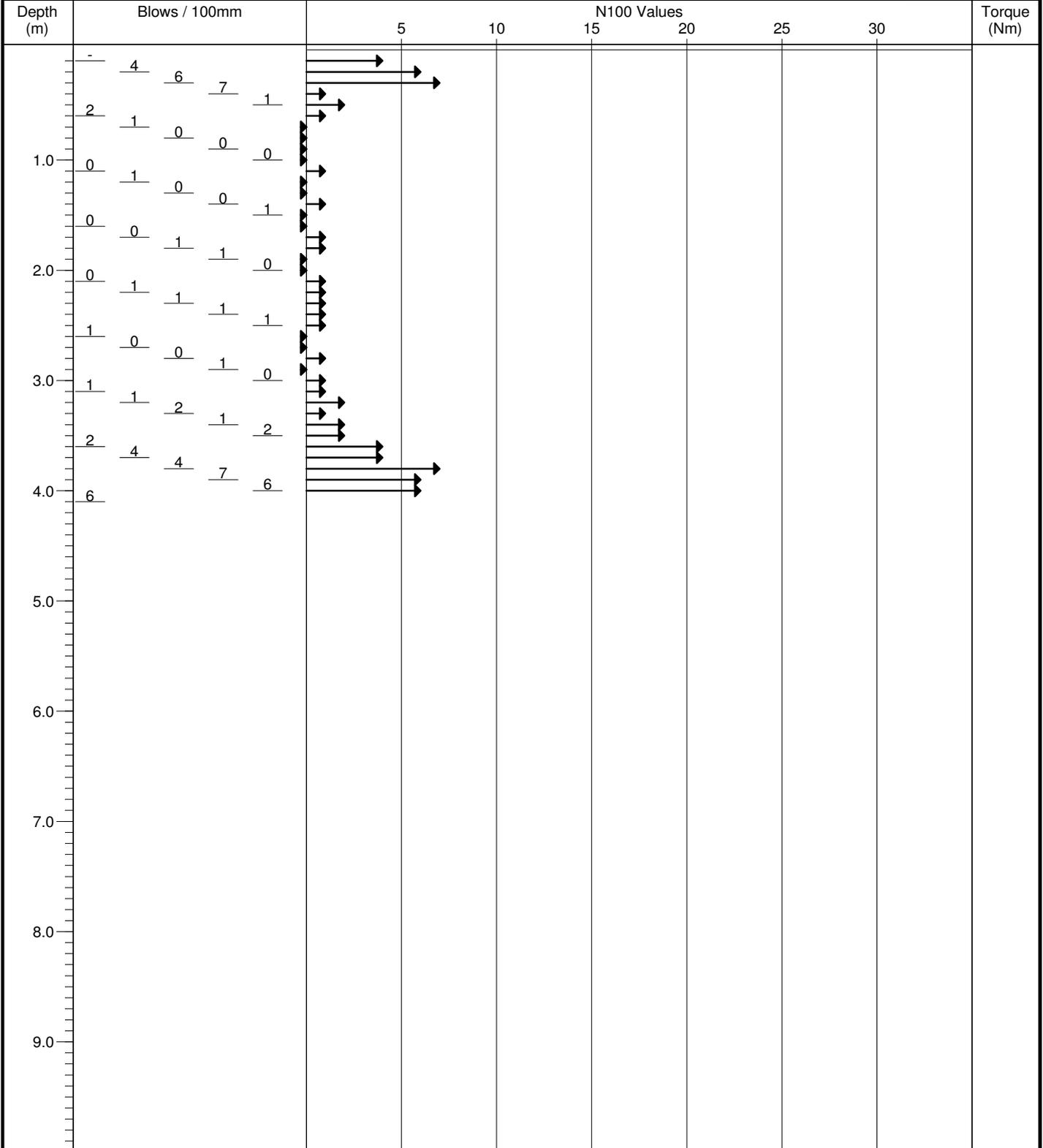
Groundwater:
Remarks:

Site: Forge Lane	Location: Forge Lane, Thornhill Lees, West Yorkshire, WF12 9EN	Ground Level (mASD): 37.67	Fall Height (mm): 1	Scale 1:50
Client: Kirklees Council		Easting: 423713.00 Northing: 419720.00	Hammer Weight (kg): 63.50 Probe Type: DPSH	Logged By: JJH
Project No: 96234.01	Start Date: 18/02/2011	Method: Dynamic Probe	Cone Diam (mm): 51	Checked By:
				Sheet 1 of 1



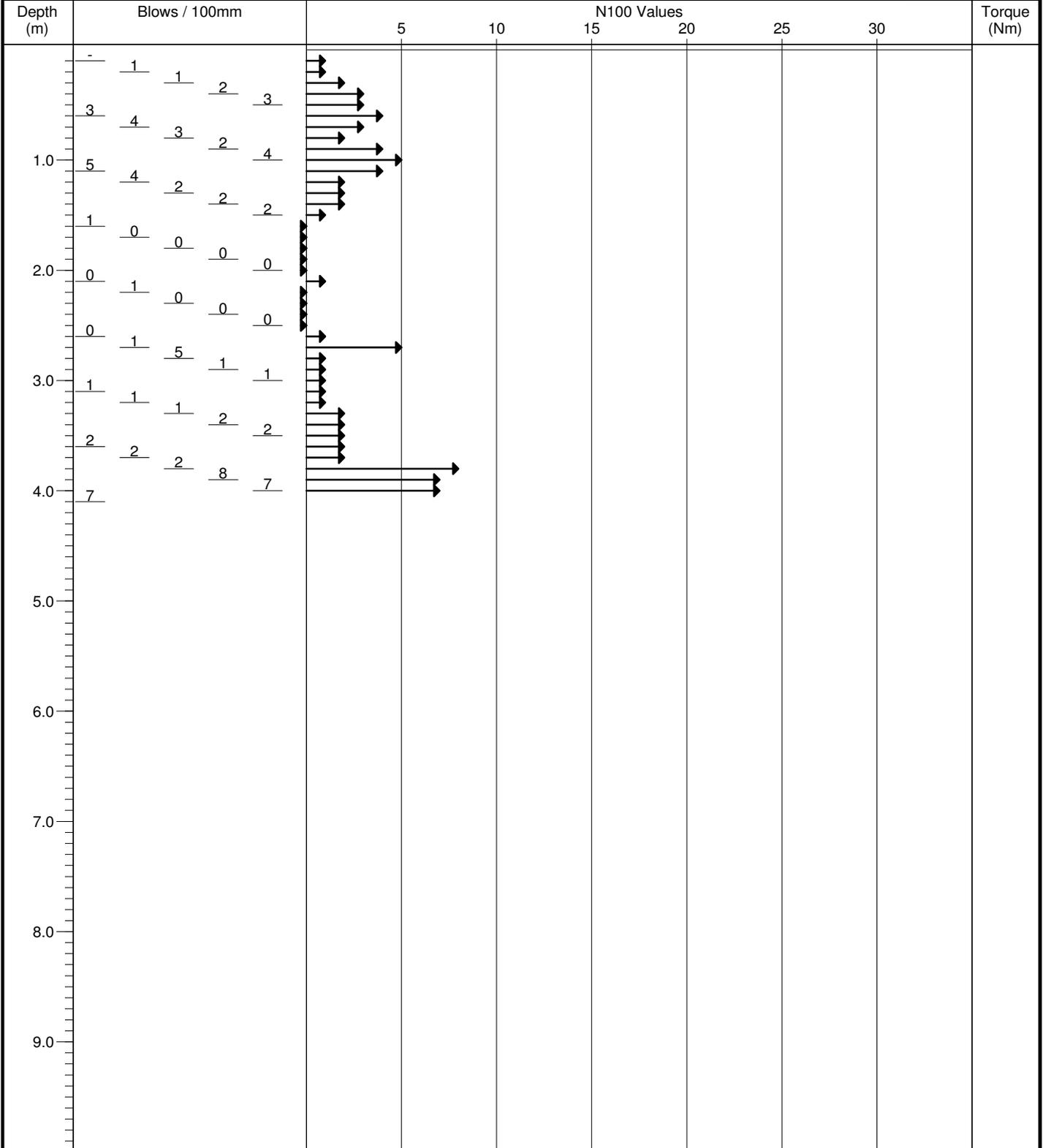
Remarks:

Site: Forge Lane	Location: Forge Lane, Thornhill Lees, West Yorkshire, WF12 9EN	Ground Level (mASD): 37.74	Fall Height (mm): 1	Scale 1:50
Client: Kirklees Council		Easting: 423717.00 Northing: 419746.00	Hammer Weight (kg): 63.50 Probe Type: DPSH	Logged By: JJH
Project No: 96234.01	Start Date: 18/02/2011	Method: Dynamic Probe	Cone Diam (mm): 51	Checked By:
				Sheet 1 of 1



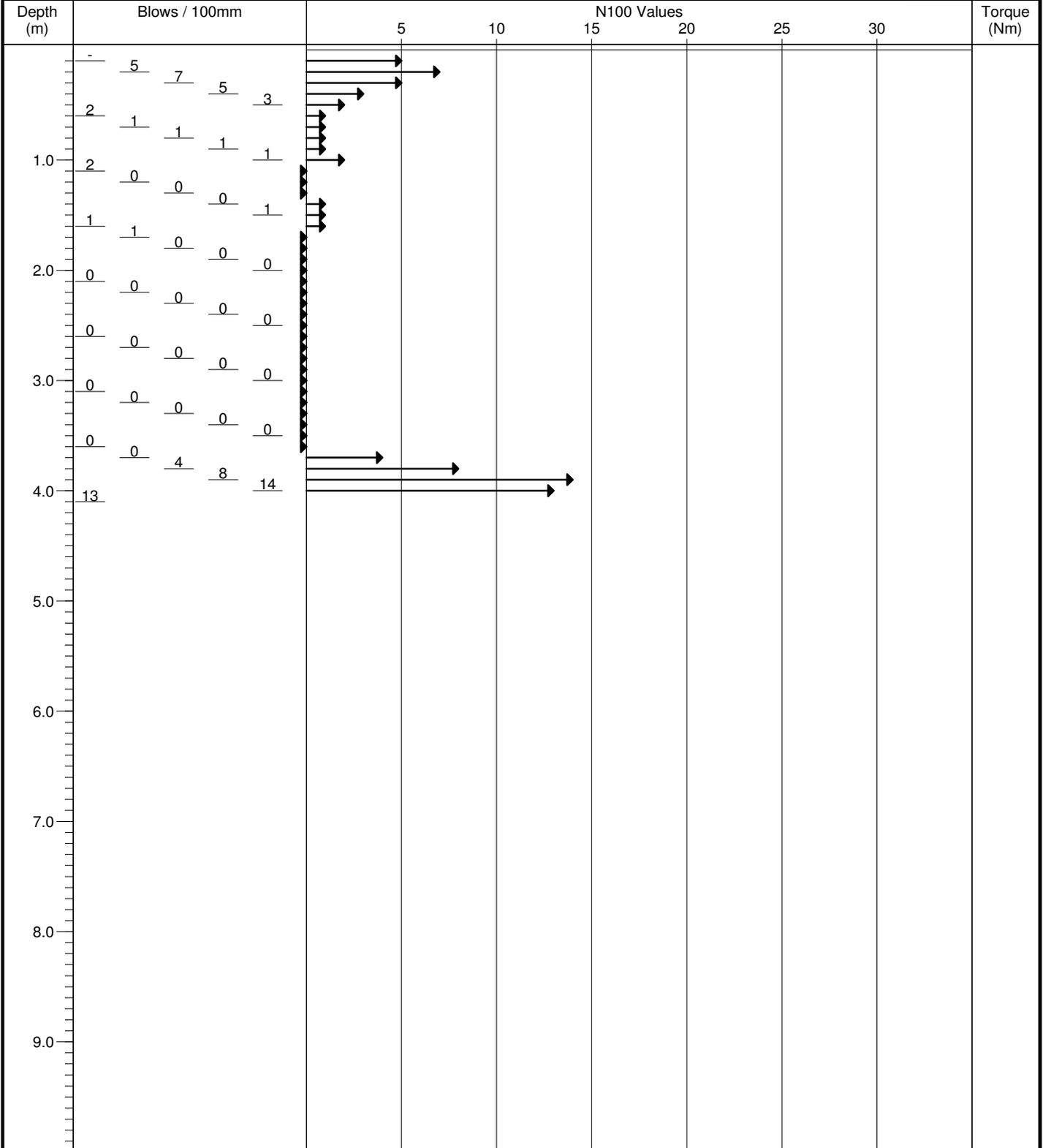
Remarks:

Site: Forge Lane	Location: Forge Lane, Thornhill Lees, West Yorkshire, WF12 9EN	Ground Level (mASD): 38.09	Fall Height (mm): 1	Scale 1:50
Client: Kirklees Council		Easting: 423743.00 Northing: 419754.00	Hammer Weight (kg): 63.50 Probe Type: DPSH	Logged By: JJH
Project No: 96234.01	Start Date: 18/02/2011	Method: Dynamic Probe	Cone Diam (mm): 51	Checked By:
				Sheet 1 of 1



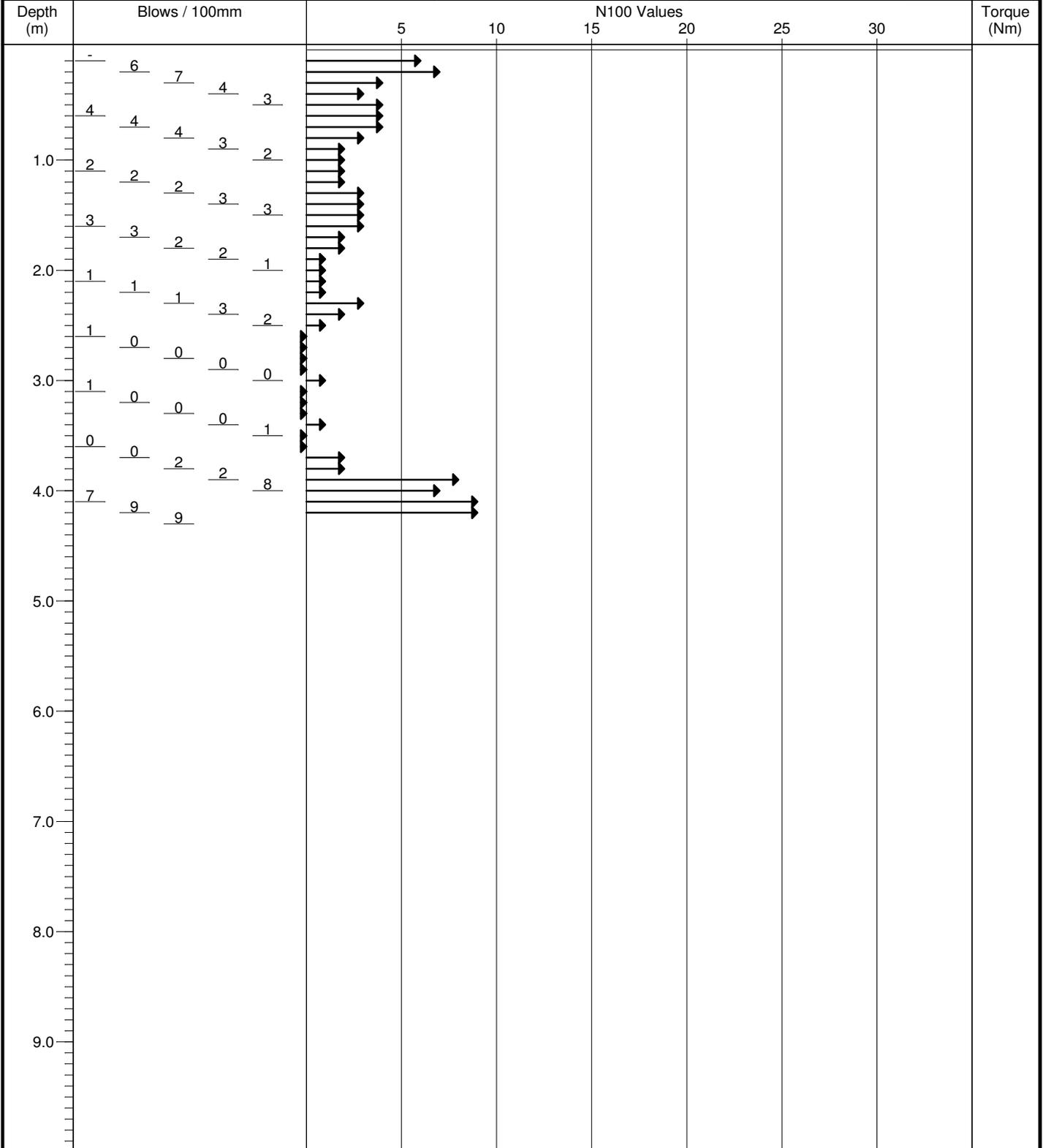
Remarks:

Site: Forge Lane	Location: Forge Lane, Thornhill Lees, West Yorkshire, WF12 9EN	Ground Level (mASD): 37.94	Fall Height (mm): 1	Scale 1:50
Client: Kirklees Council		Easting: 423697.00 Northing: 419741.00	Hammer Weight (kg): 63.50 Probe Type: DPSH	Logged By: JJH
Project No: 96234.01	Start Date: 18/02/2011	Method: Dynamic Probe	Cone Diam (mm): 51	Checked By:
				Sheet 1 of 1



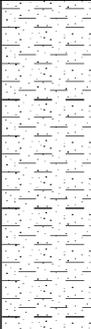
Remarks:

Site: Forge Lane	Location: Forge Lane, Thornhill Lees, West Yorkshire, WF12 9EN	Ground Level (mASD): 37.96	Fall Height (mm): 1	Scale 1:50
Client: Kirklees Council		Easting: 423692.00 Northing: 419744.00	Hammer Weight (kg): 63.50 Probe Type: DPSH	Logged By: JJH
Project No: 96234.01	Start Date: 18/02/2011	Method: Dynamic Probe	Cone Diam (mm): 51	Checked By:
				Sheet 1 of 1



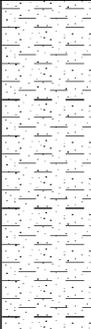
Remarks:

Site: Forge lane	Location: Forge Lane, Thornhill Lees, West Yorkshire, WF12 9EN	Ground Level (mAOD): 37.96	Hole Diameter (mm): -	Scale 1:205
Client: Kirklees Council		Easting: 423799.00 Northing: 419727.00	Well Diameter (mm): Filter Material:	Logged by:
Project: 96234.01	Date: 23/02/2011	Method: Rotary Probing		Checked by:

STRATA RECORD		IN SITU TESTS / SAMPLES							Sheet 1 of 1	
Description	Legend	Depth (mBGL)	Level (mAOD)	Sample Type	Sample Depth (m)	PID (ppm)	PPT (kPa)	SPT N Value	Well Details	Water Level
SAND/CLAY fill										1 2 3 4 5 6 7 8
Grey MUDSTONE		9.00	28.96							9 10 11 12 13 14 15
COAL		16.70	21.26							16
Grey MUDSTONE		17.10	20.86							17 18 19 20 21 22 23 24
Grey SANDSTONE		25.00	12.96							25 26 27
COAL		28.20	9.76							28
Grey/dark MUDSTONE		29.60	8.36							29 30 31
End of Borehole at 32.00 m		32.00	5.96							32 33 34 35 36 37 38 39 40

Key: D Disturbed Sample PPT Pocket Penetrometer Test B Bulk Sample PID Photoionisation Detector U Undisturbed Sample SPT Standard Penetration Test J Jar Sample (Uncorrected)  Water Strike  Standing Water Level	Remarks:
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Site: Forge lane	Location: Forge Lane, Thornhill Lees, West Yorkshire, WF12 9EN	Ground Level (mAOD): 38.04	Hole Diameter (mm): -	Scale 1:205
Client: Kirklees Council		Easting: 423754.00 Northing: 419754.00	Well Diameter (mm): Filter Material:	Logged by:
Project: 96234.01	Date: 24/02/2011	Method: Rotary Probing		Checked by:

STRATA RECORD		IN SITU TESTS / SAMPLES								Sheet 1 of 1
Description	Legend	Depth (mBGL)	Level (mAOD)	Sample Type	Sample Depth (m)	PID (ppm)	PPT (kPa)	SPT N Value	Well Details	Water Level
SAND/CLAY fill										1 2 3 4 5 6 7 8
Grey MUDSTONE		9.00	29.04							9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26
COAL		27.00	11.04							27
Grey MUDSTONE		28.10	9.94							28 29 30 31
End of Borehole at 32.00 m		32.00	6.04							32 33 34 35 36 37 38 39 40

Key: D Disturbed Sample PPT Pocket Penetrometer Test B Bulk Sample PID Photoionisation Detector U Undisturbed Sample SPT Standard Penetration Test J Jar Sample (Uncorrected) ▽ Water Strike ▼ Standing Water Level	Remarks:
--	----------

Site: Forge lane	Location: Forge Lane, Thornhill Lees, West Yorkshire, WF12 9EN	Ground Level (mAOD): 37.96	Hole Diameter (mm): -	Scale 1:205
Client: Kirklees Council		Easting: 423639.00 Northing: 419754.00	Well Diameter (mm): Filter Material:	Logged by:
Project: 96234.01	Date: 24/02/2011	Method: Rotary Probing		Checked by:

STRATA RECORD		IN SITU TESTS / SAMPLES							Sheet 1 of 1	
Description	Legend	Depth (mBGL)	Level (mAOD)	Sample Type	Sample Depth (m)	PID (ppm)	PPT (kPa)	SPT N Value	Well Details	Water Level
SAND/CLAY fill										1 2 3 4 5 6 7 8
Grey MUDSTONE		9.00	28.96							9 10 11 12 13 14 15 16 17 18
COAL		18.80	19.16							19
Grey MUDSTONE		20.20	17.76							20 21 22 23 24 25 26 27
COAL		27.50	10.46							28
Grey MUDSTONE		27.70	10.26							29 30 31 32 33
COAL		34.40	3.56							34
Grey/dark MUDSTONE		34.60	3.36							35 36 37
End of Borehole at 39.00 m		39.00	-1.05							38 39 40

Key: D Disturbed Sample PPT Pocket Penetrometer Test B Bulk Sample PID Photoionisation Detector U Undisturbed Sample SPT Standard Penetration Test (Uncorrected) J Jar Sample  Water Strike  Standing Water Level	Remarks:
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Appendix H
Photographs Representative of Material Encountered



Plate A – TP104 showing black silt from gravel pit backfill



Plate B – TP108 showing line of gravel pit into natural



Plate C – TP107 Showing line of gravel pit into natural



Plate D – TP114 Showing general made ground into River Terrace Deposits (and groundwater)



Plate E – TP118 Showing made ground and River Terrace Deposits



Plate F – TP120 Showing made ground with high ash and brick content



Plate G – TP121 Showing shallow natural ground with shallow groundwater



Plate H – TP124 Showing cobbles and boulders in made ground



Plate I - TP112 Showing made ground with high slag content

Appendix I
Environmental Laboratory Results



ARCADIS Geraghty & Miller
1 Whitehall Riverside
Leeds
West Yorkshire
LS1 4BN

Attention: Jonathan Harris

CERTIFICATE OF ANALYSIS

Date: 09 March 2011
Customer: H_ARCADIS_LEE
Sample Delivery Group (SDG): 110216-13
Your Reference: 96234.01
Location: Forge Lane, Dewsbury
Report No: 119768

This report directly supersedes report 118862 in its entirety.

We received 6 samples on Wednesday February 16, 2011 and 6 of these samples were scheduled for analysis which was completed on Wednesday March 09, 2011. Accredited laboratory tests are defined within the report, but opinions, interpretations and on-site data expressed herein are outside the scope of ISO 17025 accreditation.

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

All chemical testing (unless subcontracted) is performed at ALcontrol Hawarden Laboratories.

Asbestos testing - we are not accredited for screening soil samples for asbestos fibres. We are only accredited to identify asbestos fibres in bulk material (ACM).

Approved By: _____

Sonia McWhan
Operations Manager



1291
GROUP



CERTIFICATE OF ANALYSIS

Validated

SDG: 110216-13
Job: H_ARCADIS_LEE-40
Client Reference: 96234.01

Location: Forge Lane, Dewsbury
Customer: ARCADIS Geraghty & Miller
Attention: Andrew Smith

Order Number:
Report Number: 119768
Superseded Report: 118862

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
2877770	CP101		0.50 - 1.00	14/02/2011
2877774	WS102		0.80 - 1.00	14/02/2011
2877772	WS103		1.60 - 1.80	14/02/2011

Only received samples which have had analysis scheduled will be shown on the following pages.



SDG: 110216-13
 Job: H_ARCADIS_LEE-40
 Client Reference: 96234.01

Location: Forge Lane, Dewsbury
 Customer: ARCADIS Geraghty & Miller
 Attention: Andrew Smith

Order Number:
 Report Number: 119768
 Superseded Report: 118862

SOLID Results Legend  Test  No Determination Possible	Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container	
		2877770	CP101		0.50 - 1.00	250g Amber Jar 400g Tub
		2877773	WS101		0.50 - 0.70	250g Amber Jar 400g Tub
		2877774	WS102		0.80 - 1.00	250g Amber Jar 400g Tub
		2877775	WS102		1.40 - 1.60	250g Amber Jar 400g Tub
	2877771	WS103		0.60 - 0.80	250g Amber Jar 400g Tub	
	2877772	WS103		1.60 - 1.80	250g Amber Jar 400g Tub	
Alkali Metals by iCap-OES (Soil)	All	NDPs: 0 Tests: 4				
Ammoniacal Nitrogen	All	NDPs: 0 Tests: 3				
Ammonium Soil by Titration	All	NDPs: 0 Tests: 3				
Anions by Kone (soil)	All	NDPs: 0 Tests: 6				
Anions by Kone (w)	All	NDPs: 0 Tests: 3				
Asbestos Containing Material Screen	All	NDPs: 0 Tests: 5				
Boron Water Soluble	All	NDPs: 0 Tests: 4				
Calorific Value (S)*	All	NDPs: 0 Tests: 3				
Cyanide Comp/Free/Total/Thiocyanate	All	NDPs: 0 Tests: 6				
Dissolved Metals by ICP-MS	All	NDPs: 0 Tests: 3				
Easily Liberated Sulphide	All	NDPs: 0 Tests: 3				
Elemental Sulphur	All	NDPs: 0 Tests: 3				
EPH (DRO) (C10-C40) Aqueous (W)	All	NDPs: 0 Tests: 3				
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 4				
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 4				



SDG: 110216-13
 Job: H_ARCADIS_LEE-40
 Client Reference: 96234.01

Location: Forge Lane, Dewsbury
 Customer: ARCADIS Geraghty & Miller
 Attention: Andrew Smith

Order Number:
 Report Number: 119768
 Superseded Report: 118862

SOLID Results Legend <input checked="" type="checkbox"/> Test <input checked="" type="checkbox"/> No Determination Possible	Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container	
		2877770	CP101		0.50 - 1.00	250g Amber Jar 400g Tub
		2877773	WS101		0.50 - 0.70	250g Amber Jar 400g Tub
		2877774	WS102		0.80 - 1.00	250g Amber Jar 400g Tub
		2877775	WS102		1.40 - 1.60	250g Amber Jar 400g Tub
	2877771	WS103		0.60 - 0.80	250g Amber Jar 400g Tub	
	2877772	WS103		1.60 - 1.80	250g Amber Jar 400g Tub	
Fluoride	All	NDPs: 0 Tests: 3				
Fluoride (soluble)	All	NDPs: 0 Tests: 4				
Free Sulphur	All	NDPs: 0 Tests: 3				
GRO by GC-FID (S)	All	NDPs: 0 Tests: 4				
Hexavalent Chromium (s)	All	NDPs: 0 Tests: 4				
Hexavalent Chromium (w)	All	NDPs: 0 Tests: 3				
Mercury Dissolved	All	NDPs: 0 Tests: 3				
Metals by iCap-OES (Soil)	Aluminium	NDPs: 0 Tests: 4				
	Arsenic	NDPs: 0 Tests: 4				
	Beryllium	NDPs: 0 Tests: 4				
	Cadmium	NDPs: 0 Tests: 4				
	Chromium	NDPs: 0 Tests: 4				
	Copper	NDPs: 0 Tests: 4				
	Iron	NDPs: 0 Tests: 4				
	Lead	NDPs: 0 Tests: 4				



SDG: 110216-13
 Job: H_ARCADIS_LEE-40
 Client Reference: 96234.01

Location: Forge Lane, Dewsbury
 Customer: ARCADIS Geraghty & Miller
 Attention: Andrew Smith

Order Number:
 Report Number: 119768
 Superseded Report: 118862

SOLID Results Legend Test No Determination Possible	Lab Sample No(s)	2877770	2877773	2877774	2877775	2877771	2877772
	Customer Sample Reference	CP101	WS101	WS102	WS102	WS103	WS103
	AGS Reference						
	Depth (m)	0.50 - 1.00	0.50 - 0.70	0.80 - 1.00	1.40 - 1.60	0.60 - 0.80	1.60 - 1.80
	Container	250g Amber Jar 400g Tub	250g Amber Jar 60g VOC 400g Tub	250g Amber Jar 60g VOC 400g Tub	250g Amber Jar 60g VOC	250g Amber Jar 60g VOC	250g Amber Jar 60g VOC
Metals by iCap-OES (Soil)	Mercury	NDPs: 0 Tests: 4	X	X	X		X
	Molybdenum	NDPs: 0 Tests: 4	X	X	X		X
	Nickel	NDPs: 0 Tests: 4	X	X	X		X
	Tin	NDPs: 0 Tests: 4	X	X	X		X
	Vanadium	NDPs: 0 Tests: 4	X	X	X		X
	Zinc	NDPs: 0 Tests: 4	X	X	X		X
Metals by iCap-OES Dissolved (W)	All	NDPs: 0 Tests: 3		X	X	X	
NO3, NO2 and TON by KONE (s)	All	NDPs: 0 Tests: 4	X	X	X		X
PAH by GCMS	All	NDPs: 0 Tests: 4	X	X	X		X
PAH Spec MS - Aqueous (W)	All	NDPs: 0 Tests: 3		X	X	X	
PCBs by GCMS	All	NDPs: 0 Tests: 3		X	X	X	
pH	All	NDPs: 0 Tests: 4	X	X	X		X
pH Value	All	NDPs: 0 Tests: 3		X	X	X	
Phenols by HPLC (S)	All	NDPs: 0 Tests: 3		X	X	X	
Phenols by HPLC (W)	All	NDPs: 0 Tests: 1		X			



SDG: 110216-13
 Job: H_ARCADIS_LEE-40
 Client Reference: 96234.01

Location: Forge Lane, Dewsbury
 Customer: ARCADIS Geraghty & Miller
 Attention: Andrew Smith

Order Number:
 Report Number: 119768
 Superseded Report: 118862

SOLID Results Legend Test No Determination Possible	Lab Sample No(s)	2877770	2877773	2877774	2877775	2877771	2877772
	Customer Sample Reference	CP101	WS101	WS102	WS102	WS103	WS103
	AGS Reference						
	Depth (m)	0.50 - 1.00	0.50 - 0.70	0.80 - 1.00	1.40 - 1.60	0.60 - 0.80	1.60 - 1.80
	Container	250g Amber Jar 400g Tub	250g Amber Jar 60g VOC 400g Tub	250g Amber Jar 60g VOC 400g Tub	250g Amber Jar 60g VOC	250g Amber Jar 60g VOC	250g Amber Jar 60g VOC
Phosphate (Ortho as PO4) (s)	All	NDPs: 0 Tests: 4	X	X	X		X
Sample description	All	NDPs: 0 Tests: 6	X	X	X	X	X
Semi Volatile Organic Compounds	All	NDPs: 0 Tests: 3		X		X	
Silver	All	NDPs: 0 Tests: 4	X	X			X
Sulphide	All	NDPs: 0 Tests: 3		X		X	X
Total Organic Carbon	All	NDPs: 0 Tests: 3		X		X	X
Total Sulphate	All	NDPs: 0 Tests: 3		X		X	X
Total Sulphur	All	NDPs: 0 Tests: 3		X		X	X
TPH CWG GC (S)	All	NDPs: 0 Tests: 4	X	X	X		X
VOC MS (S)	All	NDPs: 0 Tests: 3		X		X	X



SDG: 110216-13
Job: H_ARCADIS_LEE-40
Client Reference: 96234.01

Location: Forge Lane, Dewsbury
Customer: ARCADIS Geraghty & Miller
Attention: Andrew Smith

Order Number:
Report Number: 119768
Superseded Report: 118862

Sample Descriptions

Grain Sizes

very fine	<0.063mm	fine	0.063mm - 0.1mm	medium	0.1mm - 2mm	coarse	2mm - 10mm	very coarse	>10mm
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Lab Sample No(s)	Customer Sample Ref.	Depth (m)	Colour	Description	Grain size	Inclusions	Inclusions 2
2877770	CP101	0.50 - 1.00	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	N/A
2877773	WS101	0.50 - 0.70	Dark Brown	Sand	0.1 - 2 mm	Stones	None
2877774	WS102	0.80 - 1.00	Dark Brown	Sand	0.1 - 2 mm	Stones	N/A
2877775	WS102	1.40 - 1.60	Dark Brown	Sandy Loam	0.1 - 2 mm	Stones	Crushed Brick
2877771	WS103	0.60 - 0.80	Dark Brown	Sand	0.1 - 2 mm	Stones	None
2877772	WS103	1.60 - 1.80	Dark Brown	Sand	0.1 - 2 mm	Stones	Crushed Brick

These descriptions are only intended to act as a cross check if sample identities are questioned, and to provide a log of sample matrices with respect to MCERTS validation. They are not intended as full geological descriptions.

We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample.

Other coarse granular materials such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.



SDG: 110216-13
Job: H_ARCADIS_LEE-40
Client Reference: 96234.01

Location: Forge Lane, Dewsbury
Customer: ARCADIS Geraghty & Miller
Attention: Andrew Smith

Order Number:
Report Number: 119768
Superseded Report: 118862

Results Legend		Customer Sample R	CP101	WS101	WS102	WS102	WS103	WS103
#	ISO17025 accredited.	Depth (m) Sample Type Date Sampled Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.50 - 1.00	0.50 - 0.70	0.80 - 1.00	1.40 - 1.60	0.60 - 0.80	1.60 - 1.80
M	mCERTS accredited.		Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
S	Non-conforming work.		14/02/2011	14/02/2011	14/02/2011	14/02/2011	14/02/2011	14/02/2011
aq	Aqueous / settled sample.		16/02/2011	16/02/2011	16/02/2011	16/02/2011	16/02/2011	16/02/2011
diss.filt	Dissolved / filtered sample.		110216-13	110216-13	110216-13	110216-13	110216-13	110216-13
tot.unfilt	Total / unfiltered sample.		2877770	2877773	2877774	2877775	2877771	2877772
*	subcontracted test.							
**	% recovery of the surrogate standard to check the efficiency of the method. The results of the individual compounds within the samples are not corrected for this recovery.							
Component	LOD/Units		Method					
Calorific value*	kJ/kg	SUB		1760		1720	0	
Asbestos Containing Material Screen	-	TM001	No ACM Detected	No ACM Detected	No ACM Detected	No ACM Detected		No ACM Detected
Ammoniacal Nitrogen as N	<15 mg/kg	TM024		<15		<15	<15	
Catechol	<0.01 mg/kg	TM062 (S)		<0.01		<0.01	<0.01	
Phenol	<0.01 mg/kg	TM062 (S)		0.128		<0.01	<0.01	
Cresols	<0.01 mg/kg	TM062 (S)		0.104		<0.01	<0.01	
Resorcinol	<0.05 mg/kg	TM062 (S)		<0.05		<0.05	<0.05	
Xylenols	<0.015 mg/kg	TM062 (S)		0.0348		<0.015	<0.015	
1-Naphthol	<0.01 mg/kg	TM062 (S)		<0.01		<0.01	<0.01	
2,3,5-Trimethylphenol	<0.01 mg/kg	TM062 (S)		<0.01		<0.01	<0.01	
2-Isopropylphenol	<0.015 mg/kg	TM062 (S)		<0.015		<0.015	<0.015	
Phenols, Total 8 Speciated	<0.15 mg/kg	TM062 (S)		0.267		<0.15	<0.15	
Ammoniacal Nitrogen as N NRA leach	<200 µg/l	TM099		<200		<200	<200	
Ammoniacal Nitrogen as NH4 NRA leach	<300 µg/l	TM099		<300		<300	<300	
Ammonia, Free / unionised as N NRA leach	<200 µg/l	TM099		<200		<200	<200	
Sulphide NRA leach	<10 µg/l	TM101		<10		<10	<10	
Fluoride NRA leach	<500 µg/l	TM104		708		<500	591	
Organic Carbon, Total	<0.2 %	TM132		6.45	#	7.89	7.98	#
Sulphur, Total	<0.02 %	TM132		0.38	#	0.45	0.29	#
pH	1 pH Units	TM133	8.06	8.5	7.35			7.41
Sulphur, Elemental	<5 mg/kg	TM136		181		19.9	111	
Sulphur, Free NRA leach	<50 µg/l	TM136		<50		<50	<50	
Chromium, Hexavalent	<0.6 mg/kg	TM151	<0.6	<0.6	<0.6			<0.6
Aluminium (diss.filt) NRA leach	<2.9 µg/l	TM152		32.9		134	97.3	
Arsenic (diss.filt) NRA leach	<0.12 µg/l	TM152		41.7		0.346	3.54	
Beryllium (diss.filt) NRA leach	<0.07 µg/l	TM152		<0.07		<0.07	<0.07	
Boron (diss.filt) NRA leach	<9.4 µg/l	TM152		<9.4		<9.4	<9.4	
Cadmium (diss.filt) NRA leach	<0.1 µg/l	TM152		<0.1		<0.1	<0.1	
Chromium (diss.filt) NRA leach	<0.22 µg/l	TM152		1.91		0.448	1.58	
Copper (diss.filt) NRA leach	<0.85 µg/l	TM152		<0.85		<0.85	1.29	
Lead (diss.filt) NRA leach	<0.02 µg/l	TM152		0.187		0.289	0.691	
Molybdenum (diss.filt) NRA leach	<0.24 µg/l	TM152		4.98		1.17	6.28	
Nickel (diss.filt) NRA leach	<0.15 µg/l	TM152		0.679		0.152	0.487	
Silver (diss.filt) NRA leach	<1.5 µg/l	TM152		<1.5		<1.5	<1.5	
Tin (diss.filt) NRA leach	<0.36 µg/l	TM152		<0.36		<0.36	<0.36	



SDG: 110216-13
Job: H_ARCADIS_LEE-40
Client Reference: 96234.01

Location: Forge Lane, Dewsbury
Customer: ARCADIS Geraghty & Miller
Attention: Andrew Smith

Order Number:
Report Number: 119768
Superseded Report: 118862

Results Legend			Customer Sample R		CP101	WS101	WS102	WS102	WS103	WS103
#	ISO17025 accredited.		Depth (m) Sample Type Date Sampled Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.50 - 1.00	0.50 - 0.70	0.80 - 1.00	1.40 - 1.60	0.60 - 0.80	1.60 - 1.80	
M	mCERTS accredited.			Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	
§	Non-conforming work.			14/02/2011	14/02/2011	14/02/2011	14/02/2011	14/02/2011	14/02/2011	
aq	Aqueous / settled sample.			16/02/2011	16/02/2011	16/02/2011	16/02/2011	16/02/2011	16/02/2011	
diss.filt	Dissolved / filtered sample.			110216-13	110216-13	110216-13	110216-13	110216-13	110216-13	
tot.unfilt	Total / unfiltered sample.			2877770	2877773	2877774	2877775	2877771	2877772	
*	subcontracted test.									
**	% recovery of the surrogate standard to check the efficiency of the method. The results of the individual compounds within the samples are not corrected for this recovery.									
Component	LOD/Units	Method								
Vanadium (diss.filt) NRA leach	<0.24 µg/l	TM152		2.5		0.47	1.67			
Zinc (diss.filt) NRA leach	<0.41 µg/l	TM152		0.996		<0.41	0.586			
Cyanide, Total	<1 mg/kg	TM153	<1	<1	<1				<1	
Cyanide, Free	<1 mg/kg	TM153	<1	<1	<1				<1	
PCB congener 28	<0.003 mg/kg	TM168		<0.003		<0.003	<0.003			
PCB congener 52	<0.003 mg/kg	TM168		<0.003		<0.003	<0.003			
PCB congener 101	<0.003 mg/kg	TM168		<0.003		<0.003	<0.003			
PCB congener 118	<0.003 mg/kg	TM168		<0.003		<0.003	<0.003			
PCB congener 138	<0.003 mg/kg	TM168		<0.003		<0.003	<0.003			
PCB congener 153	<0.003 mg/kg	TM168		<0.003		<0.003	<0.003			
PCB congener 180	<0.003 mg/kg	TM168		<0.003		<0.003	<0.003			
PCBs, Total ICES 7	<0.003 mg/kg	TM168		<0.003		<0.003	<0.003			
EPH Range >C10 - C40 (aq) NRA leach	<46 µg/l	TM172		<46		<46	<46			
EPH Band >C10-C12 (aq) NRA leach	<10 µg/l	TM172		<10		<10	<10			
EPH Band >C12-C16 (aq) NRA leach	<10 µg/l	TM172		<10		<10	<10			
EPH Band >C16-C21 (aq) NRA leach	<10 µg/l	TM172		<10		<10	<10			
EPH Band >C21-C40 (aq) NRA leach	<10 µg/l	TM172		<10		<10	<10			
Sulphide, Easily liberated	<15 mg/kg	TM180		18.1	#	<15	#	<15	#	
Aluminium	<11 mg/kg	TM181	15700	34900		16000			5060	
Arsenic	<0.6 mg/kg	TM181	29.7	84.6		52.7			16.9	
Beryllium	<0.01 mg/kg	TM181	2.61	5.81		2.3			1.25	
Cadmium	<0.02 mg/kg	TM181	<0.02	1.13		<0.02			2.41	
Chromium	<0.9 mg/kg	TM181	24.9	30.4		21.5			29.6	
Copper	<1.4 mg/kg	TM181	67.5	144		64			142	
Iron	<2 mg/kg	TM181	74300	87000		79300			242000	
Lead	<0.7 mg/kg	TM181	132	25.6		24.3			208	
Mercury	<0.14 mg/kg	TM181	<0.14	<1.4		<0.14			<1.4	
Molybdenum	<0.1 mg/kg	TM181	7	18.3		11.2			4.15	
Nickel	<0.2 mg/kg	TM181	35.6	77.4		42.2			51.8	
Tin	<0.24 mg/kg	TM181	4.36	<2.4		0.309			12.8	
Vanadium	<0.2 mg/kg	TM181	45.3	134		53.4			59.5	
Zinc	<1.9 mg/kg	TM181	141	<19		25.8			21.6	
Mercury (diss.filt) NRA leach	<0.01 µg/l	TM183		<0.01		<0.01	<0.01			
Sulphate NRA leach	<2000 µg/l	TM184		25300		<2000	7800			
Chloride NRA leach	<2000 µg/l	TM184		<2000		<2000	<2000			



CERTIFICATE OF ANALYSIS

SDG: 110216-13
 Job: H_ARCADIS_LEE-40
 Client Reference: 96234.01

Location: Forge Lane, Dewsbury
 Customer: ARCADIS Geraghty & Miller
 Attention: Andrew Smith

Order Number:
 Report Number: 119768
 Superseded Report: 118862

PAH by GCMS

Results Legend		Customer Sample R	CP101	WS101	WS102	WS103		
#	ISO17025 accredited.	Depth (m) Sample Type Date Sampled Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.50 - 1.00 Soil/Solid 14/02/2011 16/02/2011 110216-13 2877770	0.50 - 0.70 Soil/Solid 14/02/2011 16/02/2011 110216-13 2877773	0.80 - 1.00 Soil/Solid 14/02/2011 16/02/2011 110216-13 2877774	1.60 - 1.80 Soil/Solid 14/02/2011 16/02/2011 110216-13 2877772		
M	mCERTS accredited.							
S	Non-conforming work.							
aq	Aqueous / settled sample.							
diss.filt	Dissolved / filtered sample.							
tot.unfilt	Total / unfiltered sample.							
*	subcontracted test.							
**	% recovery of the surrogate standard to check the efficiency of the method. The results of the individual compounds within the samples are not corrected for this recovery.							
Component	LOD/Units	Method						
Naphthalene-d8 % recovery**	%	TM218	105	107	106	103		
Acenaphthene-d10 % recovery**	%	TM218	105	107	107	103		
Phenanthrene-d10 % recovery**	%	TM218	105	106	106	102		
Chrysene-d12 % recovery**	%	TM218	102	101	101	95.2		
Perylene-d12 % recovery**	%	TM218	113	110	109	98.3		
Naphthalene	<0.009 mg/kg	TM218	0.168	1.62	0.795	0.0885	M	M
Acenaphthylene	<0.012 mg/kg	TM218	0.0293	0.303	<0.012	<0.012	M	M
Acenaphthene	<0.008 mg/kg	TM218	0.0326	0.019	<0.008	<0.008	M	M
Fluorene	<0.01 mg/kg	TM218	0.0416	0.0598	0.0225	<0.01	M	M
Phenanthrene	<0.015 mg/kg	TM218	0.629	0.677	0.917	0.0839	M	M
Anthracene	<0.016 mg/kg	TM218	0.161	0.0442	0.0247	<0.016	M	M
Fluoranthene	<0.017 mg/kg	TM218	0.776	0.126	0.118	0.0201	M	M
Pyrene	<0.015 mg/kg	TM218	0.668	0.18	0.141	<0.015	M	M
Benz(a)anthracene	<0.014 mg/kg	TM218	0.352	0.078	0.11	0.0197	M	M
Chrysene	<0.01 mg/kg	TM218	0.282	0.102	0.104	0.0128	M	M
Benzo(b)fluoranthene	<0.015 mg/kg	TM218	0.501	0.114	0.139	0.0209	M	M
Benzo(k)fluoranthene	<0.014 mg/kg	TM218	0.175	0.0313	0.0305	<0.014	M	M
Benzo(a)pyrene	<0.015 mg/kg	TM218	0.356	0.0845	0.0883	<0.015	M	M
Indeno(1,2,3-cd)pyrene	<0.018 mg/kg	TM218	0.183	0.037	0.0365	<0.018	M	M
Dibenzo(a,h)anthracene	<0.023 mg/kg	TM218	0.0539	<0.023	<0.023	<0.023	M	M
Benzo(g,h,i)perylene	<0.024 mg/kg	TM218	0.234	0.0905	0.107	<0.024	M	M
Polyaromatic hydrocarbons, Total	<0.118 mg/kg	TM218	4.64	3.56	2.63	0.246	M	M



SDG: 110216-13
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Order Number:
 Report Number: 119768
 Superseded Report: 118862

PAH Spec MS - Aqueous (W)

Results Legend		Customer Sample R	WS101	WS102	WS103				
#	ISO17025 accredited.	Depth (m) Sample Type Date Sampled Date Received SDG Ref Lab Sample No.(s) AGS Reference							
M	mCERTS accredited.		0.50 - 0.70	1.40 - 1.60	0.60 - 0.80				
S	Non-conforming work.		Soil/Solid	Soil/Solid	Soil/Solid				
aq	Aqueous / settled sample.		14/02/2011	14/02/2011	14/02/2011				
diss.filt	Dissolved / filtered sample.		16/02/2011	16/02/2011	16/02/2011				
tot.unfilt	Total / unfiltered sample.		110216-13	110216-13	110216-13				
*	subcontracted test.		2877773	2877775	2877771				
**	% recovery of the surrogate standard to check the efficiency of the method. The results of the individual compounds within the samples are not corrected for this recovery.								
Component	LOD/Units		Method						
Naphthalene (aq) NRA leach	<0.1 µg/l		TM178	0.174	0.142	1.28			
Acenaphthene (aq) NRA leach	<0.015 µg/l	TM178	<0.015	<0.015	<0.015				
Acenaphthylene (aq) NRA leach	<0.011 µg/l	TM178	<0.011	<0.011	<0.011				
Fluoranthene (aq) NRA leach	<0.017 µg/l	TM178	<0.017	<0.017	<0.017				
Anthracene (aq) NRA leach	<0.015 µg/l	TM178	<0.015	<0.015	<0.015				
Phenanthrene (aq) NRA leach	<0.022 µg/l	TM178	<0.022	<0.022	<0.022				
Fluorene (aq) NRA leach	<0.014 µg/l	TM178	<0.014	<0.014	<0.014				
Chrysene (aq) NRA leach	<0.013 µg/l	TM178	<0.013	<0.013	<0.013				
Pyrene (aq) NRA leach	<0.015 µg/l	TM178	<0.015	<0.015	<0.015				
Benzo(a)anthracene (aq) NRA leach	<0.017 µg/l	TM178	<0.017	<0.017	<0.017				
Benzo(b)fluoranthene (aq) NRA leach	<0.023 µg/l	TM178	<0.023	<0.023	<0.023				
Benzo(k)fluoranthene (aq) NRA leach	<0.027 µg/l	TM178	<0.027	<0.027	<0.027				
Benzo(a)pyrene (aq) NRA leach	<0.009 µg/l	TM178	<0.009	0.0111	<0.009				
Dibenzo(a,h)anthracene (aq) NRA leach	<0.016 µg/l	TM178	<0.016	<0.016	<0.016				
Benzo(g,h,i)perylene (aq) NRA leach	<0.016 µg/l	TM178	<0.016	<0.016	<0.016				
Indeno(1,2,3-cd)pyrene (aq) NRA leach	<0.014 µg/l	TM178	<0.014	<0.014	<0.014				
Polyaromatic hydrocarbons, Total	<0.1 µg/l	TM178	0.174	0.153	1.28				



SDG: 110216-13
Job: H_ARCADIS_LEE-40
Client Reference: 96234.01

Location: Forge Lane, Dewsbury
Customer: ARCADIS Geraghty & Miller
Attention: Andrew Smith

Order Number:
Report Number: 119768
Superseded Report: 118862

Semi Volatile Organic Compounds

Results Legend		Customer Sample R	WS101	WS102	WS103			
#	ISO17025 accredited.	Depth (m) Sample Type Date Sampled Date Received SDG Ref Lab Sample No.(s) AGS Reference						
M	mCERTS accredited.		0.50 - 0.70	1.40 - 1.60	0.60 - 0.80			
S	Non-conforming work.		Soil/Solid	Soil/Solid	Soil/Solid			
aq	Aqueous / settled sample.		14/02/2011	14/02/2011	14/02/2011			
diss.filt	Dissolved / filtered sample.		16/02/2011	16/02/2011	16/02/2011			
tot.unfilt	Total / unfiltered sample.		110216-13	110216-13	110216-13			
*	subcontracted test.		2877773	2877775	2877771			
**	% recovery of the surrogate standard to check the efficiency of the method. The results of the individual compounds within the samples are not corrected for this recovery.							
Component	LOD/Units	Method						
Phenol	<0.1 mg/kg	TM157	<0.1	<0.1	<0.1			
Pentachlorophenol	<0.1 mg/kg	TM157	<0.1	<0.1	<0.1			
n-Nitroso-n-dipropylamine	<0.1 mg/kg	TM157	<0.1	<0.1	<0.1			
Nitrobenzene	<0.1 mg/kg	TM157	<0.1	<0.1	<0.1			
Isophorone	<0.1 mg/kg	TM157	<0.1	<0.1	<0.1			
Hexachloroethane	<0.1 mg/kg	TM157	<0.1	<0.1	<0.1			
Hexachlorocyclopentadiene	<0.1 mg/kg	TM157	<0.1	<0.1	<0.1			
Hexachlorobutadiene	<0.1 mg/kg	TM157	<0.1	<0.1	<0.1			
Hexachlorobenzene	<0.1 mg/kg	TM157	<0.1	<0.1	<0.1			
n-Dioctyl phthalate	<0.1 mg/kg	TM157	<0.1	<0.1	<0.1			
Dimethyl phthalate	<0.1 mg/kg	TM157	<0.1	<0.1	<0.1			
Diethyl phthalate	<0.1 mg/kg	TM157	<0.1	<0.1	<0.1			
n-Dibutyl phthalate	<0.1 mg/kg	TM157	<0.1	<0.1	<0.1			
Dibenzofuran	<0.1 mg/kg	TM157	0.168	<0.1	<0.1			
Carbazole	<0.1 mg/kg	TM157	<0.1	<0.1	<0.1			
Butylbenzyl phthalate	<0.1 mg/kg	TM157	<0.1	<0.1	<0.1			
bis(2-Ethylhexyl) phthalate	<0.1 mg/kg	TM157	0.164	<0.1	<0.1			
bis(2-Chloroethoxy)methane	<0.1 mg/kg	TM157	<0.1	<0.1	<0.1			
bis(2-Chloroethyl)ether	<0.1 mg/kg	TM157	<0.1	<0.1	<0.1			
Azobenzene	<0.1 mg/kg	TM157	<0.1	<0.1	<0.1			
4-Nitrophenol	<0.1 mg/kg	TM157	<0.1	<0.1	<0.1			
4-Nitroaniline	<0.1 mg/kg	TM157	<0.1	<0.1	<0.1			
4-Methylphenol	<0.1 mg/kg	TM157	<0.1	<0.1	<0.1			
4-Chlorophenylphenylether	<0.1 mg/kg	TM157	<0.1	<0.1	<0.1			
4-Chloroaniline	<0.1 mg/kg	TM157	<0.1	<0.1	<0.1			
4-Chloro-3-methylphenol	<0.1 mg/kg	TM157	<0.1	<0.1	<0.1			
4-Bromophenylphenylether	<0.1 mg/kg	TM157	<0.1	<0.1	<0.1			
3-Nitroaniline	<0.1 mg/kg	TM157	<0.1	<0.1	<0.1			
2-Nitrophenol	<0.1 mg/kg	TM157	<0.1	<0.1	<0.1			
2-Nitroaniline	<0.1 mg/kg	TM157	<0.1	<0.1	<0.1			
2-Methylphenol	<0.1 mg/kg	TM157	<0.1	<0.1	<0.1			
1,2,4-Trichlorobenzene	<0.1 mg/kg	TM157	<0.1	<0.1	<0.1			
2-Chlorophenol	<0.1 mg/kg	TM157	<0.1	<0.1	<0.1			
2,6-Dinitrotoluene	<0.1 mg/kg	TM157	<0.1	<0.1	<0.1			
2,4-Dinitrotoluene	<0.1 mg/kg	TM157	<0.1	<0.1	<0.1			



CERTIFICATE OF ANALYSIS

SDG: 110216-13
Job: H_ARCADIS_LEE-40
Client Reference: 96234.01

Location: Forge Lane, Dewsbury
Customer: ARCADIS Geraghty & Miller
Attention: Andrew Smith

Order Number:
Report Number: 119768
Superseded Report: 118862

Semi Volatile Organic Compounds

Table with columns: Results Legend, Customer Sample R, WS101, WS102, WS103, Component, LOD/Units, Method. Rows include various organic compounds like 2,4-Dimethylphenol, 2,4-Dichlorophenol, etc.



SDG: 110216-13
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TPH CWG (S)

Results Legend		Customer Sample R	CP101	WS101	WS102	WS103		
#	ISO17025 accredited.	Depth (m) Sample Type Date Sampled Date Received SDG Ref Lab Sample No.(s) AGS Reference						
M	mCERTS accredited.		0.50 - 1.00	0.50 - 0.70	0.80 - 1.00	1.60 - 1.80		
S	Non-conforming work.		Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
aq	Aqueous / settled sample.		14/02/2011	14/02/2011	14/02/2011	14/02/2011		
diss.filt	Dissolved / filtered sample.		16/02/2011	16/02/2011	16/02/2011	16/02/2011		
tot.unfilt	Total / unfiltered sample.		110216-13	110216-13	110216-13	110216-13		
*	subcontracted test.		2877770	2877773	2877774	2877772		
**	% recovery of the surrogate standard to check the efficiency of the method. The results of the individual compounds within the samples are not corrected for this recovery.							
Component	LOD/Units	Method						
Aliphatics >C12-C16	<0.1 mg/kg	TM173	7.68	9.96	24.7	3.88		
Aliphatics >C16-C21	<0.1 mg/kg	TM173	6.41	8.92	20.8	4.51		
Aliphatics >C21-C35	<0.1 mg/kg	TM173	15.5	14.7	31.6	6.1		
Aliphatics >C35-C44	<0.1 mg/kg	TM173	2.66	1.86	3.75	0.715		
Total Aliphatics >C12-C44	<0.1 mg/kg	TM173	32.3	35.4	80.9	15.2		
Aromatics >EC12-EC16	<0.1 mg/kg	TM173	10.6	22.2	55.4	21.7		
Aromatics >EC16-EC21	<0.1 mg/kg	TM173	16.3	11.1	29.5	3.6		
Aromatics >EC21-EC35	<0.1 mg/kg	TM173	45.1	19.1	42.2	4.73		
Aromatics >EC35-EC44	<0.1 mg/kg	TM173	15.6	4.09	7.1	1.24		
Aromatics >EC40-EC44	<0.1 mg/kg	TM173	6.02	1.12	1.84	<0.1		
Total Aromatics >EC12-EC44	<0.1 mg/kg	TM173	87.5	56.6	134	31.3		
Total Aliphatics & Aromatics >C5-C44	<0.1 mg/kg	TM173	120	92.2	215	46.6		
Total Aliphatics >C5-35	<0.1 mg/kg	TM173	29.6	33.7	77.2	14.5		
Total Aromatics >C5-35	<0.1 mg/kg	TM173	72	52.6	127	30.1		
Total Aliphatics & Aromatics >C5-35	<0.1 mg/kg	TM173	102	86.2	204	44.6		
GRO Surrogate % recovery**	%	TM089	48	24	25	35		
GRO >C5-C12	<0.044 mg/kg	TM089	<0.044	0.155	0.0694	<0.044		
Methyl tertiary butyl ether (MTBE)	<0.005 mg/kg	TM089	<0.005 #	<0.005 #	<0.005 #	<0.005 #		
Benzene	<0.01 mg/kg	TM089	<0.01 M	<0.01 M	<0.01 M	0.0222 M		
Toluene	<0.002 mg/kg	TM089	<0.002 M	0.0116 M	0.00655 M	0.00819 M		
Ethylbenzene	<0.003 mg/kg	TM089	<0.003 M	0.0209 M	0.0144 M	0.0105 M		
m,p-Xylene	<0.006 mg/kg	TM089	<0.006 M	<0.006 M	<0.006 M	<0.006 M		
o-Xylene	<0.003 mg/kg	TM089	<0.003 M	0.00348 M	<0.003 M	<0.003 M		
Aliphatics >C5-C6	<0.01 mg/kg	TM089	<0.01	0.0139	<0.01	<0.01		
Aliphatics >C6-C8	<0.01 mg/kg	TM089	<0.01	0.0534	0.017	<0.01		
Aliphatics >C8-C10	<0.01 mg/kg	TM089	<0.01	0.0151	<0.01	<0.01		
Aliphatics >C10-C12	<0.01 mg/kg	TM089	<0.01	<0.01	<0.01	<0.01		
Aromatics >EC5-EC7	<0.01 mg/kg	TM089	<0.01	<0.01	<0.01	0.0222		
Aromatics >EC7-EC8	<0.01 mg/kg	TM089	<0.01	0.0116	<0.01	<0.01		
Aromatics >EC8-EC10	<0.01 mg/kg	TM089	<0.01	0.0406	0.0236	0.0176		
Aromatics >EC10-EC12	<0.01 mg/kg	TM089	<0.01	<0.01	<0.01	<0.01		
m,p,o-Xylene	<0.01 mg/kg	TM089	<0.01	<0.01	<0.01	<0.01		
BTEX, Total	<0.01 mg/kg	TM089	<0.01	0.036	0.021	0.041		



SDG: 110216-13
Job: H_ARCADIS_LEE-40
Client Reference: 96234.01

Location: Forge Lane, Dewsbury
Customer: ARCADIS Geraghty & Miller
Attention: Andrew Smith

Order Number:
Report Number: 119768
Superseded Report: 118862

VOC MS (S)

Results Legend		Customer Sample R	WS101	WS102	WS103				
#	ISO17025 accredited.	Depth (m) Sample Type Date Sampled Date Received SDG Ref Lab Sample No.(s) AGS Reference							
M	mCERTS accredited.		0.50 - 0.70	1.40 - 1.60	0.60 - 0.80				
S	Non-conforming work.		Soil/Solid	Soil/Solid	Soil/Solid				
aq	Aqueous / settled sample.		14/02/2011	14/02/2011	14/02/2011				
diss.filt	Dissolved / filtered sample.		16/02/2011	16/02/2011	16/02/2011				
tot.unfilt	Total / unfiltered sample.		110216-13	110216-13	110216-13				
*	subcontracted test.		2877773	2877775	2877771				
**	% recovery of the surrogate standard to check the efficiency of the method. The results of the individual compounds within the samples are not corrected for this recovery.								
Component	LOD/Units		Method						
Dibromofluoromethane**	%		TM116	43.1	102	97.5			
Toluene-d8**	%	TM116	87.5	97.4	101				
4-Bromofluorobenzene**	%	TM116	149	121	104				
Dichlorodifluoromethane	<0.004 mg/kg	TM116	<0.004 M	<0.004 M	<0.004 M				
Chloromethane	<0.007 mg/kg	TM116	<0.007 #	<0.007 #	<0.007 #				
Vinyl Chloride	<0.01 mg/kg	TM116	<0.01 #	<0.01 #	<0.01 #				
Bromomethane	<0.013 mg/kg	TM116	<0.013 M	<0.013 M	<0.013 M				
Chloroethane	<0.014 mg/kg	TM116	<0.014 M	<0.014 M	<0.014 M				
Trichlorofluoromethane	<0.006 mg/kg	TM116	<0.006 M	<0.006 M	<0.006 M				
1.1-Dichloroethene	<0.01 mg/kg	TM116	<0.01 #	<0.01 #	<0.01 #				
Carbon Disulphide	<0.007 mg/kg	TM116	0.0231 M	<0.007 M	0.0545 M				
Dichloromethane	<0.01 mg/kg	TM116	0.0199 #	<0.01 #	<0.01 #				
Methyl Tertiary Butyl Ether	<0.011 mg/kg	TM116	<0.011 M	<0.011 M	<0.011 M				
trans-1-2-Dichloroethene	<0.011 mg/kg	TM116	<0.011 M	<0.011 M	<0.011 M				
1.1-Dichloroethane	<0.008 mg/kg	TM116	<0.008 M	<0.008 M	<0.008 M				
cis-1-2-Dichloroethene	<0.005 mg/kg	TM116	<0.005 M	<0.005 M	<0.005 M				
2.2-Dichloropropane	<0.012 mg/kg	TM116	<0.012 M	<0.012 M	<0.012 M				
Bromochloromethane	<0.014 mg/kg	TM116	<0.014 M	<0.014 M	<0.014 M				
Chloroform	<0.008 mg/kg	TM116	<0.008 M	<0.008 M	<0.008 M				
1.1.1-Trichloroethane	<0.007 mg/kg	TM116	<0.007 M	<0.007 M	<0.007 M				
1.1-Dichloropropene	<0.011 mg/kg	TM116	<0.011 M	<0.011 M	<0.011 M				
Carbontetrachloride	<0.014 mg/kg	TM116	<0.014 M	<0.014 M	<0.014 M				
1.2-Dichloroethane	<0.005 mg/kg	TM116	<0.005 M	<0.005 M	<0.005 M				
Benzene	<0.009 mg/kg	TM116	0.0807 M	<0.009 M	<0.009 M				
Trichloroethene	<0.009 mg/kg	TM116	<0.009 M	<0.009 M	<0.009 M				
1.2-Dichloropropane	<0.012 mg/kg	TM116	<0.012 M	<0.012 M	<0.012 M				
Dibromomethane	<0.009 mg/kg	TM116	<0.009 M	<0.009 M	<0.009 M				
Bromodichloromethane	<0.007 mg/kg	TM116	<0.007 M	<0.007 M	<0.007 M				
cis-1-3-Dichloropropene	<0.014 mg/kg	TM116	<0.014 M	<0.014 M	<0.014 M				
Toluene	<0.005 mg/kg	TM116	0.0461 M	<0.005 M	<0.005 M				
trans-1-3-Dichloropropene	<0.014 mg/kg	TM116	<0.014 M	<0.014 M	<0.014 M				
1.1.2-Trichloroethane	<0.01 mg/kg	TM116	<0.01 M	<0.01 M	<0.01 M				
1.3-Dichloropropane	<0.007 mg/kg	TM116	<0.007 #	<0.007 #	<0.007 #				
Tetrachloroethene	<0.005 mg/kg	TM116	<0.005 M	<0.005 M	<0.005 M				
Dibromochloromethane	<0.013 mg/kg	TM116	<0.013 M	<0.013 M	<0.013 M				



CERTIFICATE OF ANALYSIS

SDG: 110216-13
 Job: H_ARCADIS_LEE-40
 Client Reference: 96234.01

Location: Forge Lane, Dewsbury
 Customer: ARCADIS Geraghty & Miller
 Attention: Andrew Smith

Order Number:
 Report Number: 119768
 Superseded Report: 118862

VOC MS (S)

Results Legend		Customer Sample R	WS101	WS102	WS103						
#	ISO17025 accredited.										
M	mCERTS accredited.	Depth (m) Sample Type Date Sampled Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.50 - 0.70 Soil/Solid 14/02/2011 16/02/2011 110216-13 2877773	1.40 - 1.60 Soil/Solid 14/02/2011 16/02/2011 110216-13 2877775	0.60 - 0.80 Soil/Solid 14/02/2011 16/02/2011 110216-13 2877771						
S	Non-conforming work.										
aq	Aqueous / settled sample.										
diss.filt	Dissolved / filtered sample.										
tot.unfilt	Total / unfiltered sample.										
*	subcontracted test.										
**	% recovery of the surrogate standard to check the efficiency of the method. The results of the individual compounds within the samples are not corrected for this recovery.										
Component	LOD/Units					Method					
1.2-Dibromoethane	<0.012 mg/kg					TM116	<0.012 M	<0.012 M	<0.012 M		
Chlorobenzene	<0.005 mg/kg					TM116	<0.005 M	<0.005 M	<0.005 M		
1.1.1.2-Tetrachloroethane	<0.01 mg/kg	TM116	<0.01 M	<0.01 M	<0.01 M						
Ethylbenzene	<0.004 mg/kg	TM116	0.117 M	0.0298 M	0.00562 M						
p/m-Xylene	<0.014 mg/kg	TM116	0.0342 #	<0.014 #	<0.014 #						
o-Xylene	<0.01 mg/kg	TM116	0.0218 M	<0.01 M	<0.01 M						
Styrene	<0.01 mg/kg	TM116	0.185 M	0.0316 M	<0.01 M						
Bromoform	<0.01 mg/kg	TM116	<0.01 M	<0.01 M	<0.01 M						
Isopropylbenzene	<0.005 mg/kg	TM116	<0.005 M	<0.005 M	<0.005 M						
1.1.2.2-Tetrachloroethane	<0.01 mg/kg	TM116	<0.01 #	<0.01 #	<0.01 #						
1.2.3-Trichloropropane	<0.017 mg/kg	TM116	<0.017 M	<0.017 M	<0.017 M						
Bromobenzene	<0.01 mg/kg	TM116	<0.01 M	<0.01 M	<0.01 M						
Propylbenzene	<0.011 mg/kg	TM116	<0.011 M	<0.011 M	<0.011 M						
2-Chlorotoluene	<0.009 mg/kg	TM116	<0.009 M	<0.009 M	<0.009 M						
1.3.5-Trimethylbenzene	<0.008 mg/kg	TM116	<0.008 #	<0.008 #	<0.008 #						
4-Chlorotoluene	<0.012 mg/kg	TM116	<0.012 M	<0.012 M	<0.012 M						
tert-Butylbenzene	<0.012 mg/kg	TM116	<0.012 #	<0.012 #	<0.012 #						
1.2.4-Trimethylbenzene	<0.009 mg/kg	TM116	<0.009 #	<0.009 #	<0.009 #						
sec-Butylbenzene	<0.01 mg/kg	TM116	<0.01 M	<0.01 M	<0.01 M						
4-Isopropyltoluene	<0.011 mg/kg	TM116	<0.011 M	<0.011 M	<0.011 M						
1.3-Dichlorobenzene	<0.006 mg/kg	TM116	<0.006 M	<0.006 M	<0.006 M						
1.4-Dichlorobenzene	<0.005 mg/kg	TM116	<0.005 M	<0.005 M	<0.005 M						
n-Butylbenzene	<0.01 mg/kg	TM116	<0.01 M	<0.01 M	<0.01 M						
1.2-Dichlorobenzene	<0.012 mg/kg	TM116	<0.012 M	<0.012 M	<0.012 M						
1.2-Dibromo-3-chloropropane	<0.014 mg/kg	TM116	<0.014 M	<0.014 M	<0.014 M						
Tert-amyl methyl ether	<0.015 mg/kg	TM116	<0.015	<0.015	<0.015						
1.2.4-Trichlorobenzene	<0.006 mg/kg	TM116	<0.006 #	<0.006 #	<0.006 #						
Hexachlorobutadiene	<0.012 mg/kg	TM116	<0.012	<0.012	<0.012						
Naphthalene	<0.013 mg/kg	TM116	<0.013 M	<0.013 M	<0.013 M						
1.2.3-Trichlorobenzene	<0.006 mg/kg	TM116	<0.006 M	<0.006 M	<0.006 M						

SDG: 110216-13
Job: H_ARCADIS_LEE-40
Client Reference: 96234.01

Location: Forge Lane, Dewsbury
Customer: ARCADIS Geraghty & Miller
Attention: Andrew Smith

Order Number:
Report Number: 119768
Superseded Report: 118862

Table of Results - Appendix

REPORT KEY

Results expressed as (e.g.) 1.03E-07 is equivalent to 1.03x10⁻⁷

NDP	No Determination Possible	#	ISO 17025 Accredited	*	Subcontracted Test	M	MCERTS Accredited
NFD	No Fibres Detected	PFD	Possible Fibres Detected	»	Result previously reported (Incremental reports only)	EC	Equivalent Carbon (Aromatics C8-C35)

Note: Method detection limits are not always achievable due to various circumstances beyond our control

Method No	Reference	Description	Wet/Dry Sample ¹	Surrogate Corrected
PM001		Preparation of Samples for Metals Analysis		
PM023	Leaching test method for the Assessment of Contaminated Land: Interim NRA Guidance. National Rivers Authority R & D note 301. (1994).	Leaching Procedure for NRA Leachates		
PM024	Modified BS 1377	Soil preparation including homogenisation, moisture screens of soils for Asbestos Containing Material		
SUB		Subcontracted Test		
TM001	In - house Method	Determination of asbestos containing material by screening on solids		
TM024	Method 4500A & B, AWWA/APHA, 20th Ed., 1999	Determination of Exchangeable Ammonium and Ammoniacal Nitrogen as N by titration on solids		
TM061	Method for the Determination of EPH, Massachusetts Dept. of EP, 1998	Determination of Extractable Petroleum Hydrocarbons by GC-FID (C10-C40)		
TM062 (S)	National Grid Property Holdings Methods for the Collection & Analysis of Samples from National Grid Sites version 1 Sec 3.9	Determination of Phenols in Soils by HPLC		
TM089	Modified: US EPA Methods 8020 & 602	Determination of Gasoline Range Hydrocarbons (GRO) and BTEX (MTBE) compounds by Headspace GC-FID (C4-C12)		
TM099	BS 2690: Part 7:1968 / BS 6068: Part2.11:1984	Determination of Ammonium in Water Samples using the Kone Analyser		
TM101	Method 4500B & C, AWWA/APHA, 20th Ed., 1999	Determination of Sulphide in soil and water samples using the Kone Analyser		
TM104	Method 4500F, AWWA/APHA, 20th Ed., 1999	Determination of Fluoride using the Kone Analyser		
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS		
TM132	In - house Method	ELTRA CS800 Operators Guide		
TM133	BS 1377: Part 3 1990;BS 6068-2.5	Determination of pH in Soil and Water using the GLpH pH Meter		
TM136	Method 17.10, Second Site property, March 2003	Determination of Sulphur by HPLC		
TM151	Method 3500D, AWWA/APHA, 20th Ed., 1999	Determination of Hexavalent Chromium using Kone analyser		
TM152	Method 3125B, AWWA/APHA, 20th Ed., 1999	Analysis of Aqueous Samples by ICP-MS		
TM153	Method 4500A,B,C, I, M AWWA/APHA, 20th Ed., 1999	Determination of Total Cyanide, Free (Easily Liberatable) Cyanide and Thiocyanate using the Skalar SANS+ System Segmented Flow Analyser		
TM157	HP 6890 Gas Chromatograph (GC) system and HP 5973 Mass Selective Detector (MSD).	Determination of SVOC in Soils by GC-MS extracted by sonication in DCM/Acetone		
TM168	EPA Method 8082, Polychlorinated Biphenyls by Gas Chromatography	Determination of WHO12 and EC7 Polychlorinated Biphenyl Congeners by GC-MS in Soils		
TM172	Analysis of Petroleum Hydrocarbons in Environmental Media – Total Petroleum Hydrocarbon Criteria	EPH in Waters		
TM173	Analysis of Petroleum Hydrocarbons in Environmental Media – Total Petroleum Hydrocarbon Criteria	Determination of Speciated Extractable Petroleum Hydrocarbons in Soils by GC-FID		
TM178	Modified: US EPA Method 8100	Determination of Polynuclear Aromatic Hydrocarbons (PAH) by GC-MS in Waters		
TM180	Sulphide in waters and waste waters 1991 ISBN 01 175 7186 SCA rec. 2007 (unpublished)	The Determination Of Easily Liberated Sulphide In Soil Samples by Ion Selective Electrode Technique		
TM181	US EPA Method 6010B	Determination of Routine Metals in Soil by iCap 6500 Duo ICP-OES		
TM183	BS EN 23506:2002, (BS 6068-2.74:2002) ISBN 0 580 38924 3	Determination of Trace Level Mercury in Waters and Leachates by PSA Cold Vapour Atomic Fluorescence Spectrometry		
TM184	EPA Methods 325.1 & 325.2,	The Determination of Anions in Aqueous Matrices using the Kone Spectrophotometric Analysers		
TM218	Microwave extraction – EPA method 3546	Microwave extraction - EPA method 3546		
TM221	Inductively Coupled Plasma - Atomic Emission Spectroscopy. An Atlas of Spectral Information: Winge, Fassel, Peterson and Floyd	Determination of Acid extractable Sulphate in Soils by IRIS Emission Spectrometer		
TM222	In-House Method	Determination of Hot Water Soluble Boron in Soils (10:1 Water:soil) by IRIS Emission Spectrometer		
TM224	US EPA Method 6010B	Determination of Alkaline Metals by iCap 6500 Duo ICP-OES		
TM227	Standard methods for the examination of waters and wastewaters 20th Edition, AWWA/APHA Method 4500.	Determination of Total Cyanide, Free (Easily Liberatable) Cyanide and Thiocyanate		
TM228	US EPA Method 6010B	Determination of Major Cations in Water by iCap 6500 Duo ICP-OES		



CERTIFICATE OF ANALYSIS

SDG: 110216-13 **Location:** Forge Lane, Dewsbury **Order Number:**
Job: H_ARCADIS_LEE-40 **Customer:** ARCADIS Geraghty & Miller **Report Number:** 119768
Client Reference: 96234.01 **Attention:** Andrew Smith **Superseded Report:** 118862

Method No	Reference	Description	Wet/Dry Sample ¹	Surrogate Corrected
TM241	Methods for the Examination of Waters and Associated Materials; Chromium in Raw and Potable Waters and Sewage Effluents 1980.	The Determination of Hexavalent Chromium in Waters and Leachates using the Kone Analyser		
TM242	Method 340.3, Fluoride, EPA, 1997.	Determination of Fluoride in Soil Samples using the Kone Analyser		
TM243				
TM250				
TM256	The measurement of Electrical Conductivity and the Laboratory determination of pH Value of Natural, Treated and Wastewaters. HMSO, 1978. ISBN 011 751428 4.	Determination of pH in Water and Leachate using the GLpH pH Meter		
TM259	by HPLC	Determination of Phenols in Waters and Leachates by HPLC		

¹ Applies to Solid samples only. DRY indicates samples have been dried at 35°C. NA = not applicable.



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Test Completion Dates

Lab Sample No(s) Customer Sample Ref.	2877770	2877773	2877774	2877775	2877771	2877772
	CP101	WS101	WS102	WS102	WS103	WS103
AGS Ref.						
Depth	0.50 - 1.00	0.50 - 0.70	0.80 - 1.00	1.40 - 1.60	0.60 - 0.80	1.60 - 1.80
Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Alkali Metals by iCap-OES (Soil)	22-Feb-2011	22-Feb-2011	22-Feb-2011			22-Feb-2011
Ammoniacal Nitrogen		09-Mar-2011		09-Mar-2011	09-Mar-2011	
Ammonium Soil by Titration		17-Feb-2011		17-Feb-2011	17-Feb-2011	
Anions by Kone (soil)	18-Feb-2011	18-Feb-2011	18-Feb-2011	18-Feb-2011	18-Feb-2011	18-Feb-2011
Anions by Kone (w)		09-Mar-2011		09-Mar-2011	09-Mar-2011	
Asbestos Containing Material Screen	16-Feb-2011	16-Feb-2011	16-Feb-2011	16-Feb-2011		16-Feb-2011
Boron Water Soluble	22-Feb-2011	22-Feb-2011	22-Feb-2011			22-Feb-2011
Calorific Value (S)*		25-Feb-2011		25-Feb-2011	25-Feb-2011	
Cyanide Comp/Free/Total/Thiocyanate	17-Feb-2011	04-Mar-2011	17-Feb-2011	04-Mar-2011	04-Mar-2011	17-Feb-2011
Dissolved Metals by ICP-MS		04-Mar-2011		04-Mar-2011	04-Mar-2011	
Easily Liberated Sulphide		17-Feb-2011		21-Feb-2011	21-Feb-2011	
Elemental Sulphur		22-Feb-2011		22-Feb-2011	22-Feb-2011	
EPH (DRO) (C10-C40) Aqueous (W)		08-Mar-2011		08-Mar-2011	08-Mar-2011	
EPH CWG (Aliphatic) GC (S)	19-Feb-2011	18-Feb-2011	18-Feb-2011			18-Feb-2011
EPH CWG (Aromatic) GC (S)	19-Feb-2011	18-Feb-2011	18-Feb-2011			18-Feb-2011
Fluoride		07-Mar-2011		07-Mar-2011	07-Mar-2011	
Fluoride (soluble)	21-Feb-2011	18-Feb-2011	18-Feb-2011			18-Feb-2011
Free Sulphur		04-Mar-2011		04-Mar-2011	04-Mar-2011	
GRO by GC-FID (S)	18-Feb-2011	22-Feb-2011	22-Feb-2011			18-Feb-2011
Hexavalent Chromium (s)	17-Feb-2011	17-Feb-2011	17-Feb-2011			17-Feb-2011
Hexavalent Chromium (w)		07-Mar-2011		07-Mar-2011	07-Mar-2011	
Mercury Dissolved		04-Mar-2011		04-Mar-2011	04-Mar-2011	
Metals by iCap-OES (Soil)	22-Feb-2011	22-Feb-2011	22-Feb-2011			22-Feb-2011
Metals by iCap-OES Dissolved (W)		04-Mar-2011		04-Mar-2011	04-Mar-2011	
NO3, NO2 and TON by KONE (s)	21-Feb-2011	21-Feb-2011	21-Feb-2011			21-Feb-2011
NRA Leachate		01-Mar-2011		01-Mar-2011	01-Mar-2011	
PAH by GCMS	20-Feb-2011	20-Feb-2011	20-Feb-2011			20-Feb-2011
PAH Spec MS - Aqueous (W)		07-Mar-2011		07-Mar-2011	07-Mar-2011	
PCBs by GCMS		19-Feb-2011		19-Feb-2011	19-Feb-2011	
pH	17-Feb-2011	17-Feb-2011	17-Feb-2011			17-Feb-2011
pH Value		04-Mar-2011		04-Mar-2011	04-Mar-2011	
Phenols by HPLC (S)		18-Feb-2011		17-Feb-2011	18-Feb-2011	
Phenols by HPLC (W)		07-Mar-2011				
Phosphate (Ortho as PO4) (s)	21-Feb-2011	18-Feb-2011	18-Feb-2011			18-Feb-2011
Sample description	16-Feb-2011	16-Feb-2011	16-Feb-2011	16-Feb-2011	16-Feb-2011	16-Feb-2011
Semi Volatile Organic Compounds		21-Feb-2011		21-Feb-2011	21-Feb-2011	
Silver	22-Feb-2011	22-Feb-2011	22-Feb-2011			22-Feb-2011
Sulphide		09-Mar-2011		09-Mar-2011	09-Mar-2011	
Total Organic Carbon		18-Feb-2011		18-Feb-2011	17-Feb-2011	
Total Sulphate		03-Mar-2011		03-Mar-2011	03-Mar-2011	
Total Sulphur		18-Feb-2011		18-Feb-2011	18-Feb-2011	
TPH CWG GC (S)	19-Feb-2011	22-Feb-2011	22-Feb-2011			18-Feb-2011
VOC MS (S)		20-Feb-2011		22-Feb-2011	22-Feb-2011	



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ASSOCIATED AQC DATA

Alkali Metals by iCap-OES (Soil)

Component	Method Code	QC 28	QC 26
Calcium	TM224	91.30 82.76 : 117.24	95.14 82.76 : 117.24
Magnesium	TM224	94.21 80.90 : 107.65	99.74 80.90 : 107.65
Potassium	TM224	114.46 65.06 : 116.82	116.41 65.06 : 116.82
Sodium	TM224	99.91 65.06 : 134.94	103.13 65.06 : 134.94

Ammoniacal Nitrogen

Component	Method Code	QC 39
Ammoniacal Nitrogen as N	TM099	100.78 97.38 : 106.13

Ammonium Soil by Titration

Component	Method Code	QC 28	QC 24
Exchangeable Ammonium as NH ₄	TM024	94.08 80.84 : 103.27	93.19 80.84 : 103.27

Anions by Kone (soil)

Component	Method Code	QC 22	QC 27
Chloride (soluble)	TM243	100.77 78.07 : 121.93	97.57 78.07 : 121.93
Water Soluble Sulphate as SO ₄ 2:1 Extract	TM243	98.60 91.36 : 106.23	97.01 91.36 : 106.23

Anions by Kone (w)

Component	Method Code	QC 30
Chloride	TM184	100.30 95.90 : 105.20
Nitrite as NO ₂	TM184	100.90 92.92 : 105.47
Phosphate (Ortho as PO ₄)	TM184	103.80 96.98 : 107.09
Sulphate (soluble)	TM184	100.84 95.09 : 105.03
TON as NO ₃	TM184	96.50 93.27 : 107.89

Boron Water Soluble



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Boron Water Soluble

Component	Method Code	QC 25	QC 25
Water Soluble Boron	TM222	95.15 86.36 : 114.95	92.75 86.36 : 114.95

Cyanide Comp/Free/Total/Thiocyanate

Component	Method Code	QC 28	QC 24
Free Cyanide	TM153	102.67 87.04 : 107.05	
Free Cyanide (W)	TM227		92.60 87.13 : 117.88
Thiocyanate	TM153	103.74 90.22 : 111.93	
Thiocyanate (W)	TM227		97.45 84.79 : 114.71
Total Cyanide	TM153	105.22 77.00 : 112.12	
Total Cyanide (W)	TM227		100.33 87.76 : 118.74

Dissolved Metals by ICP-MS

Component	Method Code	QC 31
Aluminium	TM152	103.15 85.00 : 115.00
Antimony	TM152	99.71 85.05 : 115.00
Arsenic	TM152	100.49 85.05 : 115.00
Barium	TM152	101.11 85.05 : 115.00
Beryllium	TM152	104.77 85.05 : 115.00
Bismuth	TM152	99.77 85.05 : 115.00
Boron	TM152	105.67 85.05 : 115.00
Cadmium	TM152	100.48 85.05 : 115.00
Chromium	TM152	101.15 85.05 : 115.00
Cobalt	TM152	101.69 85.05 : 115.00
Copper	TM152	100.53 85.05 : 115.00
Lead	TM152	101.12 85.05 : 115.00
Lithium	TM152	105.41 85.05 : 115.00
Manganese	TM152	100.88 85.05 : 115.00



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Dissolved Metals by ICP-MS

		QC 31
Molybdenum	TM152	100.65 85.05 : 115.00
Nickel	TM152	101.65 85.05 : 115.00
Phosphorus	TM152	101.20 85.00 : 115.00
Selenium	TM152	101.95 85.00 : 115.00
Silver	TM152	97.95 85.00 : 115.00
Strontium	TM152	100.65 85.05 : 115.00
Tellurium	TM152	102.69 85.05 : 115.00
Thallium	TM152	100.49 85.05 : 115.00
Tin	TM152	102.08 85.05 : 115.00
Titanium	TM152	100.49 85.05 : 115.00
Uranium	TM152	99.32 85.05 : 115.00
Vanadium	TM152	100.55 85.05 : 115.00
Zinc	TM152	100.09 85.00 : 115.00

Easily Liberated Sulphide

Component	Method Code	QC 26	QC 20
Easily Liberated Sulphide	TM180	88.80 44.43 : 127.23	81.39 44.43 : 127.23

Elemental Sulphur

Component	Method Code	QC 20
Elemental Sulphur	TM136	100.51

EPH (DRO) (C10-C40) Aqueous (W)

Component	Method Code	QC 32
EPH (DRO) (C10-C40)	TM172	88.42 38.50 : 139.00



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EPH CWG (Aliphatic) GC (S)

Component	Method Code	QC 26	QC 23
Total Aliphatics >C12-C35	TM173	93.63 68.60 : 100.41	97.39 69.61 : 98.11

EPH CWG (Aromatic) GC (S)

Component	Method Code	QC 26	QC 23
Total Aromatics >EC12-EC35	TM173	91.53 60.37 : 122.36	100.17 72.46 : 119.87

Fluoride

Component	Method Code	QC 37
Fluoride	TM104	99.13 81.33 : 118.67

Hexavalent Chromium (s)

Component	Method Code	QC 28
Hexavalent Chromium	TM151	99.80 92.03 : 118.13

Hexavalent Chromium (w)

Component	Method Code	QC 38
Hexavalent Chromium	TM241	100.20 92.14 : 111.57

Mercury Dissolved

Component	Method Code	QC 37
Mercury Dissolved (CVAf)	TM183	89.00 85.87 : 123.88



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Metals by iCap-OES (Soil)

Component	Method Code	QC 28	QC 26	QC 28	QC 28
Aluminium	TM181	124.09 94.29 : 126.83	129.93 99.74 : 133.84	123.79 94.29 : 126.83	124.77 99.42 : 133.41
Antimony	TM181	100.16 80.62 : 119.38	116.93 95.73 : 132.37	101.42 80.62 : 119.38	104.76 84.02 : 116.19
Arsenic	TM181	104.82 93.69 : 117.92	108.96 92.13 : 124.49	102.41 93.78 : 118.04	109.47 92.22 : 124.62
Barium	TM181	113.26 92.15 : 121.48	112.09 99.87 : 124.97	105.24 92.15 : 121.48	113.17 -1.31 : 23.83
Beryllium	TM181	104.01 93.37 : 106.63	102.24 83.56 : 132.08	99.58 93.37 : 106.63	103.28 83.56 : 132.08
Boron	TM181	128.92 71.45 : 144.21	130.71 83.10 : 149.49	129.90 71.45 : 144.21	122.47 82.88 : 149.11
Cadmium	TM181	95.53 83.47 : 108.02	101.78 99.32 : 120.68	93.39 83.47 : 108.02	103.48 86.94 : 105.63
Chromium	TM181	102.48 86.66 : 111.67	108.73 89.88 : 120.16	103.24 86.66 : 111.67	107.82 89.76 : 120.00
Cobalt	TM181	105.51 91.65 : 115.98	109.24 94.73 : 120.59	103.64 91.65 : 115.98	109.95 94.43 : 120.21
Copper	TM181	100.11 90.86 : 109.48	99.14 93.26 : 114.97	100.24 90.86 : 109.48	106.41 93.32 : 115.05
Iron	TM181	113.90 100.21 : 121.44	118.97 100.19 : 127.85	108.74 100.21 : 121.44	116.25 99.77 : 127.31
Lead	TM181	94.40 81.17 : 121.35	113.31 81.63 : 123.21	92.01 81.17 : 121.35	97.23 81.75 : 123.40
Manganese	TM181	95.77 88.94 : 103.43	103.42 89.87 : 108.44	96.32 88.94 : 103.43	99.28 89.95 : 108.54
Mercury	TM181	109.40 96.85 : 124.11	115.91 101.30 : 128.70	109.05 96.85 : 124.11	119.07 101.30 : 128.70
Molybdenum	TM181	99.05 83.94 : 116.06	117.67 96.32 : 127.40	96.88 83.94 : 116.06	100.14 84.02 : 111.13
Nickel	TM181	99.47 83.34 : 114.35	114.43 88.13 : 116.85	100.53 83.34 : 114.35	107.63 88.14 : 116.87
Phosphorus	TM181	98.09 85.62 : 116.58	108.82 89.03 : 113.27	100.53 85.62 : 116.58	97.27 89.00 : 113.23
Selenium	TM181	109.38 100.15 : 123.30	109.07 95.46 : 126.52	106.25 100.15 : 123.30	112.00 95.45 : 126.51
Strontium	TM181	106.03 89.82 : 110.49	112.16 91.79 : 123.61	104.63 89.82 : 110.49	111.44 91.88 : 123.72
Thallium	TM181	104.47 93.51 : 130.39	128.72 81.67 : 125.57	105.31 93.51 : 130.39	109.78 81.64 : 125.52
Tin	TM181	97.84 89.71 : 110.91	101.80 97.01 : 132.90	96.16 89.71 : 110.91	101.88 84.94 : 116.37
Titanium	TM181	110.76 78.57 : 125.05	88.33 87.17 : 133.97	108.42 78.57 : 125.05	109.50 87.06 : 133.82
Vanadium	TM181	106.44 91.61 : 110.18	108.46 93.04 : 119.76	103.51 91.61 : 110.18	109.28 89.94 : 123.16
Zinc	TM181	94.72 83.65 : 103.15	94.80 82.78 : 113.72	99.35 83.65 : 103.15	98.65 82.72 : 113.65

Metals by iCap-OES Dissolved (W)



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Metals by iCap-OES Dissolved (W)

Component	Method Code	QC 39	QC 30
Calcium	TM228	97.21 81.78 : 115.59	97.11 81.78 : 115.59
Iron	TM228	88.40 81.04 : 106.35	88.04 81.04 : 106.35
Magnesium	TM228	97.01 81.62 : 113.40	96.80 81.62 : 113.40
Potassium	TM228	97.25 81.27 : 112.71	96.95 81.27 : 112.71
Sodium	TM228	98.68 81.34 : 114.58	98.18 81.34 : 114.58

NO3, NO2 and TON by KONE (s)

Component	Method Code	QC 22	QC 27
Nitrate/TON as N QC	TM243	144.11 75.71 : 136.31	130.20 75.71 : 136.31
Nitrite (soluble) as NO2	TM243	92.13 80.34 : 120.22	89.89 80.34 : 120.22

PAH by GCMS

Component	Method Code	QC 25
Acenaphthene	TM218	96.53 73.81 : 109.35
Acenaphthylene	TM218	85.49 67.05 : 95.65
Anthracene	TM218	93.31 72.39 : 100.02
Benz(a)anthracene	TM218	105.73 74.79 : 118.85
Benzo(a)pyrene	TM218	110.88 73.75 : 119.70
Benzo(b)fluoranthene	TM218	105.59 75.06 : 120.22
Benzo(ghi)perylene	TM218	100.37 75.04 : 115.56
Benzo(k)fluoranthene	TM218	101.51 76.34 : 113.30
Chrysene	TM218	97.52 73.17 : 115.36
Dibenzo(ah)anthracene	TM218	100.18 74.81 : 113.99
Fluoranthene	TM218	99.22 75.32 : 108.37
Fluorene	TM218	94.89 71.61 : 107.41
Indeno(123cd)pyrene	TM218	102.45 74.70 : 117.26
Naphthalene	TM218	94.00 73.58 : 103.51
Phenanthrene	TM218	97.53 74.65 : 105.86



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PAH by GCMS

		QC 25
Pyrene	TM218	98.68 76.08 : 109.72

PAH Spec MS - Aqueous (W)

Component	Method Code	QC 27
Acenaphthene by GCMS	TM178	91.18 85.48 : 106.23
Acenaphthylene by GCMS	TM178	92.73 80.12 : 106.77
Anthracene by GCMS	TM178	90.53 77.85 : 105.75
Benz(a)anthracene by GCMS	TM178	100.49 78.50 : 107.21
Benzo(a)pyrene by GCMS	TM178	102.29 82.45 : 122.13
Benzo(b)fluoranthene by GCMS	TM178	93.14 87.25 : 114.25
Benzo(ghi)perylene by GCMS	TM178	104.97 82.05 : 112.05
Benzo(k)fluoranthene by GCMS	TM178	101.76 87.20 : 122.40
Chrysene by GCMS	TM178	102.89 85.32 : 108.58
Dibenzo(ah)anthracene by GCMS	TM178	108.68 72.40 : 118.55
Fluoranthene by GCMS	TM178	94.01 87.00 : 105.75
Fluorene by GCMS	TM178	94.65 83.15 : 107.63
Indeno(123cd)pyrene by GCMS	TM178	105.24 82.25 : 114.75
Naphthalene by GCMS	TM178	93.24 84.63 : 104.92
Phenanthrene by GCMS	TM178	95.86 86.86 : 107.20
Pyrene by GCMS	TM178	95.48 84.55 : 108.55
Volume	TM178	15000.00

PCBs by GCMS

Component	Method Code	QC 29
PCB congener 101	TM168	85.21
PCB congener 114	TM168	85.46
PCB congener 156	TM168	81.22
PCB congener 180	TM168	83.46
PCB congener 28	TM168	86.11



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pH

Component	Method Code	QC 28
pH	TM133	101.00 98.46 : 102.30

pH Value

Component	Method Code	QC 32
pH	TM256	99.86 99.26 : 100.01

Phenols by HPLC (S)

Component	Method Code	QC 20	QC 27
2,3,5 Trimethyl-Phenol by HPLC (S)	TM062 (S)	99.40 85.13 : 105.17	101.80 85.13 : 105.17
2-Isopropyl Phenol by HPLC (S)	TM062 (S)	97.01 87.06 : 106.06	99.40 87.06 : 106.06
Catechol by HPLC (S)	TM062 (S)	71.86 27.40 : 94.47	71.26 27.40 : 94.47
Cresols by HPLC (S)	TM062 (S)	91.42 83.33 : 100.99	93.61 83.33 : 100.99
Naphthol by HPLC (S)	TM062 (S)	98.20 55.65 : 110.94	99.40 55.65 : 110.94
Phenol by HPLC (S)	TM062 (S)	95.21 83.94 : 101.65	95.81 83.94 : 101.65
Resorcinol HPLC (S)	TM062 (S)	101.20 83.97 : 105.22	100.00 83.97 : 105.22
Xylenols by HPLC (S)	TM062 (S)	96.51 83.64 : 102.70	99.00 83.64 : 102.70

Phenols by HPLC (W)

Component	Method Code	QC 35
2,3,5 Trimethyl-Phenol by HPLC (W)	TM259	103.00 93.62 : 109.26
2-Isopropyl Phenol by HPLC (W)	TM259	103.00 95.28 : 108.84
Cresols by HPLC (W)	TM259	103.33 93.83 : 110.08
Naphthol by HPLC (W)	TM259	99.00 90.45 : 109.21
Phenol by HPLC (W)	TM259	96.00 93.02 : 105.72
Xylenols by HPLC (W)	TM259	104.00 94.65 : 107.41

Phosphate (Ortho as PO4) (s)



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Phosphate (Ortho as PO₄) (s)

Component	Method Code	QC 22	QC 27
Phosphate (Ortho as PO ₄)	TM243	131.76 69.42 : 130.58	146.01 69.42 : 130.58

Semi Volatile Organic Compounds

Component	Method Code	QC 24
4-Bromophenylphenylether (Soil)	TM157	82.90 61.72 : 116.07
Benzo(a)anthracene (Soil)	TM157	88.08 60.41 : 125.98
Hexachlorobutadiene (Soil)	TM157	86.46 66.69 : 115.46
Naphthalene (Soil)	TM157	82.33 66.96 : 117.88
Nitrobenzene (Soil)	TM157	84.59 67.54 : 113.96
Phenol (Soil)	TM157	82.30 72.46 : 110.83

Sulphide

Component	Method Code	QC 21
Sulphide	TM101	104.93 77.08 : 135.77

Total Organic Carbon

Component	Method Code	QC 25	QC 22
Total Organic Carbon	TM132	94.86 88.75 : 104.70	92.20 88.75 : 104.70

Total Sulphate

Component	Method Code	QC 29
Total Sulphate	TM221	88.35 76.23 : 96.92

Total Sulphur



CERTIFICATE OF ANALYSIS

Validated

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Total Sulphur

Component	Method Code	QC 29	QC 29
Total Sulphur %	TM132	97.03 85.59 : 114.40	97.03 85.59 : 114.40

The above information details the reference name of the analytical quality control sample (AQC) that has been run with the samples contained in this report for the different methods of analysis.

The figure detailed is the percentage recovery result for the AQC.

The subscript numbers below are the percentage recovery lower control limit (LCL) and the upper control limit (UCL). The percentage recovery result for the AQC should be between these limits to be statistically in control.



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Superseded Report: 118862

Chromatogram

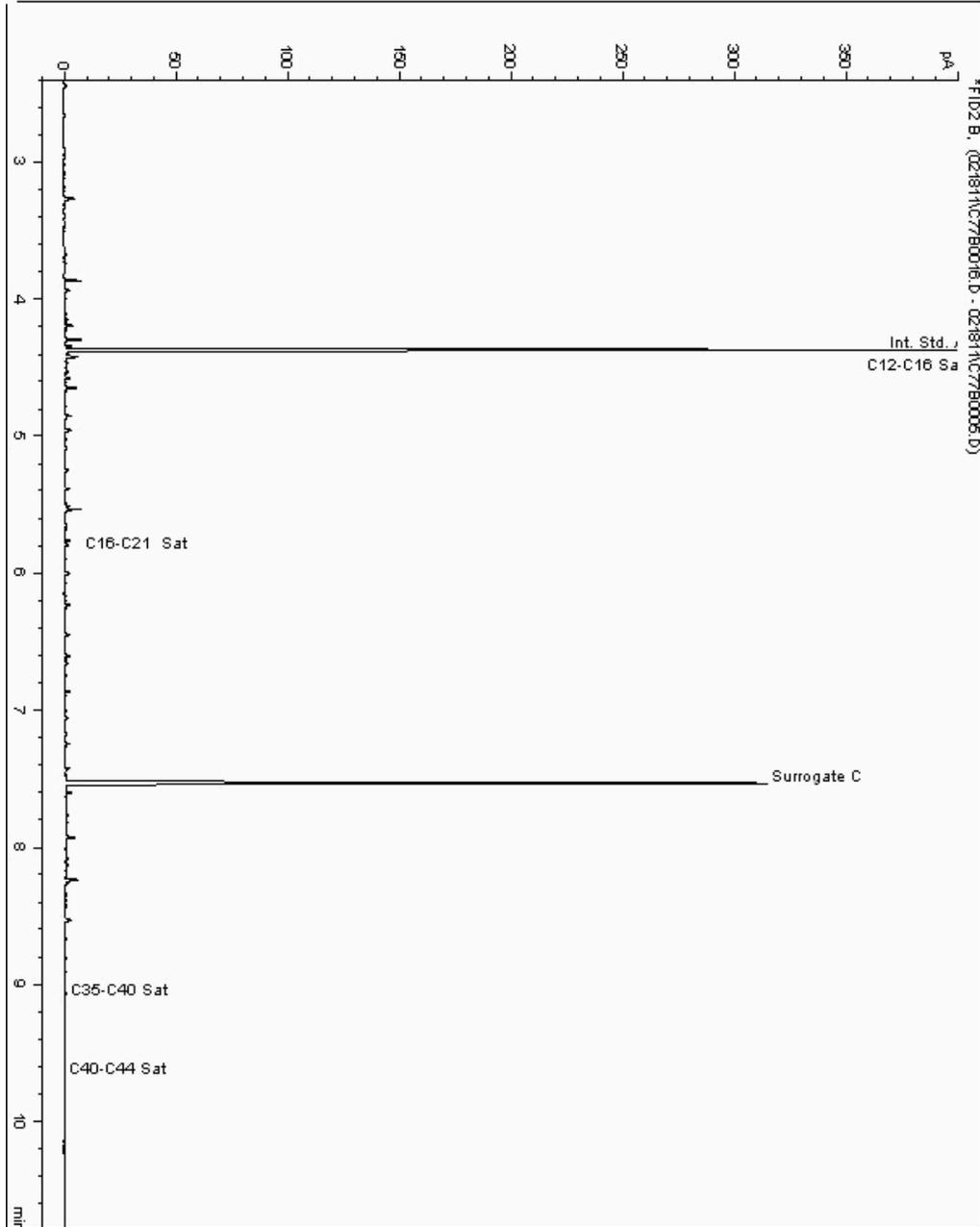
Analysis: EPH CWG (Aliphatic) GC (S)

Sample No : 2889106
Sample ID : CP101

Depth : 0.50 - 1.00

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 2949743-2889106
Date Acquired : 18/02/11 22:08:43 PM
Units : ppb
Dilution:





CERTIFICATE OF ANALYSIS

SDG: 110216-13
Job: H_ARCADIS_LEE-40
Client Reference: 96234.01

Location: Forge Lane, Dewsbury
Customer: ARCADIS Geraghty & Miller
Attention: Andrew Smith

Order Number:
Report Number: 119768
Superseded Report: 118862

Chromatogram

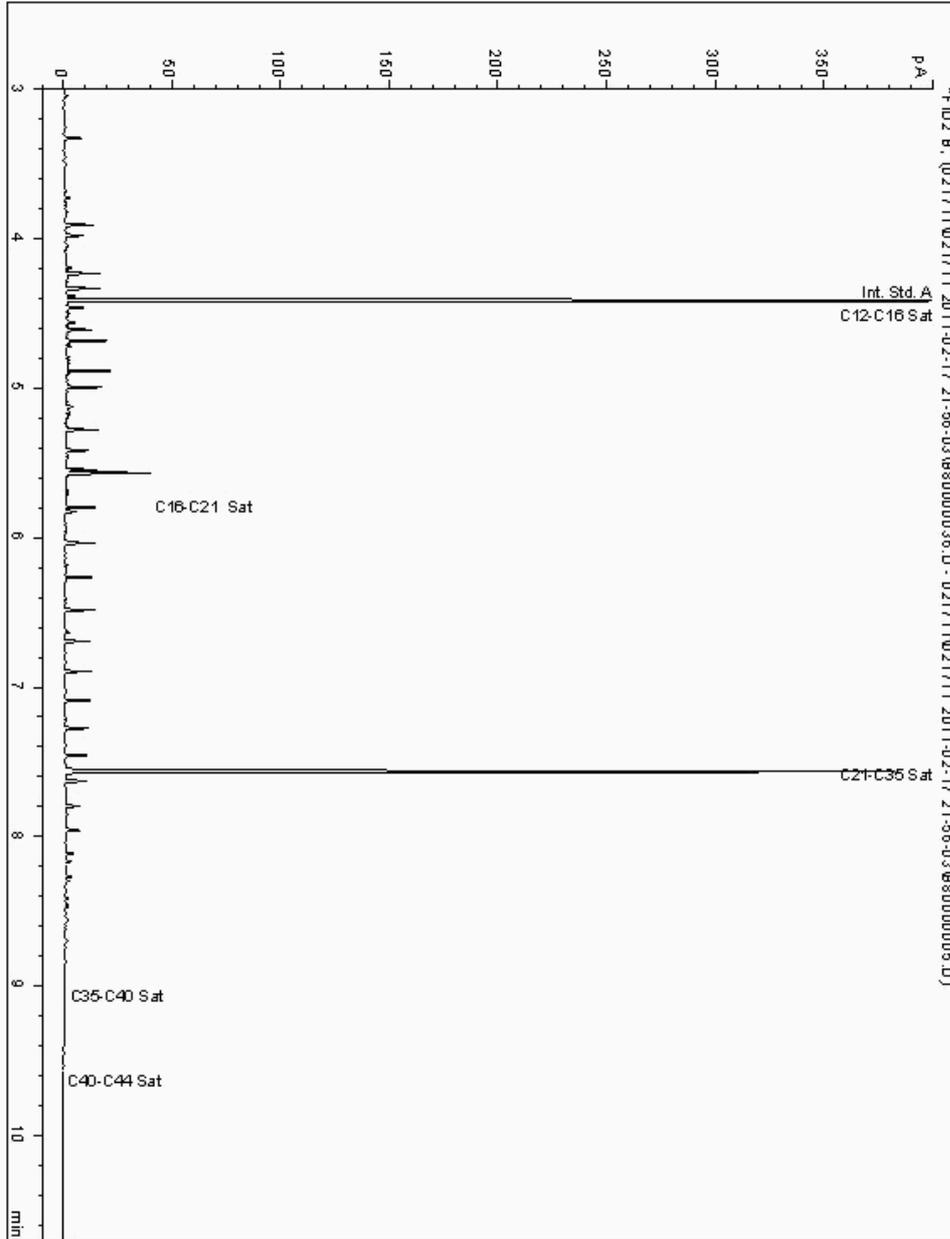
Analysis: EPH CWG (Aliphatic) GC (S)

Sample No : 2890720
Sample ID : WS102

Depth : 0.80 - 1.00

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 2949838-2890720
Date Acquired : 18/02/11 08:52:05
Units : ppb
Dilution :
CF : 1
Multiplier : 1.010





CERTIFICATE OF ANALYSIS

SDG: 110216-13
Job: H_ARCADIS_LEE-40
Client Reference: 96234.01

Location: Forge Lane, Dewsbury
Customer: ARCADIS Geraghty & Miller
Attention: Andrew Smith

Order Number:
Report Number: 119768
Superseded Report: 118862

Chromatogram

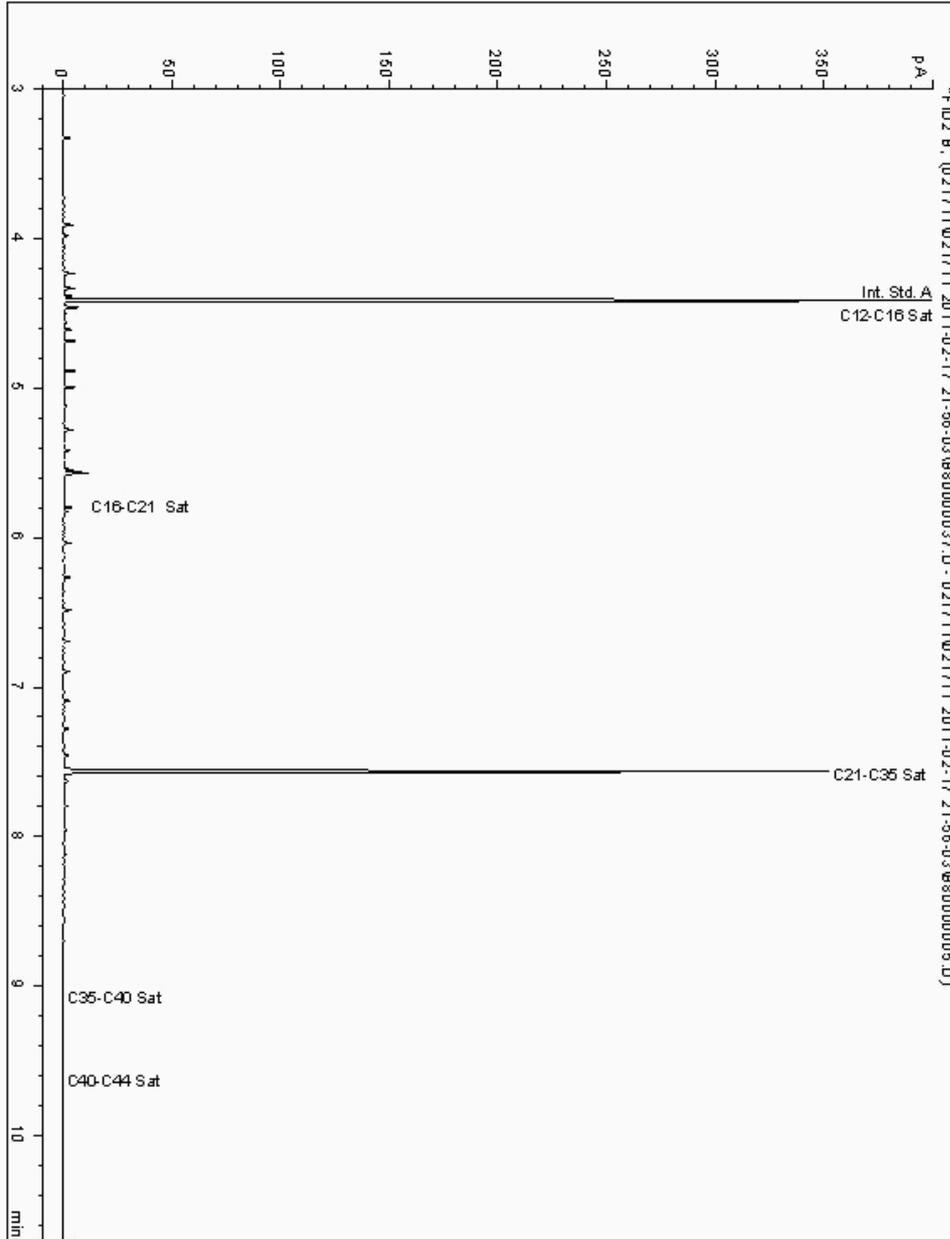
Analysis: EPH CWG (Aliphatic) GC (S)

Sample No : 2890846
Sample ID : WS101

Depth : 0.50 - 0.70

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 2949815-2890846
Date Acquired : 18/02/11 09:12:17
Units : ppb
Dilution :
CF : 1
Multiplier : 1.010





CERTIFICATE OF ANALYSIS

SDG: 110216-13
Job: H_ARCADIS_LEE-40
Client Reference: 96234.01

Location: Forge Lane, Dewsbury
Customer: ARCADIS Geraghty & Miller
Attention: Andrew Smith

Order Number:
Report Number: 119768
Superseded Report: 118862

Chromatogram

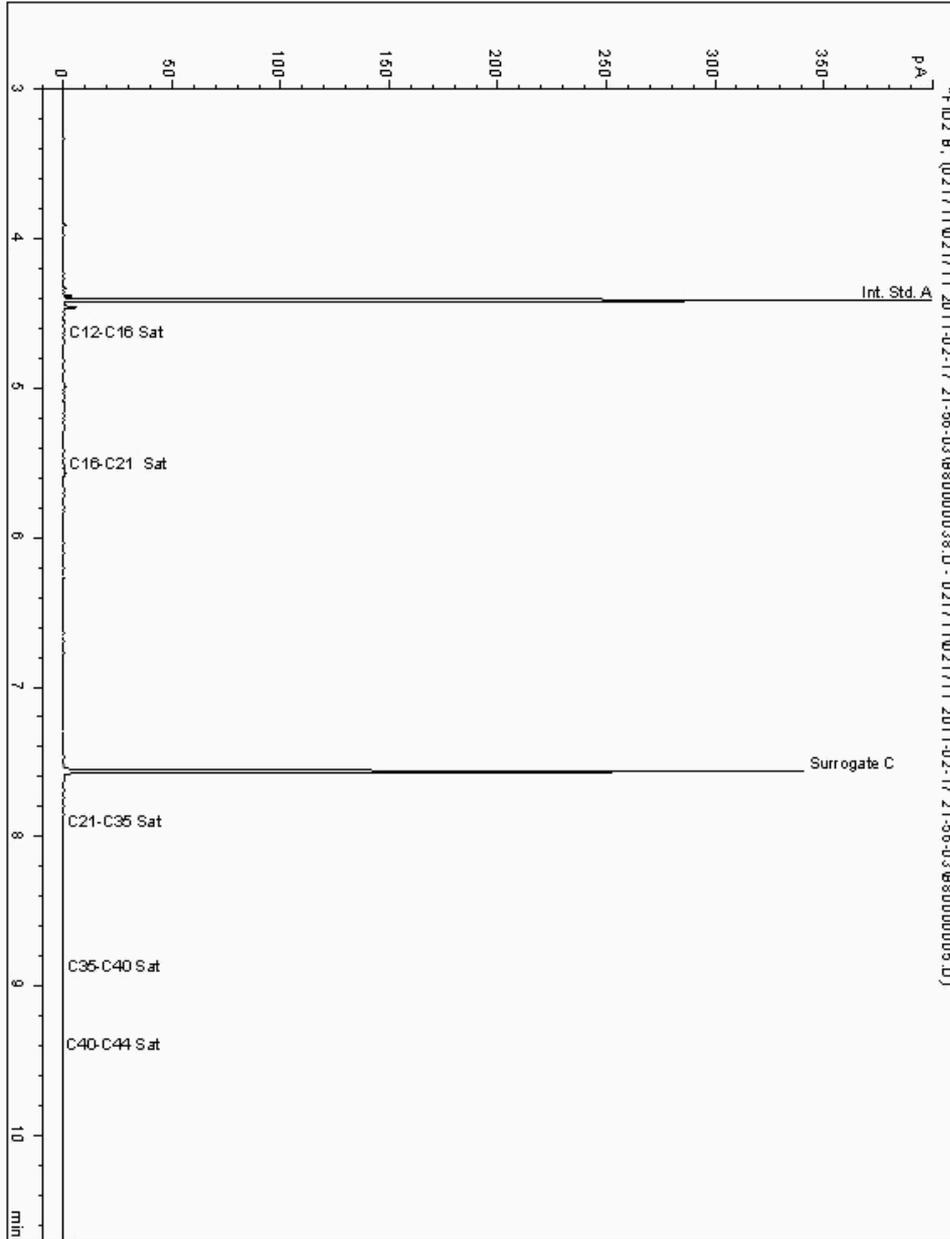
Analysis: EPH CWG (Aliphatic) GC (S)

Sample No : 2890971
Sample ID : WS103

Depth : 1.60 - 1.80

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 2949787-2890971
Date Acquired : 18/02/11 09:32:20
Units : ppb
Dilution :
CF : 1
Multiplier : 0.960





CERTIFICATE OF ANALYSIS

SDG: 110216-13
Job: H_ARCADIS_LEE-40
Client Reference: 96234.01

Location: Forge Lane, Dewsbury
Customer: ARCADIS Geraghty & Miller
Attention: Andrew Smith

Order Number:
Report Number: 119768
Superseded Report: 118862

Chromatogram

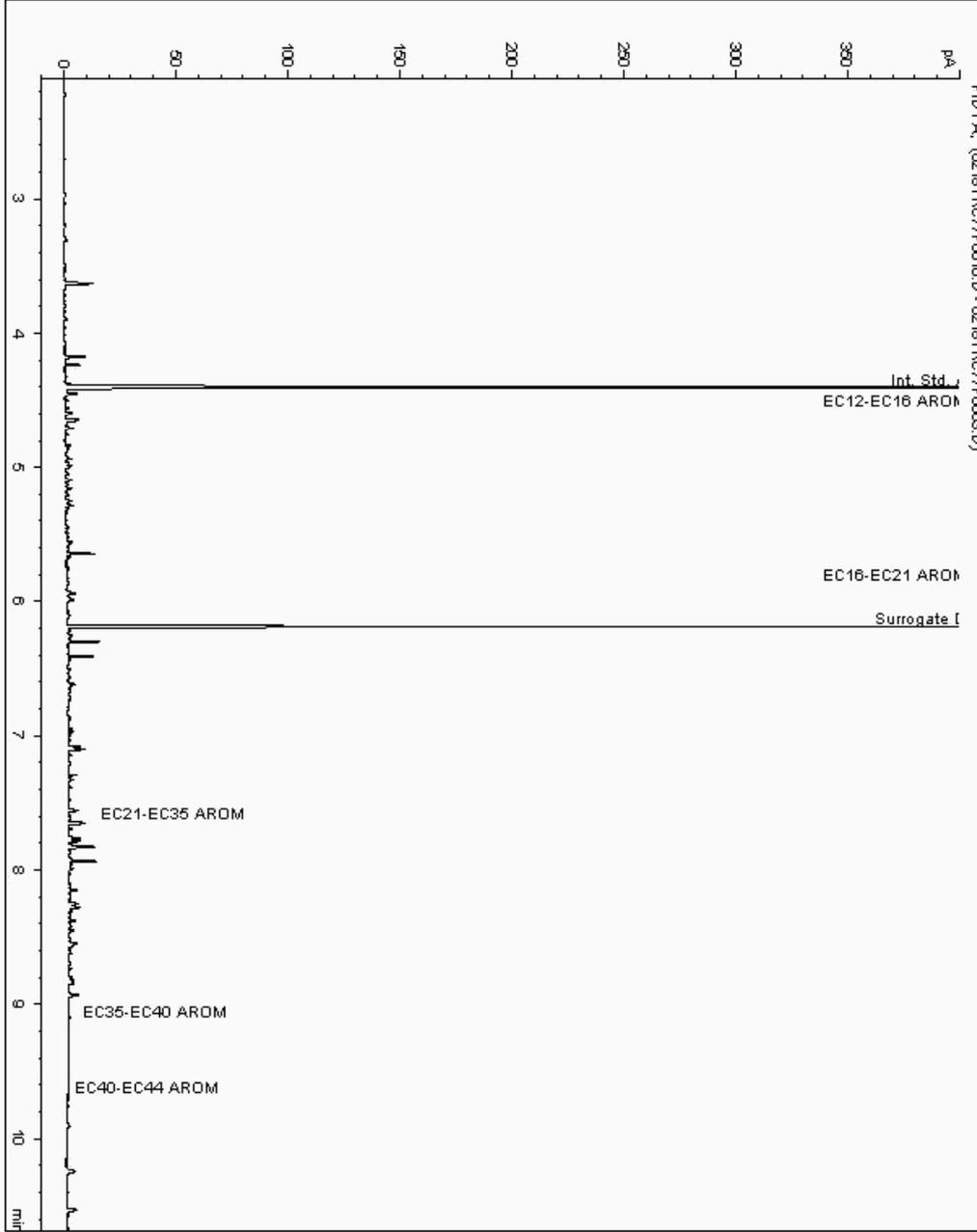
Analysis: EPH CWG (Aromatic) GC (S)

Sample No : 2889106
Sample ID : CP101

Depth : 0.50 - 1.00

Alcontrol/Geochem Analytical Services
Speciated TPH - AROM (C12 - C40)

Sample Identity: 2949744-2889106
Date Acquired : 18/02/11 22:08:43 PM
Units : ppb
Dilution:





CERTIFICATE OF ANALYSIS

SDG: 110216-13
Job: H_ARCADIS_LEE-40
Client Reference: 96234.01

Location: Forge Lane, Dewsbury
Customer: ARCADIS Geraghty & Miller
Attention: Andrew Smith

Order Number:
Report Number: 119768
Superseded Report: 118862

Chromatogram

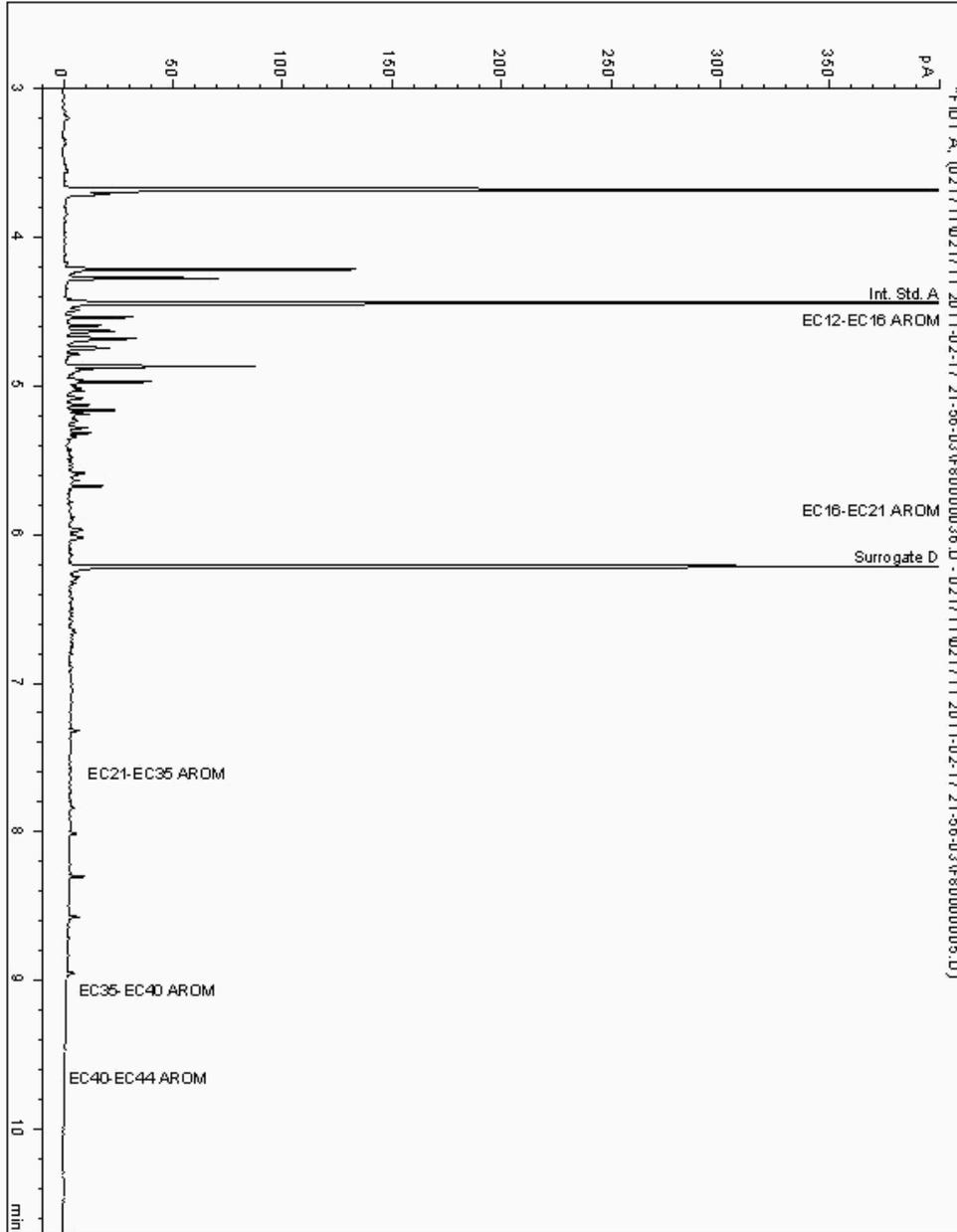
Analysis: EPH CWG (Aromatic) GC (S)

Sample No : 2890720
Sample ID : WS102

Depth : 0.80 - 1.00

Alcontrol/Geochem Analytical Services
Speciated TPH - AROM (C12 - C40)

Sample Identity: 2949839-2890720
Date Acquired : 18/02/11 08:52:06
Units : ppb
Dilution :
CF : 1
Multiplier : 1.010





CERTIFICATE OF ANALYSIS

SDG: 110216-13
Job: H_ARCADIS_LEE-40
Client Reference: 96234.01

Location: Forge Lane, Dewsbury
Customer: ARCADIS Geraghty & Miller
Attention: Andrew Smith

Order Number:
Report Number: 119768
Superseded Report: 118862

Chromatogram

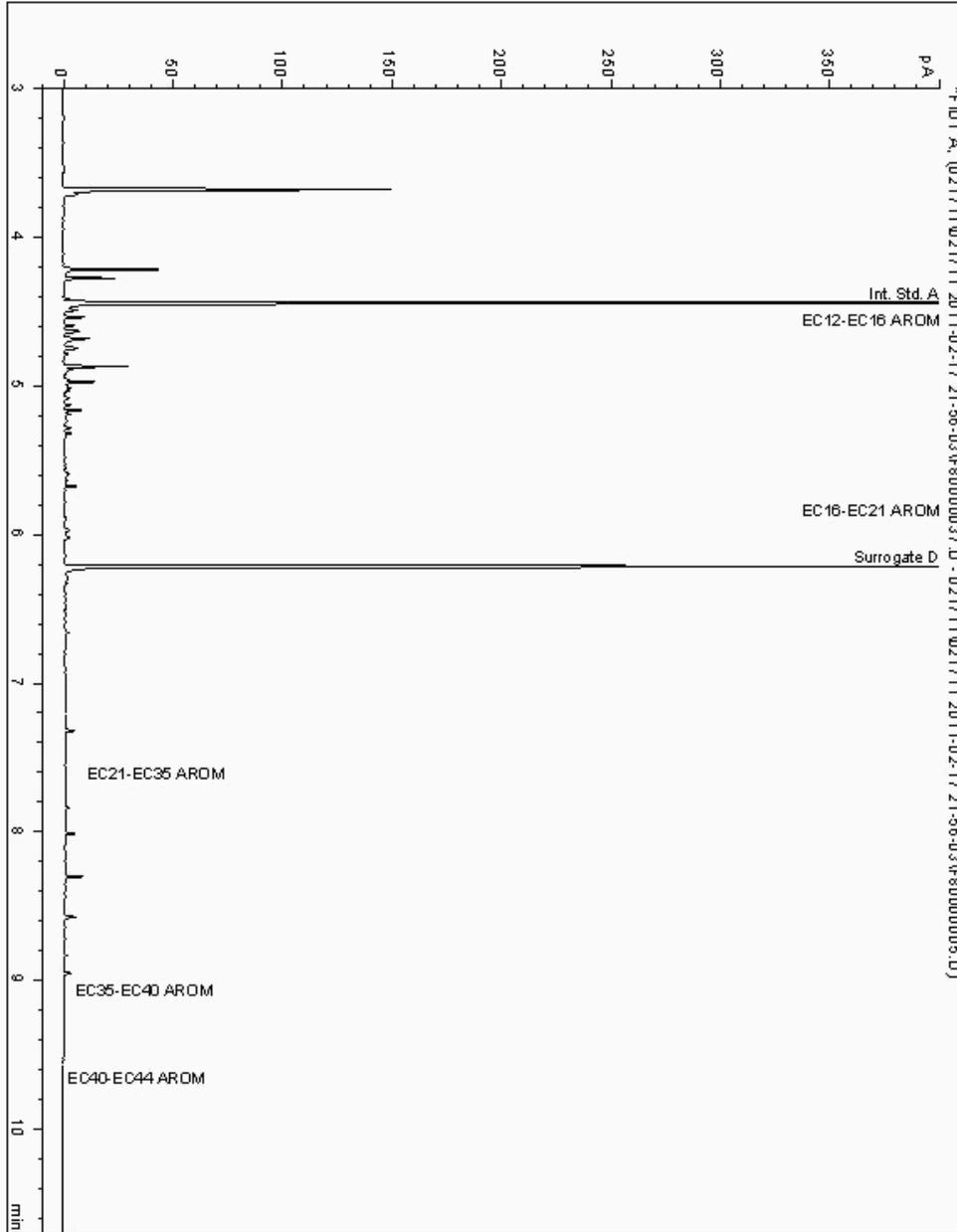
Analysis: EPH CWG (Aromatic) GC (S)

Sample No : 2890846
Sample ID : WS101

Depth : 0.50 - 0.70

Alcontrol/Geochem Analytical Services
Speciated TPH - AROM (C12 - C40)

Sample Identity: 2949816-2890846
Date Acquired : 18/02/11 09:12:18
Units : ppb
Dilution :
CF : 1
Multiplier : 1.010





CERTIFICATE OF ANALYSIS

SDG: 110216-13
Job: H_ARCADIS_LEE-40
Client Reference: 96234.01

Location: Forge Lane, Dewsbury
Customer: ARCADIS Geraghty & Miller
Attention: Andrew Smith

Order Number:
Report Number: 119768
Superseded Report: 118862

Chromatogram

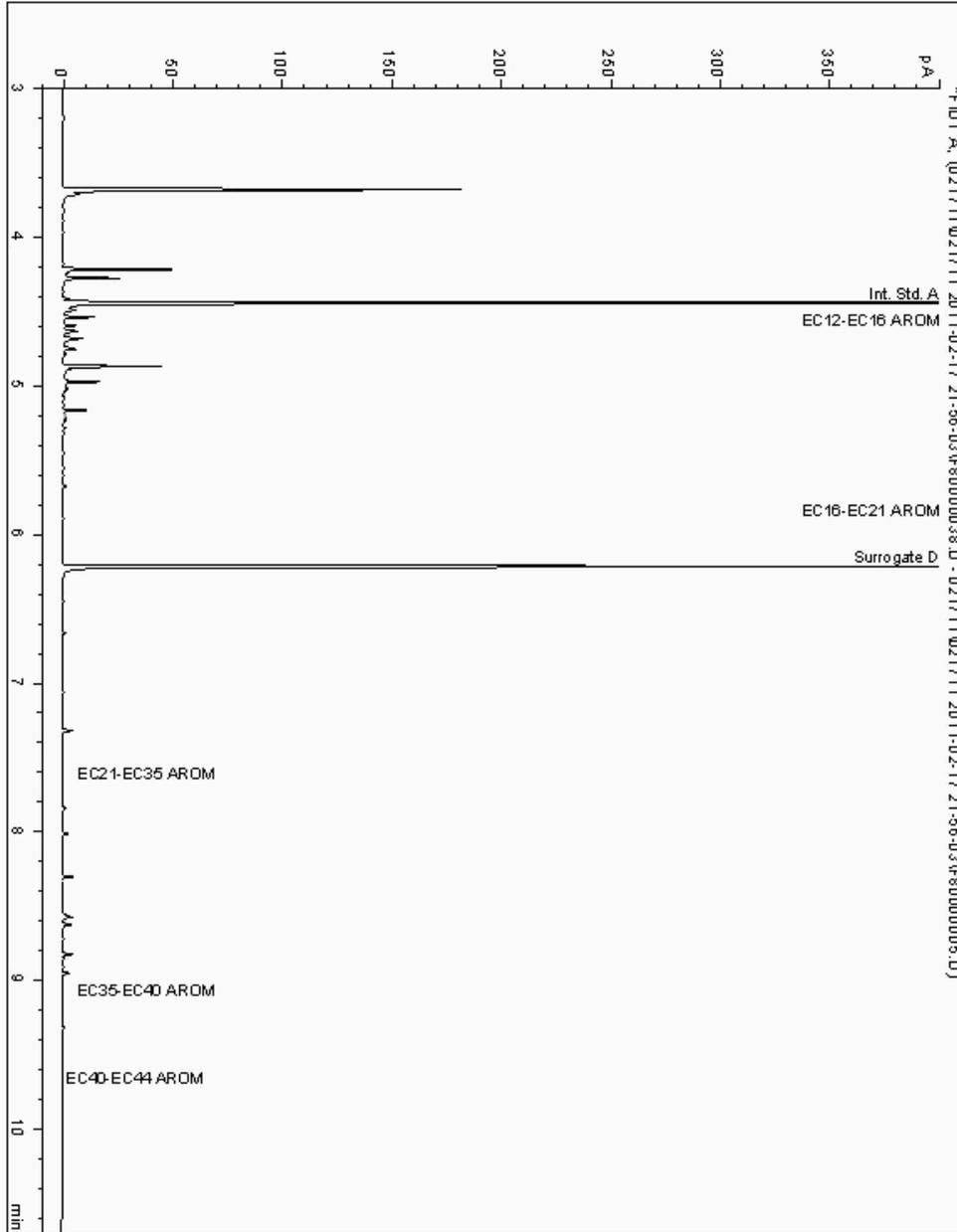
Analysis: EPH CWG (Aromatic) GC (S)

Sample No : 2890971
Sample ID : WS103

Depth : 1.60 - 1.80

Alcontrol/Geochem Analytical Services
Speciated TPH - AROM (C12 - C40)

Sample Identity: 2949788-2890971
Date Acquired : 18/02/11 09:32:21
Units : ppb
Dilution :
CF : 1
Multiplier : 0.960





CERTIFICATE OF ANALYSIS

SDG: 110216-13
Job: H_ARCADIS_LEE-40
Client Reference: 96234.01

Location: Forge Lane, Dewsbury
Customer: ARCADIS Geraghty & Miller
Attention: Andrew Smith

Order Number:
Report Number: 119768
Superseded Report: 118862

Chromatogram

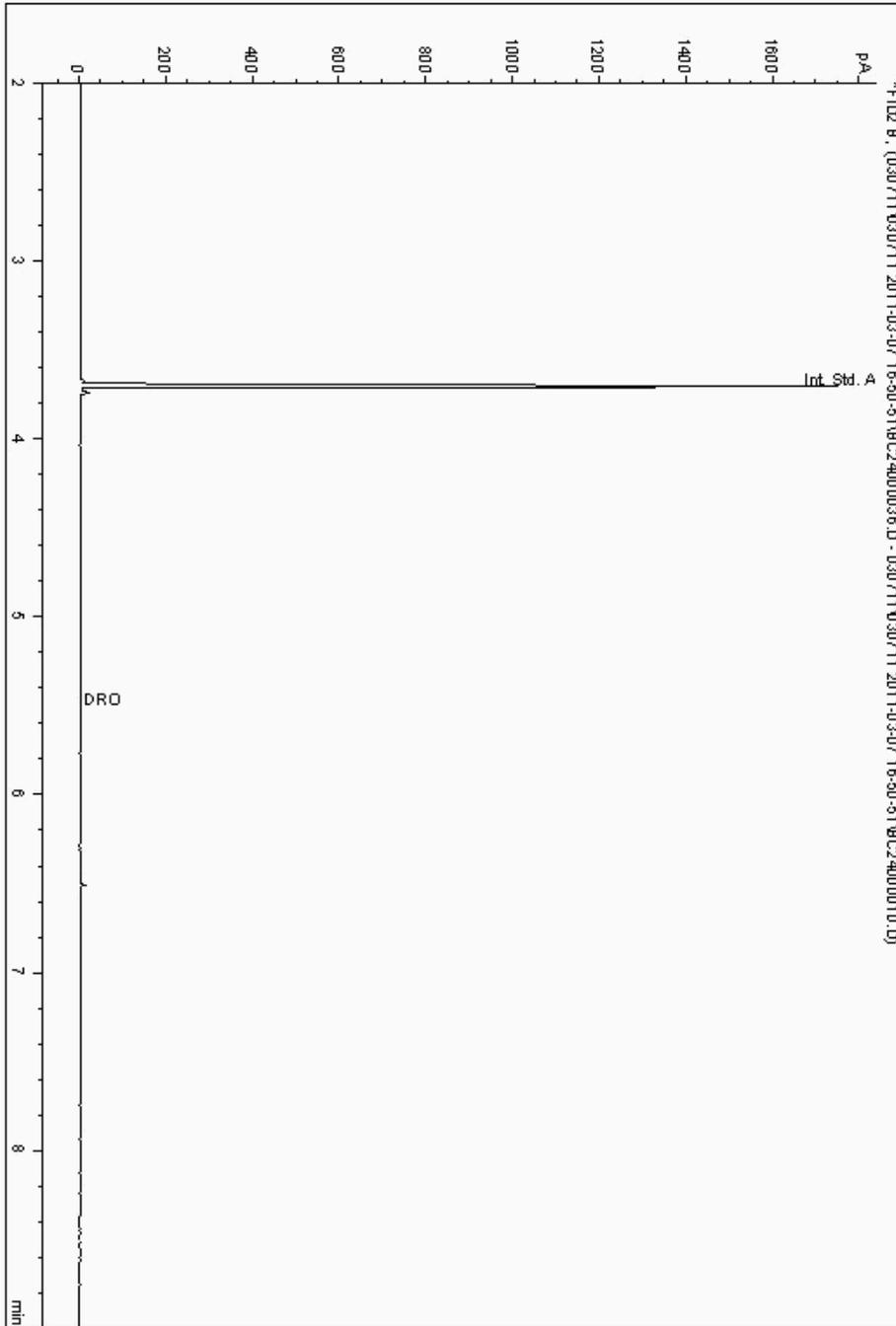
Analysis: EPH (DRO) (C10-C40) Aqueous (W)

Sample No : 2987547
Sample ID : WS102

Depth : 1.40 - 1.60

Alcontrol Analytical Services
EPH Range Organics (C10 - C40)

Sample Identity: 3033530-2987547
Date Acquired : 08/03/11 05:04:46 AM
Units :
Sample Volume: 0 ml's
Dilution:





CERTIFICATE OF ANALYSIS

SDG: 110216-13
Job: H_ARCADIS_LEE-40
Client Reference: 96234.01

Location: Forge Lane, Dewsbury
Customer: ARCADIS Geraghty & Miller
Attention: Andrew Smith

Order Number:
Report Number: 119768
Superseded Report: 118862

Chromatogram

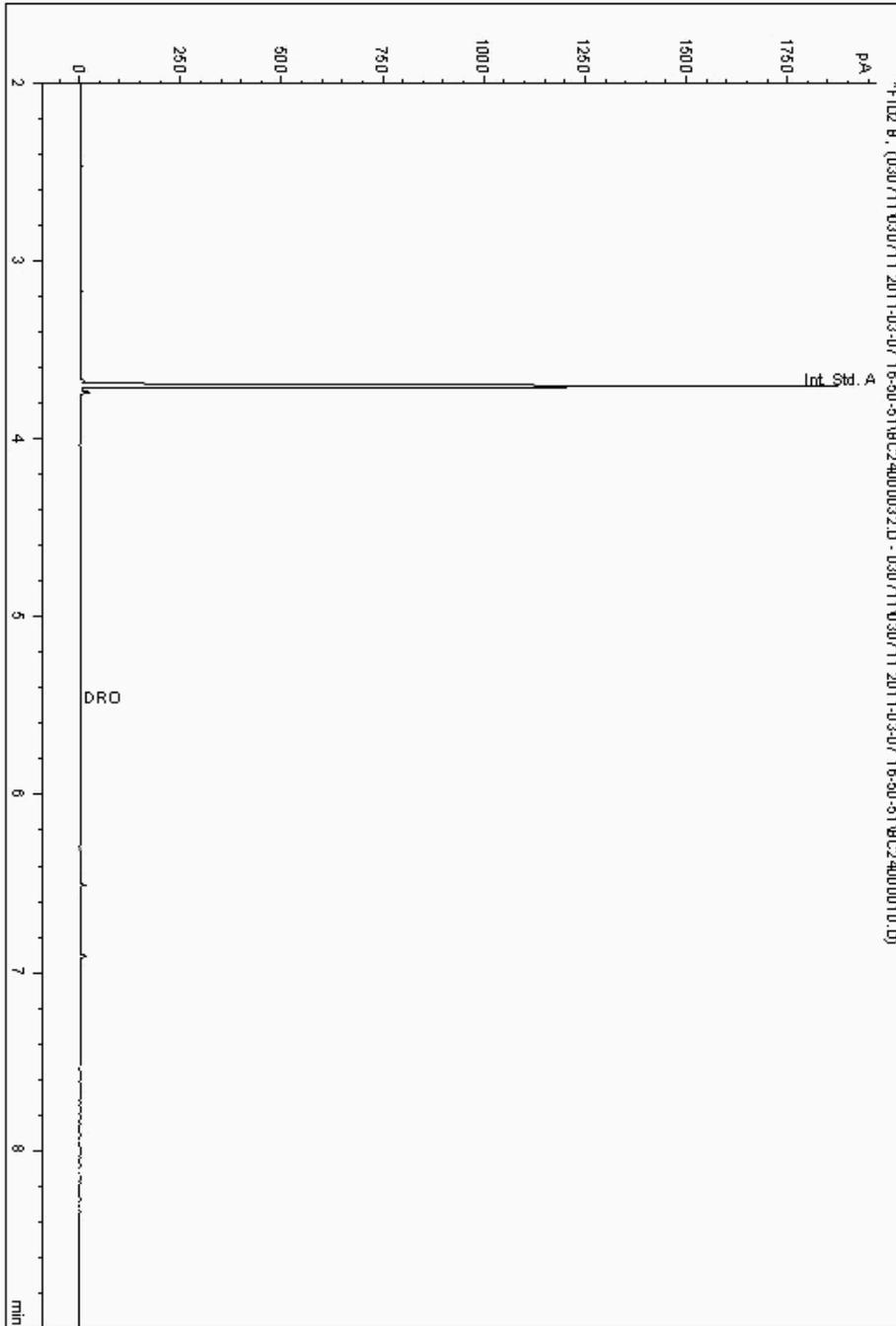
Analysis: EPH (DRO) (C10-C40) Aqueous (W)

Sample No : 2987566
Sample ID : WS101

Depth : 0.50 - 0.70

Alcontrol Analytical Services
EPH Range Organics (C10 - C40)

Sample Identity: 3033514-2987566
Date Acquired : 08/03/11 03:37:26 AM
Units :
Sample Volume: 0 ml's
Dilution:





CERTIFICATE OF ANALYSIS

SDG: 110216-13
Job: H_ARCADIS_LEE-40
Client Reference: 96234.01

Location: Forge Lane, Dewsbury
Customer: ARCADIS Geraghty & Miller
Attention: Andrew Smith

Order Number:
Report Number: 119768
Superseded Report: 118862

Chromatogram

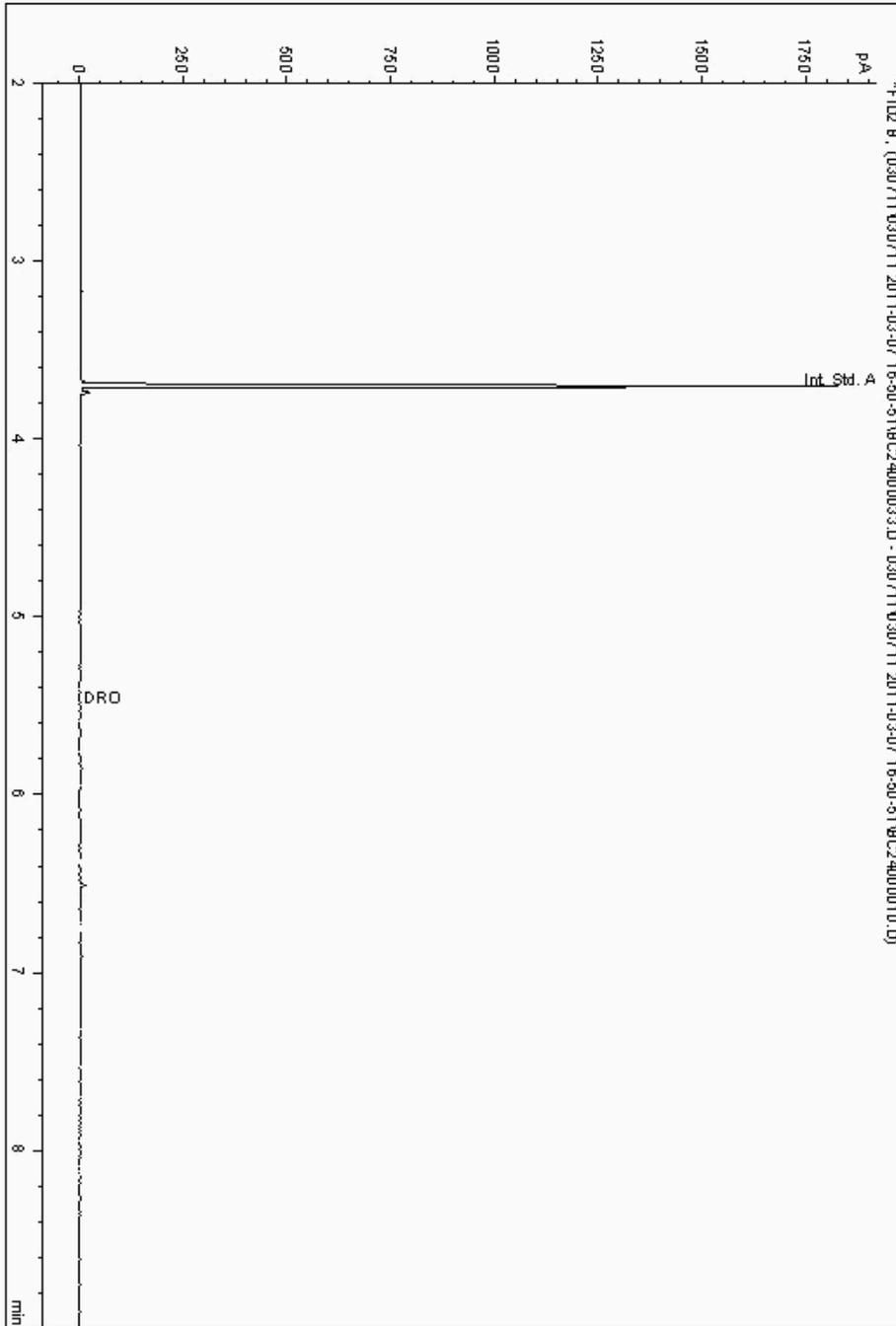
Analysis: EPH (DRO) (C10-C40) Aqueous (W)

Sample No : 2987596
Sample ID : WS103

Depth : 0.60 - 0.80

Alcontrol Analytical Services
EPH Range Organics (C10 - C40)

Sample Identity: 3033546-2987596
Date Acquired : 08/03/11 03:59:31 AM
Units :
Sample Volume: 0 ml's
Dilution:





CERTIFICATE OF ANALYSIS

SDG: 110216-13
Job: H_ARCADIS_LEE-40
Client Reference: 96234.01

Location: Forge Lane, Dewsbury
Customer: ARCADIS Geraghty & Miller
Attention: Andrew Smith

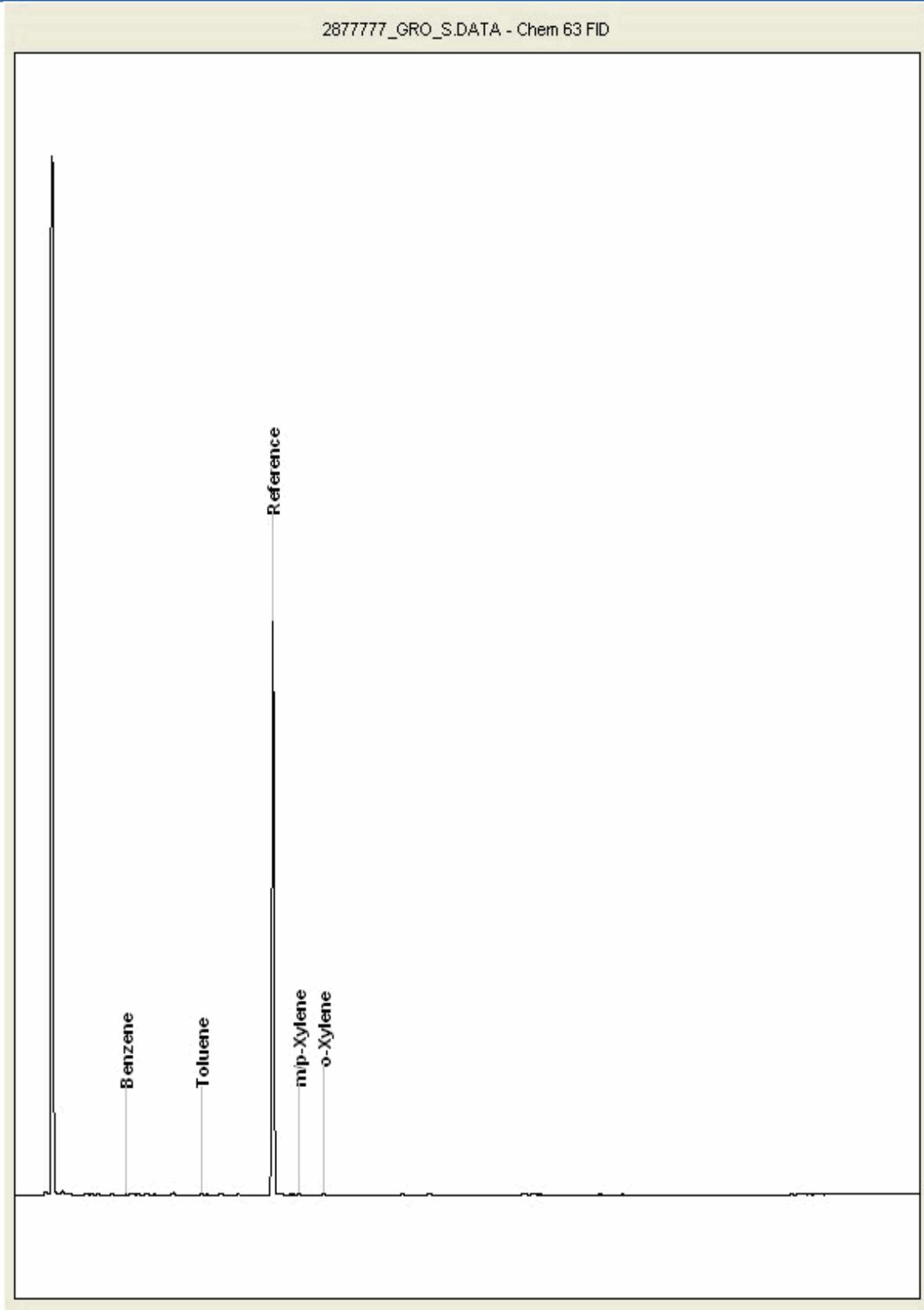
Order Number:
Report Number: 119768
Superseded Report: 118862

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 2877777
Sample ID : CP101

Depth : 0.50 - 1.00





CERTIFICATE OF ANALYSIS

SDG: 110216-13
Job: H_ARCADIS_LEE-40
Client Reference: 96234.01

Location: Forge Lane, Dewsbury
Customer: ARCADIS Geraghty & Miller
Attention: Andrew Smith

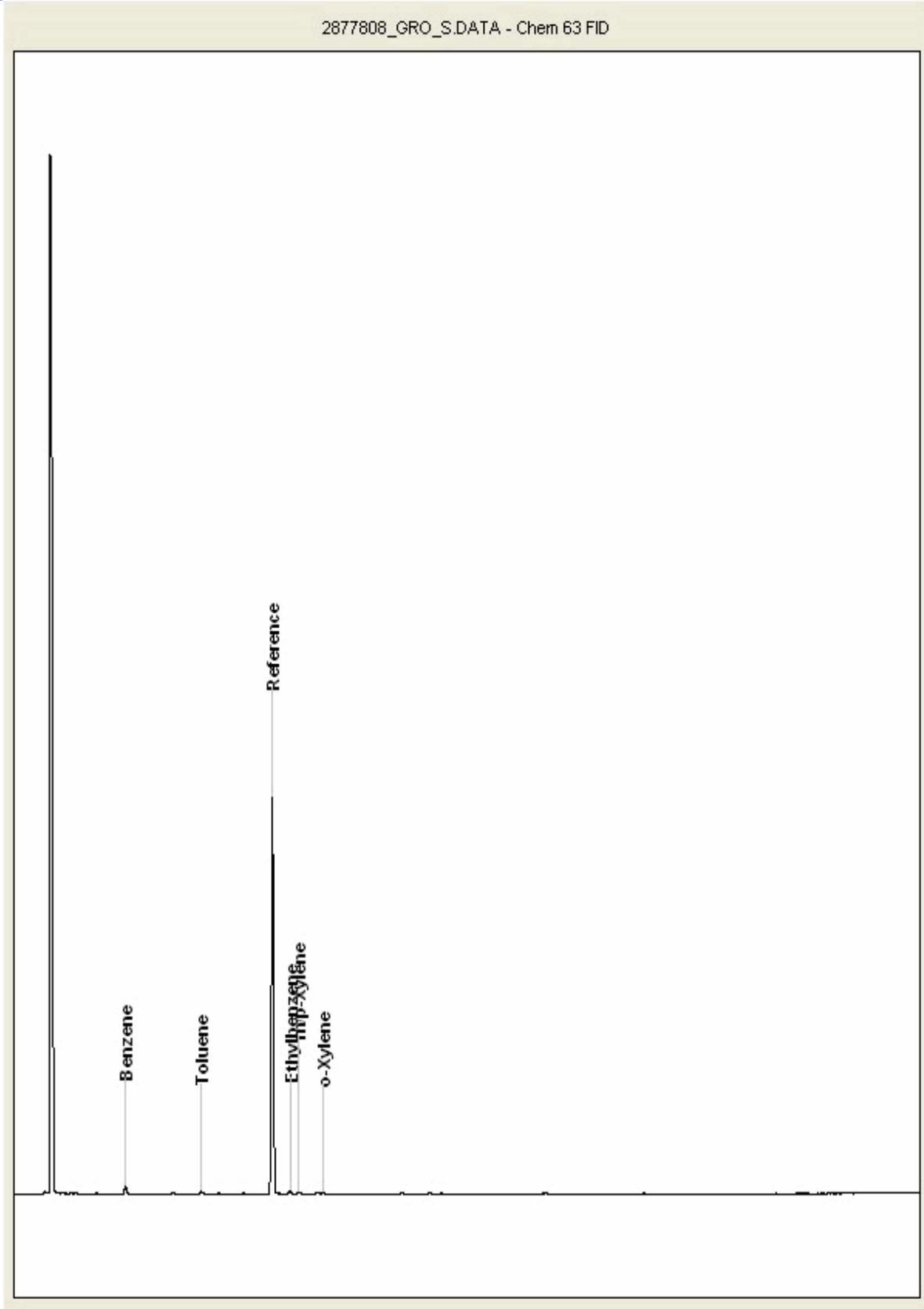
Order Number:
Report Number: 119768
Superseded Report: 118862

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 2877808
Sample ID : WS103

Depth : 1.60 - 1.80





CERTIFICATE OF ANALYSIS

SDG: 110216-13
Job: H_ARCADIS_LEE-40
Client Reference: 96234.01

Location: Forge Lane, Dewsbury
Customer: ARCADIS Geraghty & Miller
Attention: Andrew Smith

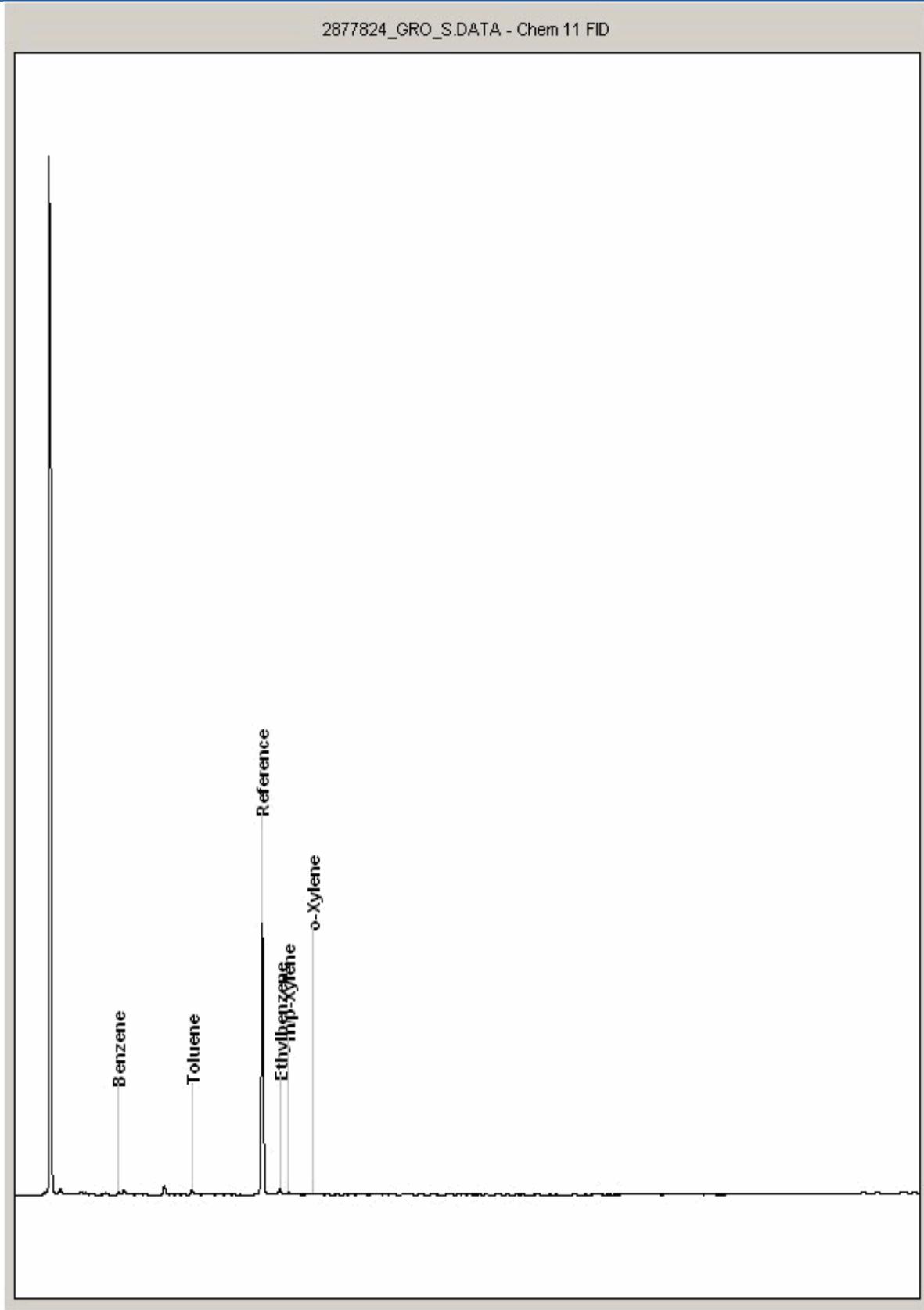
Order Number:
Report Number: 119768
Superseded Report: 118862

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 2877824
Sample ID : WS101

Depth : 0.50 - 0.70





SDG: 110216-13
Job: H_ARCADIS_LEE-40
Client Reference: 96234.01

Location: Forge Lane, Dewsbury
Customer: ARCADIS Geraghty & Miller
Attention: Andrew Smith

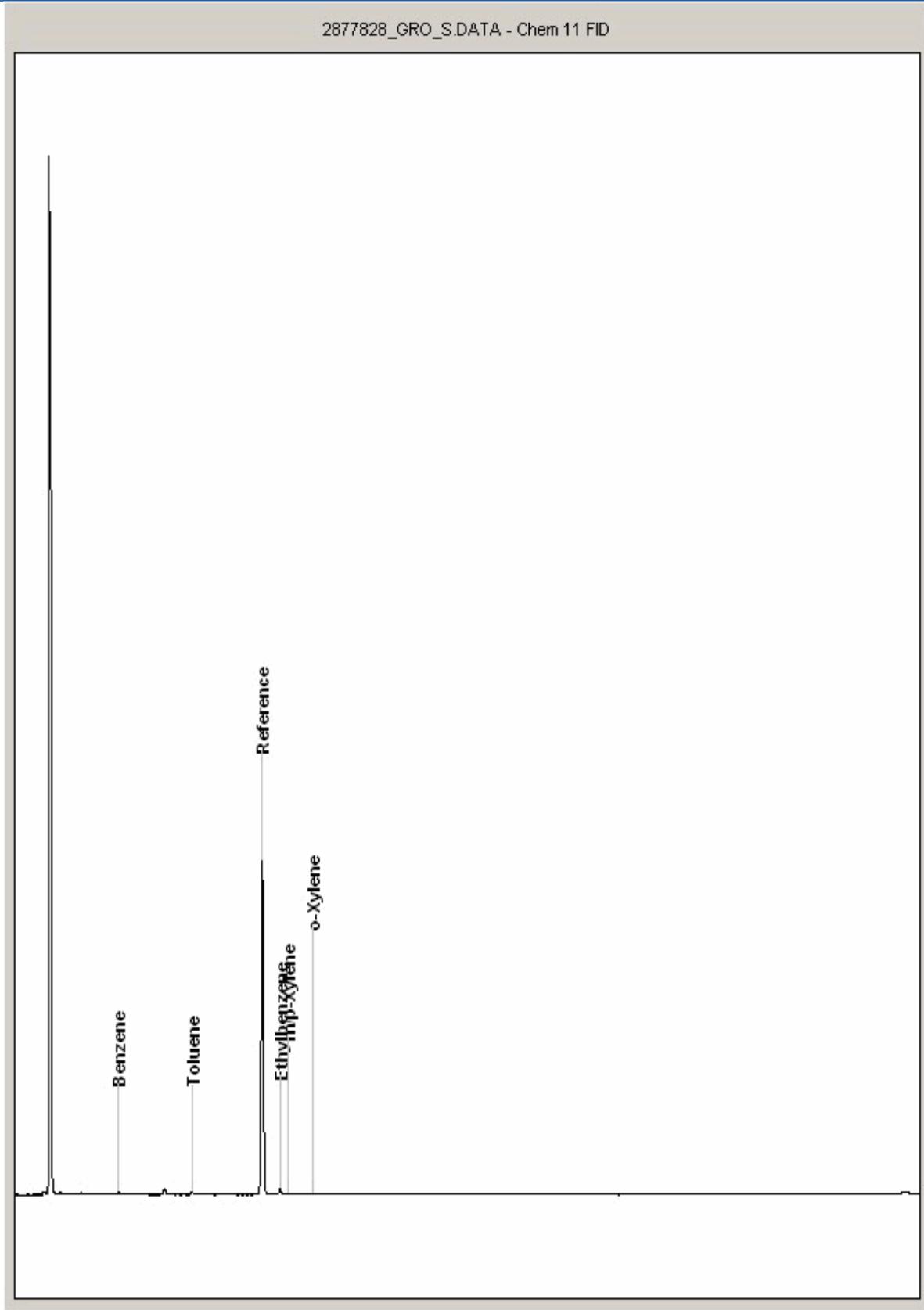
Order Number:
Report Number: 119768
Superseded Report: 118862

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 2877828
Sample ID : WS102

Depth : 0.80 - 1.00





Make:	Model: *	Serial No : 2877773-WS101-0.50-0.70	System: OTHER
-------	----------	-------------------------------------	---------------

Sample No: 3727581	Job No.: 2880371	Sampled: 18/02/11	Received: 18/02/11
Machine Hrs: Not Given	Form No:	Oil Hours: Not Given	Brand: NOT GIVEN

Diagnosis

Gross calorific Value = 1758.99 kJ/kg.



An No.	Sample Date	Oil Condition											Additive Elements ppm					
		Visc. 40°C	Appearance	Dispersancy	Water	Glycol	Fuel	Initial pH	TAN	Oxidation	TBN	ISO	Ba	Ca	Mg	P	Zn	
1	18/02/11	-5	70	n/a	n/a	N	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

An No.	Sample Date	Elemental Analysis - Contamination & Wear Metals ppm																	Oil Chg	Oil Age	
		B	Na	Si	Li	Al	Cr	Cu	Fe	Pb	Sn	Mo	Ni	Ti	Ag	Mn	V				
1	18/02/11	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		-1	

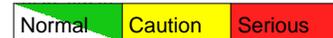
Analysis
Sampled
Received
Sys Serv
Oil Serv

Analysis
Sampled
Received
Sys Serv
Oil Serv

Analysis
Sampled
Received
Sys Serv
Oil Serv

System History

Key :



Location: *

*

*

F.A.O. HAWARDEN SUBCONTRACTING
ALCONTROL
UNIT 7-8 HAWARDEN BUSINESS PARK
OFF MANOR ROAD
HAWARDEN
CH5 3US

Unique No : **1805112**
Signed : Peter Foy [Interpreter]
Reference : 5089157/ALCONTROL/1/NS/O
Date : 24/02/2011 13:11:43

SDG: 110216-13
Job: H_ARCADIS_LEE-40
Client Reference: 96234.01

Location: Forge Lane, Dewsbury
Customer: ARCADIS Geraghty & Miller
Attention: Andrew Smith

Order Number:
Report Number: 119768
Superseded Report: 118862

Appendix

1. Results are expressed on a dry weight basis (dried at 35°C) for all soil analyses except for the following: NRA Leach tests, flash point, ammonium as NH4 by the BRE method, VOC TICS, SVOC TICS, TOF-MS SCAN/SEARCH and TOF-MS TICS.

2. Samples will be run in duplicate upon request, but an additional charge may be incurred.

3. If sufficient sample is received a sub sample will be retained free of charge for 30 days after analysis is completed (e-mailed) for both soil jars, tubs and volatile jars. All waters and vials will be discarded 10 days after the analysis is completed (e-mailed). All material removed during an asbestos containing material screen and analysed for the presence of asbestos will be retained for a period of 6 months after the analysis date. All samples received and not scheduled will be disposed of one month after the date of receipt unless we are instructed to the contrary. Once the initial period has expired, a storage charge will be applied for each month or part thereof until the client cancels the request for sample storage. ALcontrol Laboratories reserve the right to charge for samples received and stored but not analysed.

4. With respect to turnaround, we will always endeavour to meet client requirements wherever possible, but turnaround times cannot be absolutely guaranteed due to so many variables beyond our control.

5. We take responsibility for any test performed by sub-contractors (marked with an asterisk). We endeavour to use UKAS/MCERTS Accredited Laboratories, who either complete a quality questionnaire or are audited by ourselves. For some determinands there are no UKAS/MCERTS Accredited Laboratories, in this instance a laboratory with a known track record will be utilised.

6. When requested, the individual sub sample scheduled will be screened in house for the presence of large asbestos containing material fragments/pieces. If no asbestos containing material is found this will be reported as 'no asbestos containing material detected'. If asbestos containing material is detected it will be removed and analysed by our documented in house method TM048 based on HSG 248 (2005), which is accredited to ISO17025. If asbestos containing material is present no further analysis will be undertaken. At no point is the fibre content of the soil sample determined.

7. If no separate volatile sample is supplied by the client, the integrity of the data may be compromised if the laboratory is required to create a sub-sample from the bulk sample -similarly, if a headspace or sediment is present in the volatile sample. This will be flagged up as an invalid VOC on the test schedule or recorded on the log sheet.

8. If appropriate preserved bottles are not received preservation will take place on receipt. However, the integrity of the data may be compromised.

9. NDP -No determination possible due to insufficient/unsuitable sample.

10. Metals in water are performed on a filtered sample, and therefore represent dissolved metals -total metals must be requested separately.

11. A table containing the date of analysis for each parameter is not routinely included with the report, but is available upon request.

12. Results relate only to the items tested

13. **Surrogate recoveries** -Most of our organic methods include surrogates, the recovery of which is monitored and reported. For EPH, MO, PAH, GRO and VOCs on soils the result is not surrogate corrected, but a percentage recovery is quoted. Acceptable limits for most organic methods are 70 -130 %.

14. **Product analyses** -Organic analyses on products can only be semi-quantitative due to the matrix effects and high dilution factors employed.

15. Phenols monohydric by HPLC include phenol, cresols (2-Methylphenol, 3-Methylphenol and 4-Methylphenol) and Xylenols (2,3 Dimethylphenol, 2,4 Dimethylphenol, 2,5 Dimethylphenol, 2,6 Dimethylphenol, 3,4 Dimethylphenol, 3,5 Dimethylphenol).

16. Total of 5 speciated phenols by HPLC includes Phenol, 2,3,5-Trimethyl Phenol, 2-Isopropylphenol, Cresols and Xylenols (as detailed in 14).

17. Stones/debris are not routinely removed. We always endeavour to take a representative sub sample from the received sample.

18. Our MCERTS accreditation for PAHs by GCMS applies to all product types apart from Kerosene, where naphthalene only is not accredited.

19. In certain circumstances the method detection limit may be elevated due to the sample being outside the calibration range. Other factors that may contribute to this include possible interferences. In both cases the sample would be diluted which would cause the method detection limit to be raised.

20. Mercury results quoted on soils will not include volatile mercury as the analysis is performed on a dried and crushed sample.

21. For the BSEN 12457-3 two batch process to allow the cumulative release to be calculated, the volume of the leachate produced is measured and filtered for all tests. We therefore cannot carry out any unfiltered analysis. The tests affected include volatiles GCFID/GCMS and all subcontracted analysis.

22. For all leachate preparations (NRA, DIN, TCLP, BSEN 12457-1, 2, 3) volatile loss may occur, as we do not employ zero headspace extraction.

23. We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials -whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample. Other coarse granular material such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

24. Analysis and identification of specific compounds using GCFID is by retention time only, and we routinely calibrate and quantify for benzene, toluene, ethylbenzenes and xylenes (BTEX). For total volatiles in the C4 -C10 range, the total area of the chromatogram is integrated and expressed as ug/kg or ug/l. Although this analysis is commonly used for the quantification of gasoline range organics (GRO), the system will also detect other compounds such as chlorinated solvents, and this may lead to a falsely high result with respect to hydrocarbons only. It is not possible to specifically identify these non-hydrocarbons, as standards are not routinely run for any other compounds, and for more definitive identification, volatiles by GCMS should be utilised.

SOLID MATRICES EXTRACTION SUMMARY				
ANALYSIS	D/C OR WET	EXTRACTION SOLVENT	EXTRACTION METHOD	ANALYSIS
SOLVENT EXTRACTABLE MATTER	D&C	DOM	SOX THERM	GRAMMETRIC
CYCLOHEXANE EXT. MATTER	D&C	CYCLOHEXANE	SOX THERM	GRAMMETRIC
THIN LAYER CHROMATOGRAPHY	D&C	DOM	SOX THERM	IATROSCAN
ELEMENTAL SULPHUR	D&C	DOM	SOX THERM	HPLC
PHENOLS BY GCMS	WET	DOM	SOX THERM	GCMS
HERBICIDES	D&C	HEXANE ACETONE	SOX THERM	GCMS
PESTICIDES	D&C	HEXANE ACETONE	SOX THERM	GCMS
EPH (DRO)	D&C	HEXANE ACETONE	END OVER END	GC/FID
EPH (MIN OIL)	D&C	HEXANE ACETONE	END OVER END	GC/FID
EPH (CLEANED UP)	D&C	HEXANE ACETONE	END OVER END	GC/FID
EPH CWG BY GC	D&C	HEXANE ACETONE	END OVER END	GC/FID
PCB TOT / PCB CON	D&C	HEXANE ACETONE	END OVER END	GCMS
POLYAROMATIC HYDROCARBONS (MS)	WET	HEXANE ACETONE	MICROWAVE TM28.	GCMS
C8-C10 (C8-C10) EZ FLASH	WET	HEXANE ACETONE	SHAKER	GC/EZ
POLYAROMATIC HYDROCARBONS RAPID GC	WET	HEXANE ACETONE	SHAKER	GC/EZ
SEM VOLATILE ORGANIC COMPOUNDS	WET	DOM ACETONE	SONICATE	GCMS

LIQUID MATRICES EXTRACTION SUMMARY			
ANALYSIS	EXTRACTION SOLVENT	EXTRACTION METHOD	ANALYSIS
PAHMS	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GCMS
EPH	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC/FID
EPH CWG	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC/FID
MINERAL OIL	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC/FID
PCB 7 CONGENERS	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GCMS
PCB TOTAL	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GCMS
SVOC	DOM	LIQUID/LIQUID SHAKE	GCMS
FREESULPHUR	DOM	SOLID PHASE EXTRACTION	HPLC
PEST COP/OPP	DOM	LIQUID/LIQUID SHAKE	GCMS
TRIAZINE HERBS	DOM	LIQUID/LIQUID SHAKE	GCMS
PHENOLS MS	DOM	SOLID PHASE EXTRACTION	GCMS
TPH by INFRARED (R)	TCE	LIQUID/LIQUID SHAKE	HPLC
MINERAL OIL BY R	TCE	LIQUID/LIQUID SHAKE	HPLC
GLYCOLS	NONE	DIRECT INJECTION	GCMS

Identification of Asbestos in Bulk Materials

The results for asbestos identification for soil samples are obtained from possible Asbestos Containing Material, removed during the 'Screening of soils for Asbestos Containing Materials', which have been examined to determine the presence of asbestos fibres using Alcontrol Laboratories (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2005).

Asbestos Type	Common Name
Chrysotile	White Asbestos
Amosite	Brown Asbestos
Crocidolite	Blue Asbestos
Fibrous Actinolite	-
Fibrous Anthophyllite	-
Fibrous Tremolite	-

Visual Estimation Of Fibre Content

Estimation of fibre content is not permitted as part of our UKAS accredited test other than: - Trace -Where only one or two asbestos fibres were identified.

Further guidance on typical asbestos fibre content of manufactured products can be found in MDHS 100.

The identification of asbestos containing materials falls within our schedule of tests for which we hold UKAS accreditation, however opinions, interpretations and all other information contained in the report are outside the scope of UKAS accreditation.



ARCADIS Geraghty & Miller
1 Whitehall Riverside
Leeds
West Yorkshire
LS1 4BN

Attention: Jonathan Harris

CERTIFICATE OF ANALYSIS

Date: 09 March 2011
Customer: H_ARCADIS_LEE
Sample Delivery Group (SDG): 110216-40
Your Reference: 96234.01
Location: Forge Lane, Dewsbury
Report No: 119764

This report directly supersedes report 119153 in its entirety.

We received 6 samples on Wednesday February 16, 2011 and 4 of these samples were scheduled for analysis which was completed on Wednesday March 09, 2011. Accredited laboratory tests are defined within the report, but opinions, interpretations and on-site data expressed herein are outside the scope of ISO 17025 accreditation.

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

All chemical testing (unless subcontracted) is performed at ALcontrol Hawarden Laboratories.

Asbestos testing - we are not accredited for screening soil samples for asbestos fibres. We are only accredited to identify asbestos fibres in bulk material (ACM).

Approved By: _____

Sonia McWhan
Operations Manager



1291
GROUP



SDG: 110216-40
Job: H_ARCADIS_LEE-40
Client Reference: 96234.01

Location: Forge Lane, Dewsbury
Customer: ARCADIS Geraghty & Miller
Attention: Andrew Smith

Order Number:
Report Number: 119764
Superseded Report: 119153

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
2878777	WS104		0.30 - 0.70	15/02/2011
2878778	WS104		1.50 - 1.70	15/02/2011
2878779	WS105		0.80 - 1.00	15/02/2011
2878780	WS105		2.30 - 2.50	15/02/2011
2878781	WS106		0.70 - 1.00	15/02/2011
2878782	WS106		2.30 - 2.60	15/02/2011

Only received samples which have had analysis scheduled will be shown on the following pages.



SDG: 110216-40
 Job: H_ARCADIS_LEE-40
 Client Reference: 96234.01

Location: Forge Lane, Dewsbury
 Customer: ARCADIS Geraghty & Miller
 Attention: Andrew Smith

Order Number:
 Report Number: 119764
 Superseded Report: 119153

SOLID Results Legend Test No Determination Possible	Lab Sample No(s)	2878778	2878779	2878780	2878782
	Customer Sample Reference	WS104	WS105	WS105	WS106
	AGS Reference				
	Depth (m)	1.50 - 1.70	0.80 - 1.00	2.30 - 2.50	2.30 - 2.50
	Container	250g Amber Jar 1kg TUB	250g Amber Jar 60g VOC 1kg TUB	250g Amber Jar 1kg TUB 60g VOC	250g Amber Jar 1kg TUB 60g VOC
Alkali Metals by iCap-OES (Soil)	All	NDPs: 0 Tests: 3			
Ammoniacal Nitrogen	All	NDPs: 0 Tests: 1			
Anions by Kone (soil)	All	NDPs: 0 Tests: 4			
Anions by Kone (w)	All	NDPs: 0 Tests: 1			
Asbestos Containing Material Screen	All	NDPs: 0 Tests: 3			
Boron Water Soluble	All	NDPs: 0 Tests: 3			
Cyanide Comp/Free/Total/Thiocyanate	All	NDPs: 0 Tests: 4			
Dissolved Metals by ICP-MS	All	NDPs: 0 Tests: 1			
EPH (DRO) (C10-C40) Aqueous (W)	All	NDPs: 0 Tests: 1			
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 3			
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 3			
Fluoride	All	NDPs: 0 Tests: 1			
Fluoride (soluble)	All	NDPs: 0 Tests: 3			
Free Sulphur	All	NDPs: 0 Tests: 1			
GRO by GC-FID (S)	All	NDPs: 0 Tests: 3			



SDG: 110216-40
 Job: H_ARCADIS_LEE-40
 Client Reference: 96234.01

Location: Forge Lane, Dewsbury
 Customer: ARCADIS Geraghty & Miller
 Attention: Andrew Smith

Order Number:
 Report Number: 119764
 Superseded Report: 119153

SOLID Results Legend Test No Determination Possible	Lab Sample No(s)	2878778	2878779	2878780	2878782
	Customer Sample Reference	WS104	WS105	WS105	WS106
	AGS Reference				
	Depth (m)	1.50 - 1.70	0.80 - 1.00	2.30 - 2.50	2.30 - 2.60
	Container	250g Amber Jar 1kg TUB	250g Amber Jar 60g VOC 1kg TUB	250g Amber Jar 60g VOC 1kg TUB	60g VOC 250g Amber Jar 1kg TUB
Hexavalent Chromium (s)	All	NDPs: 0 Tests: 3			
Hexavalent Chromium (w)	All	NDPs: 0 Tests: 1			
Mercury Dissolved	All	NDPs: 0 Tests: 1			
Metals by iCap-OES (Soil)	Aluminium	NDPs: 0 Tests: 3			
	Arsenic	NDPs: 0 Tests: 3			
	Beryllium	NDPs: 0 Tests: 3			
	Cadmium	NDPs: 0 Tests: 3			
	Chromium	NDPs: 0 Tests: 3			
	Copper	NDPs: 0 Tests: 3			
	Iron	NDPs: 0 Tests: 3			
	Lead	NDPs: 0 Tests: 3			
	Mercury	NDPs: 0 Tests: 3			
	Molybdenum	NDPs: 0 Tests: 3			
	Nickel	NDPs: 0 Tests: 3			
	Tin	NDPs: 0 Tests: 3			



SDG: 110216-40
 Job: H_ARCADIS_LEE-40
 Client Reference: 96234.01

Location: Forge Lane, Dewsbury
 Customer: ARCADIS Geraghty & Miller
 Attention: Andrew Smith

Order Number:
 Report Number: 119764
 Superseded Report: 119153

SOLID Results Legend <input checked="" type="checkbox"/> Test <input checked="" type="checkbox"/> No Determination Possible	Lab Sample No(s)	2878778	2878779	2878780	2878782
	Customer Sample Reference	WS104	WS105	WS105	WS106
	AGS Reference				
	Depth (m)	1.50 - 1.70	0.80 - 1.00	2.30 - 2.50	2.30 - 2.60
	Container	250g Amber Jar 1kg TUB	250g Amber Jar 1kg TUB	250g Amber Jar 1kg TUB	60g VOC 250g Amber Jar 1kg TUB
Metals by iCap-OES (Soil)	Vanadium	NDPs: 0 Tests: 3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Zinc	NDPs: 0 Tests: 3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Metals by iCap-OES Dissolved (W)	All	NDPs: 0 Tests: 1		<input checked="" type="checkbox"/>	
NO3, NO2 and TON by KONE (s)	All	NDPs: 0 Tests: 3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PAH by GCMS	All	NDPs: 0 Tests: 3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PAH Spec MS - Aqueous (W)	All	NDPs: 0 Tests: 1		<input checked="" type="checkbox"/>	
pH	All	NDPs: 0 Tests: 3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
pH Value	All	NDPs: 0 Tests: 1		<input checked="" type="checkbox"/>	
Phenols by HPLC (S)	All	NDPs: 0 Tests: 1		<input checked="" type="checkbox"/>	
Phosphate (Ortho as PO4) (s)	All	NDPs: 0 Tests: 3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Sample description	All	NDPs: 0 Tests: 4	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Semi Volatile Organic Compounds	All	NDPs: 0 Tests: 1		<input checked="" type="checkbox"/>	
Silver	All	NDPs: 0 Tests: 3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Sulphide	All	NDPs: 0 Tests: 1			<input checked="" type="checkbox"/>
TPH CWG GC (S)	All	NDPs: 0 Tests: 3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>



CERTIFICATE OF ANALYSIS

Validated

SDG: 110216-40
Job: H_ARCADIS_LEE-40
Client Reference: 96234.01

Location: Forge Lane, Dewsbury
Customer: ARCADIS Geraghty & Miller
Attention: Andrew Smith

Order Number:
Report Number: 119764
Superseded Report: 119153

SOLID		Lab Sample No(s)	2878778	2878779	2878780	2878782
Results Legend <input checked="" type="checkbox"/> Test <input type="checkbox"/> No Determination Possible	Customer Sample Reference	WS104	WS105	WS105	WS106	
	AGS Reference					
	Depth (m)	1.50 - 1.70	0.80 - 1.00	2.30 - 2.50	2.30 - 2.60	
	Container	250g Amber Jar 1kg TUB	250g Amber Jar 60g VOC 1kg TUB	250g Amber Jar 1kg TUB 60g VOC	250g Amber Jar 1kg TUB 60g VOC	60g VOC
	VOC MS (S)	All	NDPs: 0 Tests: 1			

SDG: 110216-40
Job: H_ARCADIS_LEE-40
Client Reference: 96234.01

Location: Forge Lane, Dewsbury
Customer: ARCADIS Geraghty & Miller
Attention: Andrew Smith

Order Number:
Report Number: 119764
Superseded Report: 119153

Sample Descriptions

Grain Sizes

very fine	<0.063mm	fine	0.063mm - 0.1mm	medium	0.1mm - 2mm	coarse	2mm - 10mm	very coarse	>10mm
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Lab Sample No(s)	Customer Sample Ref.	Depth (m)	Colour	Description	Grain size	Inclusions	Inclusions 2
2878778	WS104	1.50 - 1.70	Light Brown	Loamy Sand	0.063 - 0.1 mm	Stones	None
2878779	WS105	0.80 - 1.00	Dark Brown	Top Soil	0.063 - 0.1 mm	Stones	None
2878780	WS105	2.30 - 2.50	Light Brown	Silty Clay Loam	0.063 - 0.1 mm	None	None
2878782	WS106	2.30 - 2.60	Light Brown	Sand	0.1 - 2 mm	Stones	N/A

These descriptions are only intended to act as a cross check if sample identities are questioned, and to provide a log of sample matrices with respect to MCERTS validation. They are not intended as full geological descriptions.

We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample.

Other coarse granular materials such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.



SDG: 110216-40
Job: H_ARCADIS_LEE-40
Client Reference: 96234.01

Location: Forge Lane, Dewsbury
Customer: ARCADIS Geraghty & Miller
Attention: Andrew Smith

Order Number:
Report Number: 119764
Superseded Report: 119153

Results Legend		Customer Sample R	WS104	WS105	WS105	WS106		
#	ISO17025 accredited.	Depth (m) Sample Type Date Sampled Date Received SDG Ref Lab Sample No.(s) AGS Reference	1.50 - 1.70	0.80 - 1.00	2.30 - 2.50	2.30 - 2.60		
M	mCERTS accredited.		Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
S	Non-conforming work.		15/02/2011	15/02/2011	15/02/2011	15/02/2011		
aq	Aqueous / settled sample.		16/02/2011	16/02/2011	16/02/2011	16/02/2011		
diss.filt	Dissolved / filtered sample.		110216-40	110216-40	110216-40	110216-40		
tot.unfilt	Total / unfiltered sample.		2878778	2878779	2878780	2878782		
*	subcontracted test.							
**	% recovery of the surrogate standard to check the efficiency of the method. The results of the individual compounds within the samples are not corrected for this recovery.							
Component	LOD/Units		Method					
Asbestos Containing Material Screen	-	TM001	No ACM Detected	No ACM Detected		No ACM Detected		
Catechol	<0.01 mg/kg	TM062 (S)		<0.01				
Phenol	<0.01 mg/kg	TM062 (S)		<0.01	M			
Cresols	<0.01 mg/kg	TM062 (S)		<0.01	M			
Resorcinol	<0.05 mg/kg	TM062 (S)		<0.05				
Xylenols	<0.015 mg/kg	TM062 (S)		<0.015	M			
1-Naphthol	<0.01 mg/kg	TM062 (S)		<0.01				
2,3,5-Trimethylphenol	<0.01 mg/kg	TM062 (S)		<0.01	M			
2-Isopropylphenol	<0.015 mg/kg	TM062 (S)		<0.015	M			
Phenols, Total 8 Speciated	<0.15 mg/kg	TM062 (S)		<0.15				
Ammoniacal Nitrogen as N NRA leach	<200 µg/l	TM099			872			
Ammoniacal Nitrogen as NH4 NRA leach	<300 µg/l	TM099			1120			
Ammonia, Free / unionised as N NRA leach	<200 µg/l	TM099			<200			
Sulphide NRA leach	<10 µg/l	TM101			<10			
Fluoride NRA leach	<500 µg/l	TM104			<500			
pH	1 pH Units	TM133	7.62	7.81		7.3	M	
Sulphur, Free NRA leach	<50 µg/l	TM136			<50			
Chromium, Hexavalent	<0.6 mg/kg	TM151	<0.6	<0.6		<0.6	#	
Aluminium (diss.filt) NRA leach	<2.9 µg/l	TM152			354			
Arsenic (diss.filt) NRA leach	<0.12 µg/l	TM152			2.97			
Beryllium (diss.filt) NRA leach	<0.07 µg/l	TM152			<0.07			
Boron (diss.filt) NRA leach	<9.4 µg/l	TM152			12.1			
Cadmium (diss.filt) NRA leach	<0.1 µg/l	TM152			<0.1			
Chromium (diss.filt) NRA leach	<0.22 µg/l	TM152			1.68			
Copper (diss.filt) NRA leach	<0.85 µg/l	TM152			1.27			
Lead (diss.filt) NRA leach	<0.02 µg/l	TM152			0.491			
Molybdenum (diss.filt) NRA leach	<0.24 µg/l	TM152			1.31			
Nickel (diss.filt) NRA leach	<0.15 µg/l	TM152			1.05			
Silver (diss.filt) NRA leach	<1.5 µg/l	TM152			<1.5			
Tin (diss.filt) NRA leach	<0.36 µg/l	TM152			<0.36			
Vanadium (diss.filt) NRA leach	<0.24 µg/l	TM152			1.22			
Zinc (diss.filt) NRA leach	<0.41 µg/l	TM152			1.44			
Cyanide, Total	<1 mg/kg	TM153	<1	<1		<1	M	
Cyanide, Free	<1 mg/kg	TM153	<1	<1		<1	M	
EPH Range >C10 - C40 (aq) NRA leach	<46 µg/l	TM172			<46			



SDG: 110216-40
Job: H_ARCADIS_LEE-40
Client Reference: 96234.01

Location: Forge Lane, Dewsbury
Customer: ARCADIS Geraghty & Miller
Attention: Andrew Smith

Order Number:
Report Number: 119764
Superseded Report: 119153

Results Legend		Customer Sample R	WS104	WS105	WS105	WS106			
#	ISO17025 accredited.	Depth (m) Sample Type Date Sampled Date Received SDG Ref Lab Sample No.(s) AGS Reference	1.50 - 1.70	0.80 - 1.00	2.30 - 2.50	2.30 - 2.60			
M	mCERTS accredited.		Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid			
§	Non-conforming work.		15/02/2011	15/02/2011	15/02/2011	15/02/2011			
aq	Aqueous / settled sample.		16/02/2011	16/02/2011	16/02/2011	16/02/2011			
diss.filt	Dissolved / filtered sample.		110216-40	110216-40	110216-40	110216-40			
tot.unfilt	Total / unfiltered sample.		2878778	2878779	2878780	2878782			
*	subcontracted test.								
**	% recovery of the surrogate standard to check the efficiency of the method. The results of the individual compounds within the samples are not corrected for this recovery.								
Component	LOD/Units		Method						
EPH Band >C10-C12 (aq) NRA leach	<10 µg/l		TM172			<10			
EPH Band >C12-C16 (aq) NRA leach	<10 µg/l	TM172			<10				
EPH Band >C16-C21 (aq) NRA leach	<10 µg/l	TM172			<10				
EPH Band >C21-C40 (aq) NRA leach	<10 µg/l	TM172			<10				
Aluminium	<11 mg/kg	TM181	5230	29100		5260			
Arsenic	<0.6 mg/kg	TM181	3.63	45.5		<6			
Beryllium	<0.01 mg/kg	TM181	0.564	4.44		0.992			
Cadmium	<0.02 mg/kg	TM181	<0.02	0.749		0.92			
Chromium	<0.9 mg/kg	TM181	10.6	47.4		14.6			
Copper	<1.4 mg/kg	TM181	6.91	105		<14			
Iron	<2 mg/kg	TM181	33800	96100		71700			
Lead	<0.7 mg/kg	TM181	8.53	139		7.03			
Mercury	<0.14 mg/kg	TM181	<0.14	<0.14		<1.4			
Molybdenum	<0.1 mg/kg	TM181	<0.1	11.1		0.91			
Nickel	<0.2 mg/kg	TM181	16.5	48.8		18.2			
Tin	<0.24 mg/kg	TM181	0.276	8.93		<2.4			
Vanadium	<0.2 mg/kg	TM181	12	168		33.7			
Zinc	<1.9 mg/kg	TM181	67.1	93.4		57.6			
Mercury (diss.filt) NRA leach	<0.01 µg/l	TM183			<0.01				
Sulphate NRA leach	<2000 µg/l	TM184			10100				
Chloride NRA leach	<2000 µg/l	TM184			5900				
Nitrite as NO2 NRA leach	<50 µg/l	TM184			<50				
Phosphate (ortho) as PO4 NRA leach	<50 µg/l	TM184			<50				
Nitrate as NO3 NRA leach	<300 µg/l	TM184			<300				
Boron, water soluble	<1 mg/kg	TM222	<1	<1		<1			
Magnesium	<8 mg/kg	TM224	1650	5910		1260			
Cyanide, Total NRA leach	<50 µg/l	TM227			<50				
Cyanide, Free NRA leach	<50 µg/l	TM227			<50				
Magnesium (diss.filt) NRA leach	<36 µg/l	TM228			1030				
Iron (diss.filt) NRA leach	<19 µg/l	TM228			553				
Chromium, Hexavalent NRA leach	<30 µg/l	TM241			<30				
Fluoride, 2:1 water soluble	<1 mg/kg	TM242	1.34	2.35		<1			
Phosphate (ortho) as PO4	<1 mg/kg	TM243	<1	<1		<1			
Nitrite as NO2, 2:1 water soluble	<0.1 mg/kg	TM243	0.36	0.15		0.29			
Water Soluble Sulphate as SO4 2:1 Extract	<0.008 g/l	TM243			0.0303	0.0435			



CERTIFICATE OF ANALYSIS

SDG: 110216-40
Job: H_ARCADIS_LEE-40
Client Reference: 96234.01

Location: Forge Lane, Dewsbury
Customer: ARCADIS Geraghty & Miller
Attention: Andrew Smith

Order Number:
Report Number: 119764
Superseded Report: 119153

Table with columns for Results Legend, Customer Sample R, and various sample IDs (WS104, WS105, WS106). Rows include Chloride (soluble), Nitrate as NO3, Silver, and pH NRA leach.



SDG: 110216-40
 Job: H_ARCADIS_LEE-40
 Client Reference: 96234.01

Location: Forge Lane, Dewsbury
 Customer: ARCADIS Geraghty & Miller
 Attention: Andrew Smith

Order Number:
 Report Number: 119764
 Superseded Report: 119153

Semi Volatile Organic Compounds

Results Legend		Customer Sample R	WS105					
#	ISO17025 accredited.	Depth (m) Sample Type Date Sampled Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.80 - 1.00 Soil/Solid 15/02/2011 16/02/2011 110216-40 2878779					
M	mCERTS accredited.							
S	Non-conforming work.							
aq	Aqueous / settled sample.							
diss.filt	Dissolved / filtered sample.							
tot.unfilt	Total / unfiltered sample.							
*	subcontracted test.							
**	% recovery of the surrogate standard to check the efficiency of the method. The results of the individual compounds within the samples are not corrected for this recovery.							
Component	LOD/Units			Method				
Phenol	<0.1 mg/kg			TM157	<0.1			
Pentachlorophenol	<0.1 mg/kg	TM157	<0.1					
n-Nitroso-n-dipropylamine	<0.1 mg/kg	TM157	<0.1					
Nitrobenzene	<0.1 mg/kg	TM157	<0.1					
Isophorone	<0.1 mg/kg	TM157	<0.1					
Hexachloroethane	<0.1 mg/kg	TM157	<0.1					
Hexachlorocyclopentadiene	<0.1 mg/kg	TM157	<0.1					
Hexachlorobutadiene	<0.1 mg/kg	TM157	<0.1					
Hexachlorobenzene	<0.1 mg/kg	TM157	<0.1					
n-Dioctyl phthalate	<0.1 mg/kg	TM157	<0.1					
Dimethyl phthalate	<0.1 mg/kg	TM157	<0.1					
Diethyl phthalate	<0.1 mg/kg	TM157	<0.1					
n-Dibutyl phthalate	<0.1 mg/kg	TM157	<0.1					
Dibenzofuran	<0.1 mg/kg	TM157	0.224					
Carbazole	<0.1 mg/kg	TM157	<0.1					
Butylbenzyl phthalate	<0.1 mg/kg	TM157	<0.1					
bis(2-Ethylhexyl) phthalate	<0.1 mg/kg	TM157	<0.1					
bis(2-Chloroethoxy)methane	<0.1 mg/kg	TM157	<0.1					
bis(2-Chloroethyl)ether	<0.1 mg/kg	TM157	<0.1					
Azobenzene	<0.1 mg/kg	TM157	<0.1					
4-Nitrophenol	<0.1 mg/kg	TM157	<0.1					
4-Nitroaniline	<0.1 mg/kg	TM157	<0.1					
4-Methylphenol	<0.1 mg/kg	TM157	<0.1					
4-Chlorophenylphenylether	<0.1 mg/kg	TM157	<0.1					
4-Chloroaniline	<0.1 mg/kg	TM157	<0.1					
4-Chloro-3-methylphenol	<0.1 mg/kg	TM157	<0.1					
4-Bromophenylphenylether	<0.1 mg/kg	TM157	<0.1					
3-Nitroaniline	<0.1 mg/kg	TM157	<0.1					
2-Nitrophenol	<0.1 mg/kg	TM157	<0.1					
2-Nitroaniline	<0.1 mg/kg	TM157	<0.1					
2-Methylphenol	<0.1 mg/kg	TM157	<0.1					
1,2,4-Trichlorobenzene	<0.1 mg/kg	TM157	<0.1					
2-Chlorophenol	<0.1 mg/kg	TM157	<0.1					
2,6-Dinitrotoluene	<0.1 mg/kg	TM157	<0.1					
2,4-Dinitrotoluene	<0.1 mg/kg	TM157	<0.1					



SDG: 110216-40
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Attention: Andrew Smith

Order Number:
Report Number: 119764
Superseded Report: 119153

Semi Volatile Organic Compounds

Table with columns: Results Legend, Customer Sample R, Component, LOD/Units, Method, and numerical results for various compounds like 2,4-Dimethylphenol, 2,4-Dichlorophenol, etc.



CERTIFICATE OF ANALYSIS

SDG: 110216-40
 Job: H_ARCADIS_LEE-40
 Client Reference: 96234.01

Location: Forge Lane, Dewsbury
 Customer: ARCADIS Geraghty & Miller
 Attention: Andrew Smith

Order Number:
 Report Number: 119764
 Superseded Report: 119153

TPH CWG (S)

Results Legend		Customer Sample R	WS104	WS105	WS106				
#	ISO17025 accredited.	Depth (m) Sample Type Date Sampled Date Received SDG Ref Lab Sample No.(s) AGS Reference							
M	mCERTS accredited.		1.50 - 1.70	0.80 - 1.00	2.30 - 2.60				
S	Non-conforming work.		Soil/Solid	Soil/Solid	Soil/Solid				
aq	Aqueous / settled sample.		15/02/2011	15/02/2011	15/02/2011				
diss.filt	Dissolved / filtered sample.		16/02/2011	16/02/2011	16/02/2011				
tot.unfilt	Total / unfiltered sample.		110216-40	110216-40	110216-40				
*	subcontracted test.		2878778	2878779	2878782				
**	% recovery of the surrogate standard to check the efficiency of the method. The results of the individual compounds within the samples are not corrected for this recovery.								
Component	LOD/Units		Method						
Aliphatics >C12-C16	<0.1 mg/kg		TM173	5.38	7.91	9			
Aliphatics >C16-C21	<0.1 mg/kg	TM173	9.18	10.8	16.3				
Aliphatics >C21-C35	<0.1 mg/kg	TM173	17.5	27.7	13.5				
Aliphatics >C35-C44	<0.1 mg/kg	TM173	2.3	3.97	0.949				
Total Aliphatics >C12-C44	<0.1 mg/kg	TM173	34.4	50.4	39.8				
Aromatics >EC12-EC16	<0.1 mg/kg	TM173	83.1	8.14	15.2				
Aromatics >EC16-EC21	<0.1 mg/kg	TM173	131	14	11.1				
Aromatics >EC21-EC35	<0.1 mg/kg	TM173	188	42.7	7.49				
Aromatics >EC35-EC44	<0.1 mg/kg	TM173	62.2	10.7	0.854				
Aromatics >EC40-EC44	<0.1 mg/kg	TM173	23.8	3.11	0.118				
Total Aromatics >EC12-EC44	<0.1 mg/kg	TM173	465	75.6	34.6				
Total Aliphatics & Aromatics >C5-C44	<0.1 mg/kg	TM173	500	126	75				
Total Aliphatics >C5-35	<0.1 mg/kg	TM173	32.4	46.5	39.2				
Total Aromatics >C5-35	<0.1 mg/kg	TM173	403	64.9	34				
Total Aliphatics & Aromatics >C5-35	<0.1 mg/kg	TM173	435	111	73.2				
GRO Surrogate % recovery**	%	TM089	121	39	137				
GRO >C5-C12	<0.044 mg/kg	TM089	0.586	0.2	0.582				
Methyl tertiary butyl ether (MTBE)	<0.005 mg/kg	TM089	<0.005 #	<0.005 #	<0.005 #				
Benzene	<0.01 mg/kg	TM089	<0.01 M	<0.01 M	<0.01 M				
Toluene	<0.002 mg/kg	TM089	0.0022 M	0.0132 M	0.00224 M				
Ethylbenzene	<0.003 mg/kg	TM089	0.0044 M	0.036 M	0.0056 M				
m,p-Xylene	<0.006 mg/kg	TM089	<0.006 M	<0.006 M	<0.006 M				
o-Xylene	<0.003 mg/kg	TM089	<0.003 M	<0.003 M	<0.003 M				
Aliphatics >C5-C6	<0.01 mg/kg	TM089	0.077	0.0564	0.102				
Aliphatics >C6-C8	<0.01 mg/kg	TM089	0.0176	0.024	0.0246				
Aliphatics >C8-C10	<0.01 mg/kg	TM089	0.0726	0.0192	0.0582				
Aliphatics >C10-C12	<0.01 mg/kg	TM089	0.219	0.018	0.208				
Aromatics >EC5-EC7	<0.01 mg/kg	TM089	<0.01	<0.01	<0.01				
Aromatics >EC7-EC8	<0.01 mg/kg	TM089	<0.01	0.0132	<0.01				
Aromatics >EC8-EC10	<0.01 mg/kg	TM089	0.0528	0.0516	0.0482				
Aromatics >EC10-EC12	<0.01 mg/kg	TM089	0.146	0.012	0.139				
m,p,o-Xylene	<0.01 mg/kg	TM089	<0.01	<0.01	<0.01				
BTEX, Total	<0.01 mg/kg	TM089	<0.01	0.0492	<0.01				



SDG: 110216-40
Job: H_ARCADIS_LEE-40
Client Reference: 96234.01

Location: Forge Lane, Dewsbury
Customer: ARCADIS Geraghty & Miller
Attention: Andrew Smith

Order Number:
Report Number: 119764
Superseded Report: 119153

VOC MS (S)

Results Legend		Customer Sample R	WS105						
#	ISO17025 accredited.	Depth (m) Sample Type Date Sampled Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.80 - 1.00 Soil/Solid 15/02/2011 16/02/2011 110216-40 2878779						
M	mCERTS accredited.								
S	Non-conforming work.								
aq	Aqueous / settled sample.								
diss.filt	Dissolved / filtered sample.								
tot.unfilt	Total / unfiltered sample.								
*	subcontracted test.								
**	% recovery of the surrogate standard to check the efficiency of the method. The results of the individual compounds within the samples are not corrected for this recovery.								
Component	LOD/Units			Method					
Dibromofluoromethane**	%			TM116	93.3				
Toluene-d8**	%	TM116	87.8						
4-Bromofluorobenzene**	%	TM116	160						
Dichlorodifluoromethane	<0.004 mg/kg	TM116	<0.004	M					
Chloromethane	<0.007 mg/kg	TM116	<0.007	#					
Vinyl Chloride	<0.01 mg/kg	TM116	<0.01	#					
Bromomethane	<0.013 mg/kg	TM116	<0.013	M					
Chloroethane	<0.014 mg/kg	TM116	<0.014	M					
Trichlorofluoromethane	<0.006 mg/kg	TM116	<0.006	M					
1,1-Dichloroethene	<0.01 mg/kg	TM116	<0.01	#					
Carbon Disulphide	<0.007 mg/kg	TM116	<0.007	M					
Dichloromethane	<0.01 mg/kg	TM116	0.0369	#					
Methyl Tertiary Butyl Ether	<0.011 mg/kg	TM116	<0.011	M					
trans-1-2-Dichloroethene	<0.011 mg/kg	TM116	<0.011	M					
1,1-Dichloroethane	<0.008 mg/kg	TM116	<0.008	M					
cis-1-2-Dichloroethene	<0.005 mg/kg	TM116	<0.005	M					
2,2-Dichloropropane	<0.012 mg/kg	TM116	<0.012	M					
Bromochloromethane	<0.014 mg/kg	TM116	<0.014	M					
Chloroform	<0.008 mg/kg	TM116	<0.008	M					
1,1,1-Trichloroethane	<0.007 mg/kg	TM116	<0.007	M					
1,1-Dichloropropene	<0.011 mg/kg	TM116	<0.011	M					
Carbontetrachloride	<0.014 mg/kg	TM116	<0.014	M					
1,2-Dichloroethane	<0.005 mg/kg	TM116	<0.005	M					
Benzene	<0.009 mg/kg	TM116	0.0181	M					
Trichloroethene	<0.009 mg/kg	TM116	<0.009	M					
1,2-Dichloropropane	<0.012 mg/kg	TM116	<0.012	M					
Dibromomethane	<0.009 mg/kg	TM116	<0.009	M					
Bromodichloromethane	<0.007 mg/kg	TM116	<0.007	M					
cis-1-3-Dichloropropene	<0.014 mg/kg	TM116	<0.014	M					
Toluene	<0.005 mg/kg	TM116	0.0325	M					
trans-1-3-Dichloropropene	<0.014 mg/kg	TM116	<0.014						
1,1,2-Trichloroethane	<0.01 mg/kg	TM116	<0.01	M					
1,3-Dichloropropane	<0.007 mg/kg	TM116	<0.007	#					
Tetrachloroethene	<0.005 mg/kg	TM116	<0.005	M					
Dibromochloromethane	<0.013 mg/kg	TM116	<0.013	M					



CERTIFICATE OF ANALYSIS

SDG: 110216-40
Job: H_ARCADIS_LEE-40
Client Reference: 96234.01

Location: Forge Lane, Dewsbury
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Attention: Andrew Smith

Order Number:
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Superseded Report: 119153

Table of Results - Appendix

REPORT KEY

Results expressed as (e.g.) 1.03E-07 is equivalent to 1.03x10⁻⁷

NDP	No Determination Possible	#	ISO 17025 Accredited	*	Subcontracted Test	M	MCERTS Accredited
NFD	No Fibres Detected	PFD	Possible Fibres Detected	»	Result previously reported (Incremental reports only)	EC	Equivalent Carbon (Aromatics C8-C35)

Note: Method detection limits are not always achievable due to various circumstances beyond our control

Method No	Reference	Description	Wet/Dry Sample ¹	Surrogate Corrected
PM001		Preparation of Samples for Metals Analysis		
PM023	Leaching test method for the Assessment of Contaminated Land: Interim NRA Guidance. National Rivers Authority R & D note 301. (1994).	Leaching Procedure for NRA Leachates		
PM024	Modified BS 1377	Soil preparation including homogenisation, moisture screens of soils for Asbestos Containing Material		
TM001	In - house Method	Determination of asbestos containing material by screening on solids		
TM061	Method for the Determination of EPH, Massachusetts Dept. of EP, 1998	Determination of Extractable Petroleum Hydrocarbons by GC-FID (C10-C40)		
TM062 (S)	National Grid Property Holdings Methods for the Collection & Analysis of Samples from National Grid Sites version 1 Sec 3.9	Determination of Phenols in Soils by HPLC		
TM089	Modified: US EPA Methods 8020 & 602	Determination of Gasoline Range Hydrocarbons (GRO) and BTEX (MTBE) compounds by Headspace GC-FID (C4-C12)		
TM099	BS 2690: Part 7:1968 / BS 6068: Part2.11:1984	Determination of Ammonium in Water Samples using the Kone Analyser		
TM101	Method 4500B & C, AWWA/APHA, 20th Ed., 1999	Determination of Sulphide in soil and water samples using the Kone Analyser		
TM104	Method 4500F, AWWA/APHA, 20th Ed., 1999	Determination of Fluoride using the Kone Analyser		
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS		
TM133	BS 1377: Part 3 1990;BS 6068-2.5	Determination of pH in Soil and Water using the GLpH pH Meter		
TM136	Method 17.10, Second Site property, March 2003	Determination of Sulphur by HPLC		
TM151	Method 3500D, AWWA/APHA, 20th Ed., 1999	Determination of Hexavalent Chromium using Kone analyser		
TM152	Method 3125B, AWWA/APHA, 20th Ed., 1999	Analysis of Aqueous Samples by ICP-MS		
TM153	Method 4500A,B,C, I, M AWWA/APHA, 20th Ed., 1999	Determination of Total Cyanide, Free (Easily Liberatable) Cyanide and Thiocyanate using the Skalar SANS+ System Segmented Flow Analyser		
TM157	HP 6890 Gas Chromatograph (GC) system and HP 5973 Mass Selective Detector (MSD).	Determination of SVOC in Soils by GC-MS extracted by sonication in DCM/Acetone		
TM172	Analysis of Petroleum Hydrocarbons in Environmental Media – Total Petroleum Hydrocarbon Criteria	EPH in Waters		
TM173	Analysis of Petroleum Hydrocarbons in Environmental Media – Total Petroleum Hydrocarbon Criteria	Determination of Speciated Extractable Petroleum Hydrocarbons in Soils by GC-FID		
TM178	Modified: US EPA Method 8100	Determination of Polynuclear Aromatic Hydrocarbons (PAH) by GC-MS in Waters		
TM181	US EPA Method 6010B	Determination of Routine Metals in Soil by iCap 6500 Duo ICP-OES		
TM183	BS EN 23506:2002, (BS 6068-2.74:2002) ISBN 0 580 38924 3	Determination of Trace Level Mercury in Waters and Leachates by PSA Cold Vapour Atomic Fluorescence Spectrometry		
TM184	EPA Methods 325.1 & 325.2,	The Determination of Anions in Aqueous Matrices using the Kone Spectrophotometric Analysers		
TM218	Microwave extraction – EPA method 3546	Microwave extraction - EPA method 3546		
TM222	In-House Method	Determination of Hot Water Soluble Boron in Soils (10:1 Water:soil) by IRIS Emission Spectrometer		
TM224	US EPA Method 6010B	Determination of Alkaline Metals by iCap 6500 Duo ICP-OES		
TM227	Standard methods for the examination of waters and wastewaters 20th Edition, AWWA/APHA Method 4500.	Determination of Total Cyanide, Free (Easily Liberatable) Cyanide and Thiocyanate		
TM228	US EPA Method 6010B	Determination of Major Cations in Water by iCap 6500 Duo ICP-OES		
TM241	Methods for the Examination of Waters and Associated Materials; Chromium in Raw and Potable Waters and Sewage Effluents 1980.	The Determination of Hexavalent Chromium in Waters and Leachates using the Kone Analyser		
TM242	Method 340.3, Fluoride, EPA, 1997.	Determination of Fluoride in Soil Samples using the Kone Analyser		
TM243				
TM250				
TM256	The measurement of Electrical Conductivity and the Laboratory determination of pH Value of Natural, Treated and Wastewaters. HMSO, 1978. ISBN 011 751428 4.	Determination of pH in Water and Leachate using the GLpH pH Meter		



CERTIFICATE OF ANALYSIS

Validated

SDG: 110216-40
Job: H_ARCADIS_LEE-40
Client Reference: 96234.01

Location: Forge Lane, Dewsbury
Customer: ARCADIS Geraghty & Miller
Attention: Andrew Smith

Order Number:
Report Number: 119764
Superseded Report: 119153

¹ Applies to Solid samples only. DRY indicates samples have been dried at 35°C. NA = not applicable.



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Test Completion Dates

Lab Sample No(s)	2878778	2878779	2878780	2878782
Customer Sample Ref.	WS104	WS105	WS105	WS106
AGS Ref.				
Depth	1.50 - 1.70	0.80 - 1.00	2.30 - 2.50	2.30 - 2.60
Type	SOLID	SOLID	SOLID	SOLID
Alkali Metals by iCap-OES (Soil)	22-Feb-2011	22-Feb-2011		22-Feb-2011
Ammoniacal Nitrogen			09-Mar-2011	
Anions by Kone (soil)	18-Feb-2011	21-Feb-2011	03-Mar-2011	03-Mar-2011
Anions by Kone (w)			09-Mar-2011	
Asbestos Containing Material Screen	16-Feb-2011	16-Feb-2011		16-Feb-2011
Boron Water Soluble	22-Feb-2011	18-Feb-2011		22-Feb-2011
Cyanide Comp/Free/Total/Thiocyanate	17-Feb-2011	17-Feb-2011	04-Mar-2011	17-Feb-2011
Dissolved Metals by ICP-MS			04-Mar-2011	
EPH (DRO) (C10-C40) Aqueous (W)			08-Mar-2011	
EPH CWG (Aliphatic) GC (S)	18-Feb-2011	18-Feb-2011		18-Feb-2011
EPH CWG (Aromatic) GC (S)	18-Feb-2011	18-Feb-2011		18-Feb-2011
Fluoride			07-Mar-2011	
Fluoride (soluble)	21-Feb-2011	23-Feb-2011		18-Feb-2011
Free Sulphur			04-Mar-2011	
GRO by GC-FID (S)	22-Feb-2011	22-Feb-2011		22-Feb-2011
Hexavalent Chromium (s)	17-Feb-2011	17-Feb-2011		17-Feb-2011
Hexavalent Chromium (w)			07-Mar-2011	
Mercury Dissolved			04-Mar-2011	
Metals by iCap-OES (Soil)	22-Feb-2011	18-Feb-2011		22-Feb-2011
Metals by iCap-OES Dissolved (W)			04-Mar-2011	
NO3, NO2 and TON by KONE (s)	21-Feb-2011	23-Feb-2011		21-Feb-2011
NRA Leachate			01-Mar-2011	
PAH by GCMS	20-Feb-2011	20-Feb-2011		20-Feb-2011
PAH Spec MS - Aqueous (W)			04-Mar-2011	
pH	17-Feb-2011	17-Feb-2011		17-Feb-2011
pH Value			04-Mar-2011	
Phenols by HPLC (S)		02-Mar-2011		
Phosphate (Ortho as PO4) (s)	21-Feb-2011	23-Feb-2011		18-Feb-2011
Sample description	16-Feb-2011	16-Feb-2011	01-Mar-2011	16-Feb-2011
Semi Volatile Organic Compounds			04-Mar-2011	
Silver	22-Feb-2011	22-Feb-2011		22-Feb-2011
Sulphide			09-Mar-2011	
TPH CWG GC (S)	22-Feb-2011	22-Feb-2011		22-Feb-2011
VOC MS (S)		04-Mar-2011		



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 Superseded Report: 119153

ASSOCIATED AQC DATA

Alkali Metals by iCap-OES (Soil)

Component	Method Code	QC 20	QC 27	QC 26
Calcium	TM224	104.84 82.76 : 117.24	90.80 82.76 : 117.24	95.14 82.76 : 117.24
Magnesium	TM224	106.76 80.90 : 107.65	92.22 80.90 : 107.65	99.74 80.90 : 107.65
Potassium	TM224	116.88 65.06 : 116.82	115.89 65.06 : 116.82	116.41 65.06 : 116.82
Sodium	TM224	106.88 65.06 : 134.94	104.93 65.06 : 134.94	103.13 65.06 : 134.94

Ammoniacal Nitrogen

Component	Method Code	QC 39
Ammoniacal Nitrogen as N	TM099	100.78 97.38 : 106.13

Anions by Kone (soil)

Component	Method Code	QC 22	QC 25	QC 25	QC 24	QC 28
Chloride (soluble)	TM243	100.77 78.07 : 121.93	106.30 78.07 : 121.93	100.13 78.07 : 121.93		
Water Soluble Sulphate as SO4 2:1 Extract	TM243	98.60 91.36 : 106.23	97.45 91.36 : 106.23	95.51 91.36 : 106.23	100.08 89.98 : 116.12	97.40 89.98 : 116.12

Anions by Kone (w)

Component	Method Code	QC 30
Chloride	TM184	100.30 95.90 : 105.20
Nitrite as NO2	TM184	100.90 92.92 : 105.47
Phosphate (Ortho as PO4)	TM184	103.80 96.98 : 107.09
Sulphate (soluble)	TM184	100.84 95.09 : 105.03
TON as NO3	TM184	96.50 93.27 : 107.89

Boron Water Soluble

Component	Method Code	QC 20	QC 25	QC 22
Water Soluble Boron	TM222	108.05 86.36 : 114.95	95.15 86.36 : 114.95	98.25 86.36 : 114.95

Cyanide Comp/Free/Total/Thiocyanate



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Cyanide Comp/Free/Total/Thiocyanate

Component	Method Code	QC 28	QC 24
Free Cyanide	TM153	102.67 87.04 : 107.05	
Free Cyanide (W)	TM227		92.60 87.13 : 117.88
Thiocyanate	TM153	103.74 90.22 : 111.93	
Thiocyanate (W)	TM227		97.45 84.79 : 114.71
Total Cyanide	TM153	105.22 77.00 : 112.12	
Total Cyanide (W)	TM227		100.33 87.76 : 118.74

Dissolved Metals by ICP-MS

Component	Method Code	QC 31
Aluminium	TM152	103.15 85.00 : 115.00
Antimony	TM152	99.71 85.05 : 115.00
Arsenic	TM152	100.49 85.05 : 115.00
Barium	TM152	101.11 85.05 : 115.00
Beryllium	TM152	104.77 85.05 : 115.00
Bismuth	TM152	99.77 85.05 : 115.00
Boron	TM152	105.67 85.05 : 115.00
Cadmium	TM152	100.48 85.05 : 115.00
Chromium	TM152	101.15 85.05 : 115.00
Cobalt	TM152	101.69 85.05 : 115.00
Copper	TM152	100.53 85.05 : 115.00
Lead	TM152	101.12 85.05 : 115.00
Lithium	TM152	105.41 85.05 : 115.00
Manganese	TM152	100.88 85.05 : 115.00
Molybdenum	TM152	100.65 85.05 : 115.00
Nickel	TM152	101.65 85.05 : 115.00
Phosphorus	TM152	101.20 85.00 : 115.00
Selenium	TM152	101.95 85.00 : 115.00
Silver	TM152	97.95 85.00 : 115.00



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Dissolved Metals by ICP-MS

		QC 31
Strontium	TM152	100.65 85.05 : 115.00
Tellurium	TM152	102.69 85.05 : 115.00
Thallium	TM152	100.49 85.05 : 115.00
Tin	TM152	102.08 85.05 : 115.00
Titanium	TM152	100.49 85.05 : 115.00
Uranium	TM152	99.32 85.05 : 115.00
Vanadium	TM152	100.55 85.05 : 115.00
Zinc	TM152	100.09 85.00 : 115.00

EPH (DRO) (C10-C40) Aqueous (W)

Component	Method Code	QC 32
EPH (DRO) (C10-C40)	TM172	88.42 38.50 : 139.00

EPH CWG (Aliphatic) GC (S)

Component	Method Code	QC 26	QC 23	QC 26
Total Aliphatics >C12-C35	TM173	88.08 64.28 : 103.38	90.71 67.09 : 98.92	93.63 68.60 : 100.41

EPH CWG (Aromatic) GC (S)

Component	Method Code	QC 26	QC 23	QC 26
Total Aromatics >EC12-EC35	TM173	88.34 66.16 : 121.82	87.86 63.44 : 117.90	91.53 60.37 : 122.36

Fluoride

Component	Method Code	QC 37
Fluoride	TM104	99.13 81.33 : 118.67



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Hexavalent Chromium (s)

Component	Method Code	QC 28
Hexavalent Chromium	TM151	99.80 92.03 : 118.13

Hexavalent Chromium (w)

Component	Method Code	QC 38
Hexavalent Chromium	TM241	100.20 92.14 : 111.57

Mercury Dissolved

Component	Method Code	QC 37
Mercury Dissolved (CVAf)	TM183	89.00 85.87 : 123.88

Metals by iCap-OES (Soil)

Component	Method Code	QC 20	QC 27	QC 26	QC 28	QC 28
Aluminium	TM181	121.07 99.74 : 133.84	121.94 99.74 : 133.84	129.93 99.74 : 133.84	112.01 94.29 : 126.83	124.77 99.42 : 133.41
Antimony	TM181	99.08 95.73 : 132.37	102.23 95.73 : 132.37	116.93 95.73 : 132.37	102.23 80.62 : 119.38	104.76 84.02 : 116.19
Arsenic	TM181	104.39 92.13 : 124.49	113.61 92.13 : 124.49	108.96 92.13 : 124.49	103.96 93.78 : 118.04	109.47 92.22 : 124.62
Barium	TM181	111.21 99.87 : 124.97	111.89 99.87 : 124.97	112.09 99.87 : 124.97	102.20 92.15 : 121.48	113.17 -1.31 : 23.83
Beryllium	TM181	99.67 83.56 : 132.08	106.34 83.56 : 132.08	102.24 83.56 : 132.08	96.37 93.37 : 106.63	103.28 83.56 : 132.08
Boron	TM181	125.78 83.10 : 149.49	120.23 83.10 : 149.49	130.71 83.10 : 149.49	115.58 71.45 : 144.21	122.47 82.88 : 149.11
Cadmium	TM181	101.52 99.32 : 120.68	107.41 99.32 : 120.68	101.78 99.32 : 120.68	94.73 83.47 : 108.02	103.48 86.94 : 105.63
Chromium	TM181	105.25 89.88 : 120.16	108.06 89.88 : 120.16	108.73 89.88 : 120.16	98.57 86.66 : 111.67	107.82 89.76 : 120.00
Cobalt	TM181	107.37 94.73 : 120.59	112.52 94.73 : 120.59	109.24 94.73 : 120.59	103.82 91.65 : 115.98	109.95 94.43 : 120.21
Copper	TM181	100.77 93.26 : 114.97	106.85 93.26 : 114.97	99.14 93.26 : 114.97	97.81 90.86 : 109.48	106.41 93.32 : 115.05
Iron	TM181	113.27 100.19 : 127.85	114.62 100.19 : 127.85	118.97 100.19 : 127.85	100.42 100.21 : 121.44	116.25 99.77 : 127.31
Lead	TM181	111.65 81.63 : 123.21	120.41 81.63 : 123.21	113.31 81.63 : 123.21	91.57 81.17 : 121.35	97.23 81.75 : 123.40
Manganese	TM181	99.01 89.87 : 108.44	97.00 89.87 : 108.44	103.42 89.87 : 108.44	96.04 88.94 : 103.43	99.28 89.95 : 108.54



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Metals by iCap-OES (Soil)

		QC 20	QC 27	QC 26	QC 28	QC 28
Mercury	TM181	115.47 101.30 : 128.70	121.44 101.30 : 128.70	115.91 101.30 : 128.70	108.44 96.85 : 124.11	119.07 101.30 : 128.70
Molybdenum	TM181	99.78 96.32 : 127.40	103.78 96.32 : 127.40	117.67 96.32 : 127.40	99.33 83.94 : 116.06	100.14 84.02 : 111.13
Nickel	TM181	107.02 88.13 : 116.85	102.82 88.13 : 116.85	114.43 88.13 : 116.85	97.86 83.34 : 114.35	107.63 88.14 : 116.87
Phosphorus	TM181	101.58 89.03 : 113.27	100.20 89.03 : 113.27	108.82 89.03 : 113.27	97.98 85.62 : 116.58	97.27 89.00 : 113.23
Selenium	TM181	110.08 95.46 : 126.52	110.08 95.46 : 126.52	109.07 95.46 : 126.52	109.27 100.15 : 123.30	112.00 95.45 : 126.51
Strontium	TM181	108.30 91.79 : 123.61	114.14 91.79 : 123.61	112.16 91.79 : 123.61	100.43 89.82 : 110.49	111.44 91.88 : 123.72
Thallium	TM181	112.59 81.67 : 125.57	114.98 81.67 : 125.57	128.72 81.67 : 125.57	106.76 93.51 : 130.39	109.78 81.64 : 125.52
Tin	TM181	101.04 97.01 : 132.90	109.97 97.01 : 132.90	101.80 97.01 : 132.90	96.32 89.71 : 110.91	101.88 84.94 : 116.37
Titanium	TM181	103.45 87.17 : 133.97	110.85 87.17 : 133.97	88.33 87.17 : 133.97	102.73 78.57 : 125.05	109.50 87.06 : 133.82
Vanadium	TM181	104.68 93.04 : 119.76	108.78 93.04 : 119.76	108.46 93.04 : 119.76	98.91 91.61 : 110.18	109.28 89.94 : 123.16
Zinc	TM181	96.46 82.78 : 113.72	98.08 82.78 : 113.72	94.80 82.78 : 113.72	92.12 83.65 : 103.15	98.65 82.72 : 113.65

Metals by iCap-OES Dissolved (W)

Component	Method Code	QC 30
Calcium	TM228	97.11 81.78 : 115.59
Iron	TM228	88.04 81.04 : 106.35
Magnesium	TM228	96.80 81.62 : 113.40
Potassium	TM228	96.95 81.27 : 112.71
Sodium	TM228	98.18 81.34 : 114.58

NO3, NO2 and TON by KONE (s)

Component	Method Code	QC 25	QC 22	QC 25	QC 28
Nitrate/TON as N QC	TM243	172.27 75.71 : 136.31	144.11 75.71 : 136.31	131.05 75.71 : 136.31	131.79 75.71 : 136.31
Nitrite (soluble) as NO2	TM243	102.25 80.34 : 120.22	92.13 80.34 : 120.22	85.39 80.34 : 120.22	95.51 80.34 : 120.22

PAH by GCMS

Component	Method Code	QC 25	QC 20
Acenaphthene	TM218	96.53 73.81 : 109.35	96.34 76.67 : 113.81
Acenaphthylene	TM218	85.49 67.05 : 95.65	87.36 69.48 : 103.60



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PAH by GCMS

		QC 25	QC 20
Anthracene	TM218	93.31 72.39 : 100.02	92.23 72.34 : 105.79
Benz(a)anthracene	TM218	105.73 74.79 : 118.85	100.12 78.05 : 118.23
Benzo(a)pyrene	TM218	110.88 73.75 : 119.70	100.76 71.76 : 115.28
Benzo(b)fluoranthene	TM218	105.59 75.06 : 120.22	101.80 75.47 : 118.01
Benzo(ghi)perylene	TM218	100.37 75.04 : 115.56	99.85 80.11 : 115.32
Benzo(k)fluoranthene	TM218	101.51 76.34 : 113.30	99.98 74.80 : 111.82
Chrysene	TM218	97.52 73.17 : 115.36	101.74 77.72 : 118.70
Dibenzo(ah)anthracene	TM218	100.18 74.81 : 113.99	100.42 81.32 : 115.59
Fluoranthene	TM218	99.22 75.32 : 108.37	93.07 80.57 : 113.55
Fluorene	TM218	94.89 71.61 : 107.41	94.43 75.59 : 110.55
Indeno(123cd)pyrene	TM218	102.45 74.70 : 117.26	100.51 74.93 : 117.17
Naphthalene	TM218	94.00 73.58 : 103.51	91.21 77.08 : 108.74
Phenanthrene	TM218	97.53 74.65 : 105.86	94.47 80.57 : 113.47
Pyrene	TM218	98.68 76.08 : 109.72	93.39 77.64 : 113.40

PAH Spec MS - Aqueous (W)

Component	Method Code	QC 24
Acenaphthene by GCMS	TM178	96.87 82.69 : 106.11
Acenaphthylene by GCMS	TM178	95.44 82.16 : 104.82
Anthracene by GCMS	TM178	93.01 77.85 : 105.75
Benz(a)anthracene by GCMS	TM178	92.10 75.32 : 108.18
Benzo(a)pyrene by GCMS	TM178	100.04 86.69 : 118.58
Benzo(b)fluoranthene by GCMS	TM178	100.58 87.25 : 114.25
Benzo(ghi)perylene by GCMS	TM178	99.31 82.05 : 112.05
Benzo(k)fluoranthene by GCMS	TM178	105.98 87.20 : 122.40
Chrysene by GCMS	TM178	97.87 83.22 : 112.82
Dibenzo(ah)anthracene by GCMS	TM178	100.06 72.40 : 118.55
Fluoranthene by GCMS	TM178	96.38 87.00 : 105.75



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PAH Spec MS - Aqueous (W)

		QC 24
Fluorene by GCMS	TM178	97.70 83.12 : 110.71
Indeno(123cd)pyrene by GCMS	TM178	103.63 82.25 : 114.75
Naphthalene by GCMS	TM178	96.69 84.07 : 108.07
Phenanthrene by GCMS	TM178	97.50 86.79 : 108.29
Pyrene by GCMS	TM178	95.65 84.55 : 108.55
Volume	TM178	15000.00

pH

Component	Method Code	QC 28
pH	TM133	101.00 98.46 : 102.30

pH Value

Component	Method Code	QC 32
pH	TM256	99.86 99.26 : 100.01

Phenols by HPLC (S)

Component	Method Code	QC 29
2,3,5 Trimethyl-Phenol by HPLC (S)	TM062 (S)	97.60 85.13 : 105.17
2-Isopropyl Phenol by HPLC (S)	TM062 (S)	95.81 87.06 : 106.06
Catechol by HPLC (S)	TM062 (S)	49.70 27.40 : 94.47
Cresols by HPLC (S)	TM062 (S)	88.62 83.33 : 100.99
Naphthol by HPLC (S)	TM062 (S)	73.65 55.65 : 110.94
Phenol by HPLC (S)	TM062 (S)	95.21 83.94 : 101.65
Resorcinol HPLC (S)	TM062 (S)	95.81 83.97 : 105.22
Xylenols by HPLC (S)	TM062 (S)	96.01 83.64 : 102.70

Phosphate (Ortho as PO4) (s)



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Phosphate (Ortho as PO4) (s)

Component	Method Code	QC 25	QC 22	QC 25	QC 28
Phosphate (Ortho as PO4)	TM243	145.12 69.42 : 130.58	131.76 69.42 : 130.58	141.26 69.42 : 130.58	143.04 69.42 : 130.58

Semi Volatile Organic Compounds

Component	Method Code	QC 27
4-Bromophenylphenylether (Soil)	TM157	100.26 74.30 : 113.57
Benzo(a)anthracene (Soil)	TM157	102.23 70.77 : 125.72
Hexachlorobutadiene (Soil)	TM157	100.08 78.65 : 110.23
Naphthalene (Soil)	TM157	95.74 78.64 : 113.48
Nitrobenzene (Soil)	TM157	98.63 76.14 : 111.47
Phenol (Soil)	TM157	93.46 76.77 : 113.80

Sulphide

Component	Method Code	QC 26
Sulphide	TM101	104.53 77.08 : 135.77

VOC MS (S)

Component	Method Code	QC 30
1,1,1,2-tetrachloroethane	TM116	98.64 68.18 : 144.88
1,1,1-Trichloroethane	TM116	102.71 67.21 : 142.82
1,1,2-Trichloroethane	TM116	116.75 75.40 : 160.23
1,1-Dichloroethane	TM116	110.11 70.67 : 150.18
1,2-Dichloroethane	TM116	112.26 72.96 : 155.03
1,4-Dichlorobenzene	TM116	106.62 72.36 : 153.77
2-Chlorotoluene	TM116	127.02 83.36 : 177.15
4-Chlorotoluene	TM116	134.40 84.28 : 179.10
Benzene	TM116	104.52 69.92 : 148.58



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VOC MS (S)

		QC 30
Carbon Disulphide	TM116	100.75 63.87 : 135.73
Carbontetrachloride	TM116	107.92 73.39 : 155.95
Chlorobenzene	TM116	100.67 69.59 : 147.89
Chloroform	TM116	107.38 70.48 : 149.78
Chloromethane	TM116	142.61 75.88 : 161.25
Cis-1,2-Dichloroethene	TM116	106.58 65.49 : 139.18
Dibromomethane	TM116	103.29 65.97 : 140.19
Dichloromethane	TM116	110.44 71.23 : 151.36
Ethylbenzene	TM116	95.15 68.41 : 145.37
Hexachlorobutadiene	TM116	126.32 85.39 : 181.46
Isopropylbenzene	TM116	100.13 58.18 : 123.62
Naphthalene	TM116	110.26 75.23 : 159.86
o-Xylene	TM116	97.92 65.38 : 138.92
p/m-Xylene	TM116	98.13 68.19 : 144.91
Sec-Butylbenzene	TM116	107.67 66.07 : 140.41
Tetrachloroethene	TM116	109.77 72.85 : 154.80
Toluene	TM116	90.26 67.17 : 142.75
Trichloroethene	TM116	97.63 68.75 : 146.10
Trichlorofluoromethane	TM116	92.16 62.67 : 133.18
Vinyl Chloride	TM116	129.38 67.16 : 142.72

The above information details the reference name of the analytical quality control sample (AQC) that has been run with the samples contained in this report for the different methods of analysis.

The figure detailed is the percentage recovery result for the AQC.

The subscript numbers below are the percentage recovery lower control limit (LCL) and the upper control limit (UCL). The percentage recovery result for the AQC should be between these limits to be statistically in control.



SDG: 110216-40
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Client Reference: 96234.01

Location: Forge Lane, Dewsbury
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Attention: Andrew Smith

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Chromatogram

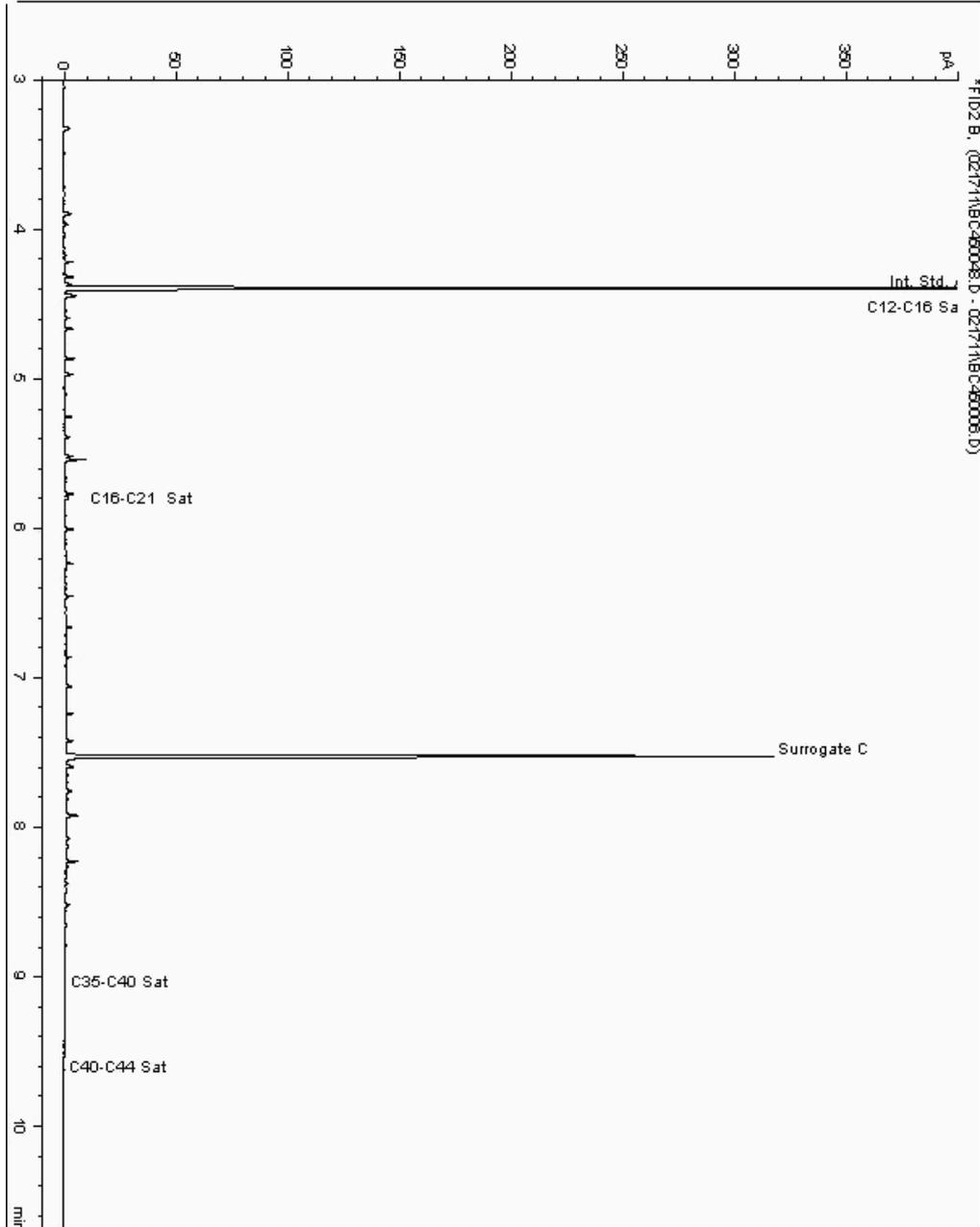
Analysis: EPH CWG (Aliphatic) GC (S)

Sample No : 2886263
Sample ID : WS105

Depth : 0.80 - 1.00

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 2950080-2886263
Date Acquired : 18/02/11 11:21:21 PM
Units : ppb
Dilution:





CERTIFICATE OF ANALYSIS

SDG: 110216-40
Job: H_ARCADIS_LEE-40
Client Reference: 96234.01

Location: Forge Lane, Dewsbury
Customer: ARCADIS Geraghty & Miller
Attention: Andrew Smith

Order Number:
Report Number: 119764
Superseded Report: 119153

Chromatogram

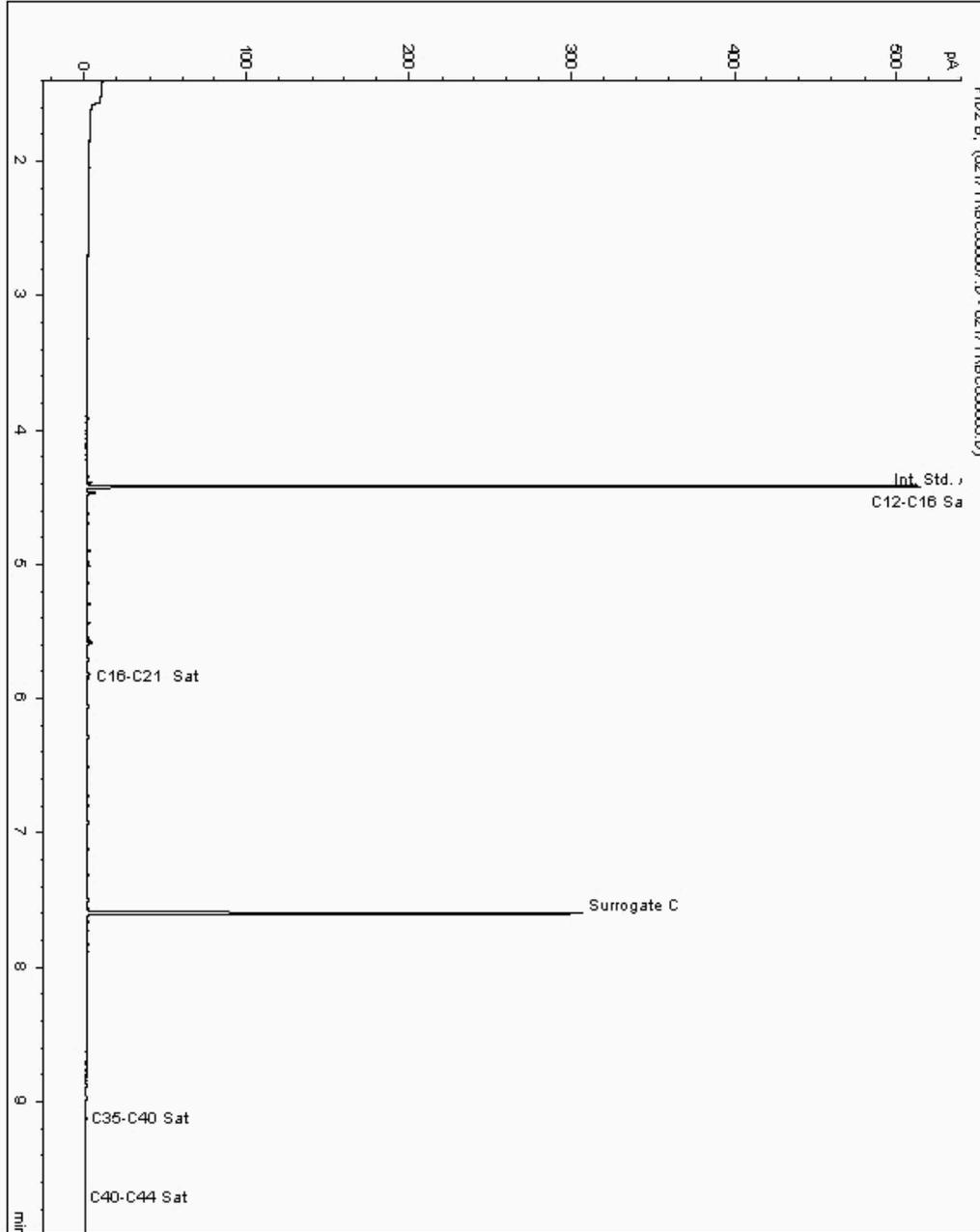
Analysis: EPH CWG (Aliphatic) GC (S)

Sample No : 2889021
Sample ID : WS104

Depth : 1.50 - 1.70

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 2950032-2889021
Date Acquired : 18/02/11 11:05:00 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.970





CERTIFICATE OF ANALYSIS

SDG: 110216-40
Job: H_ARCADIS_LEE-40
Client Reference: 96234.01

Location: Forge Lane, Dewsbury
Customer: ARCADIS Geraghty & Miller
Attention: Andrew Smith

Order Number:
Report Number: 119764
Superseded Report: 119153

Chromatogram

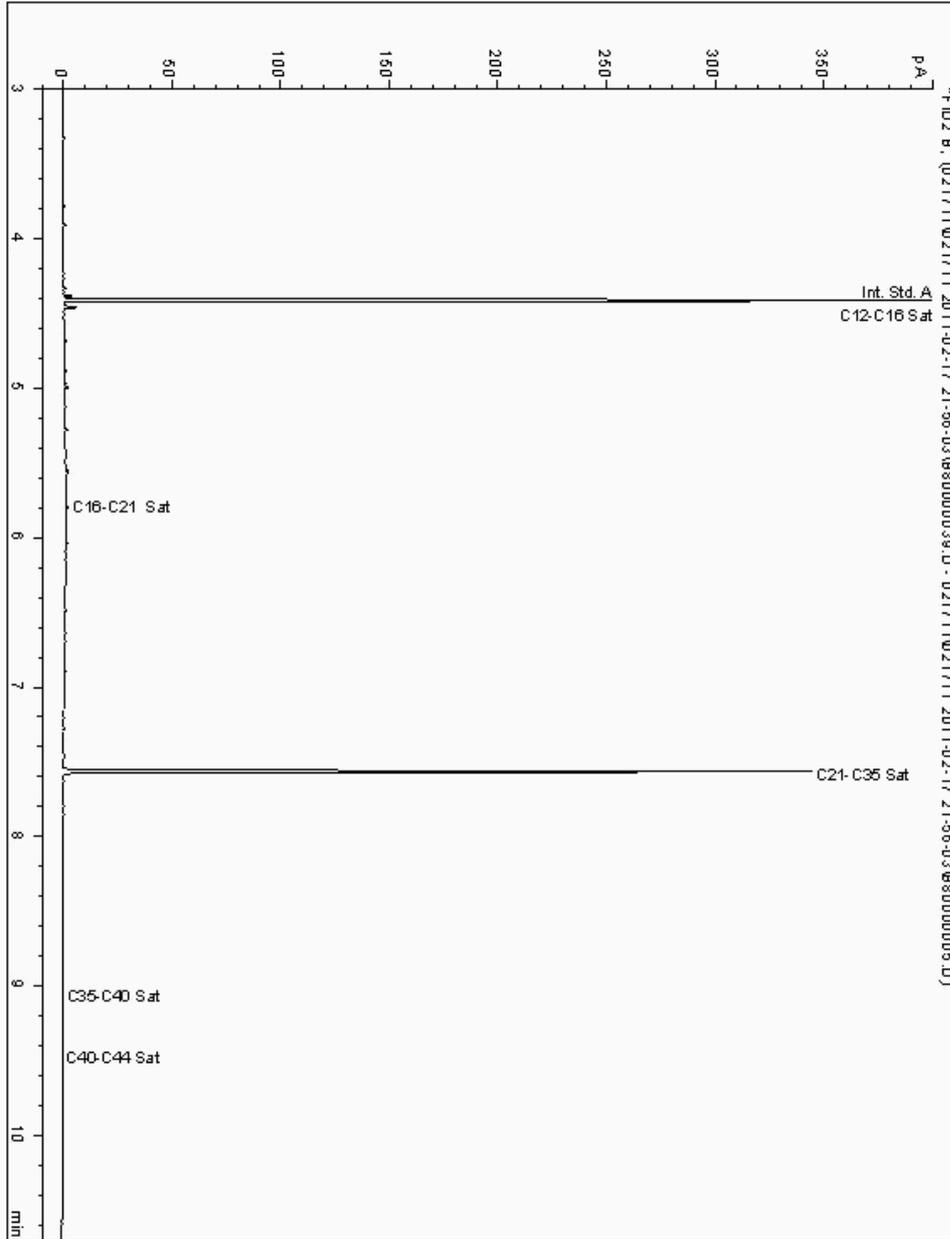
Analysis: EPH CWG (Aliphatic) GC (S)

Sample No : 2891033
Sample ID : WS106

Depth : 2.30 - 2.60

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 2950129-2891033
Date Acquired : 18/02/11 09:52:30
Units : ppb
Dilution :
CF : 1
Multiplier : 1.020





CERTIFICATE OF ANALYSIS

SDG: 110216-40
Job: H_ARCADIS_LEE-40
Client Reference: 96234.01

Location: Forge Lane, Dewsbury
Customer: ARCADIS Geraghty & Miller
Attention: Andrew Smith

Order Number:
Report Number: 119764
Superseded Report: 119153

Chromatogram

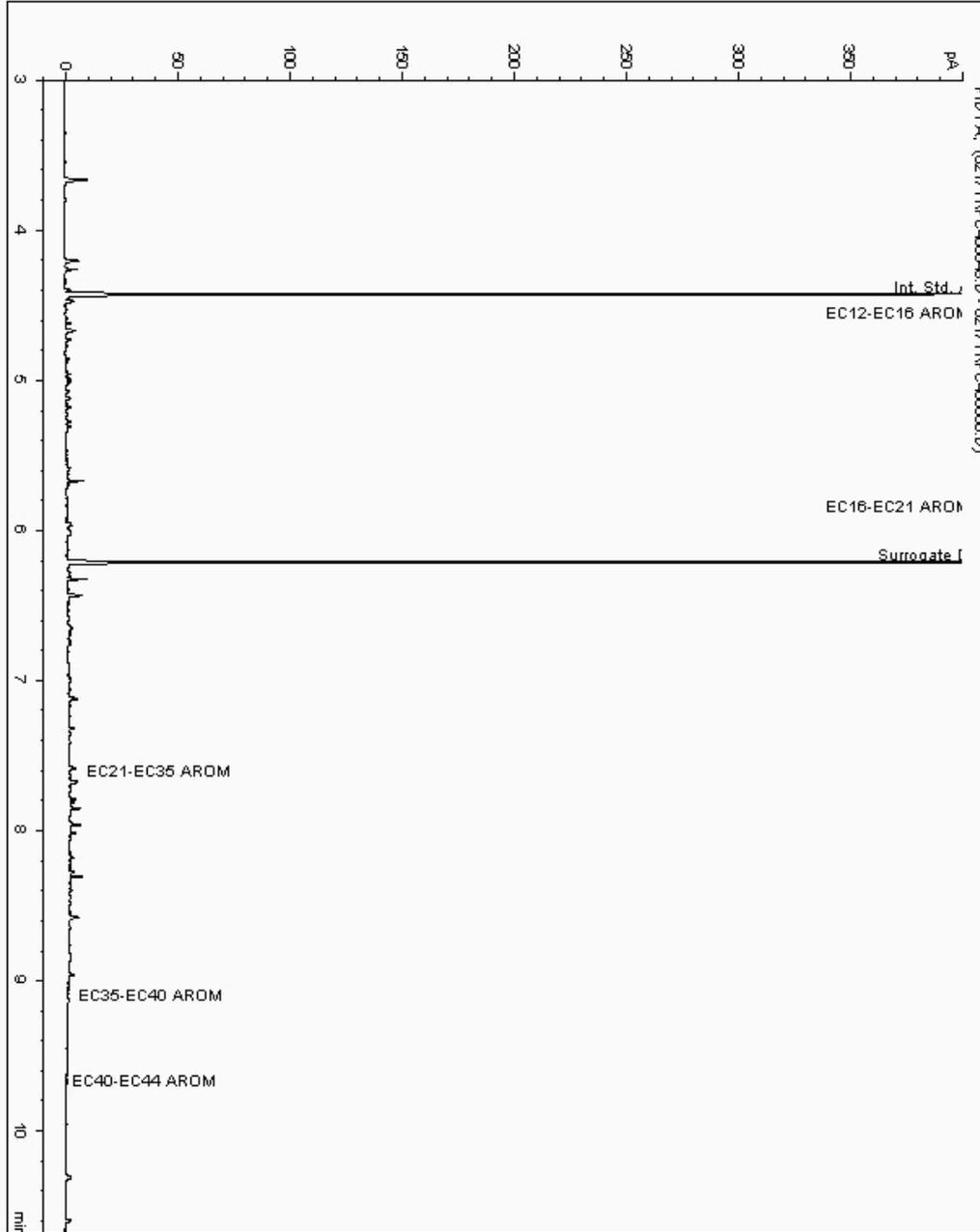
Analysis: EPH CWG (Aromatic) GC (S)

Sample No : 2886263
Sample ID : WS105

Depth : 0.80 - 1.00

Alcontrol/Geochem Analytical Services
Speciated TPH - AROM (C12 - C40)

Sample Identity: 2950081-2886263
Date Acquired : 18/02/11 11:21:21 PM
Units : ppb
Dilution:





SDG: 110216-40
Job: H_ARCADIS_LEE-40
Client Reference: 96234.01

Location: Forge Lane, Dewsbury
Customer: ARCADIS Geraghty & Miller
Attention: Andrew Smith

Order Number:
Report Number: 119764
Superseded Report: 119153

Chromatogram

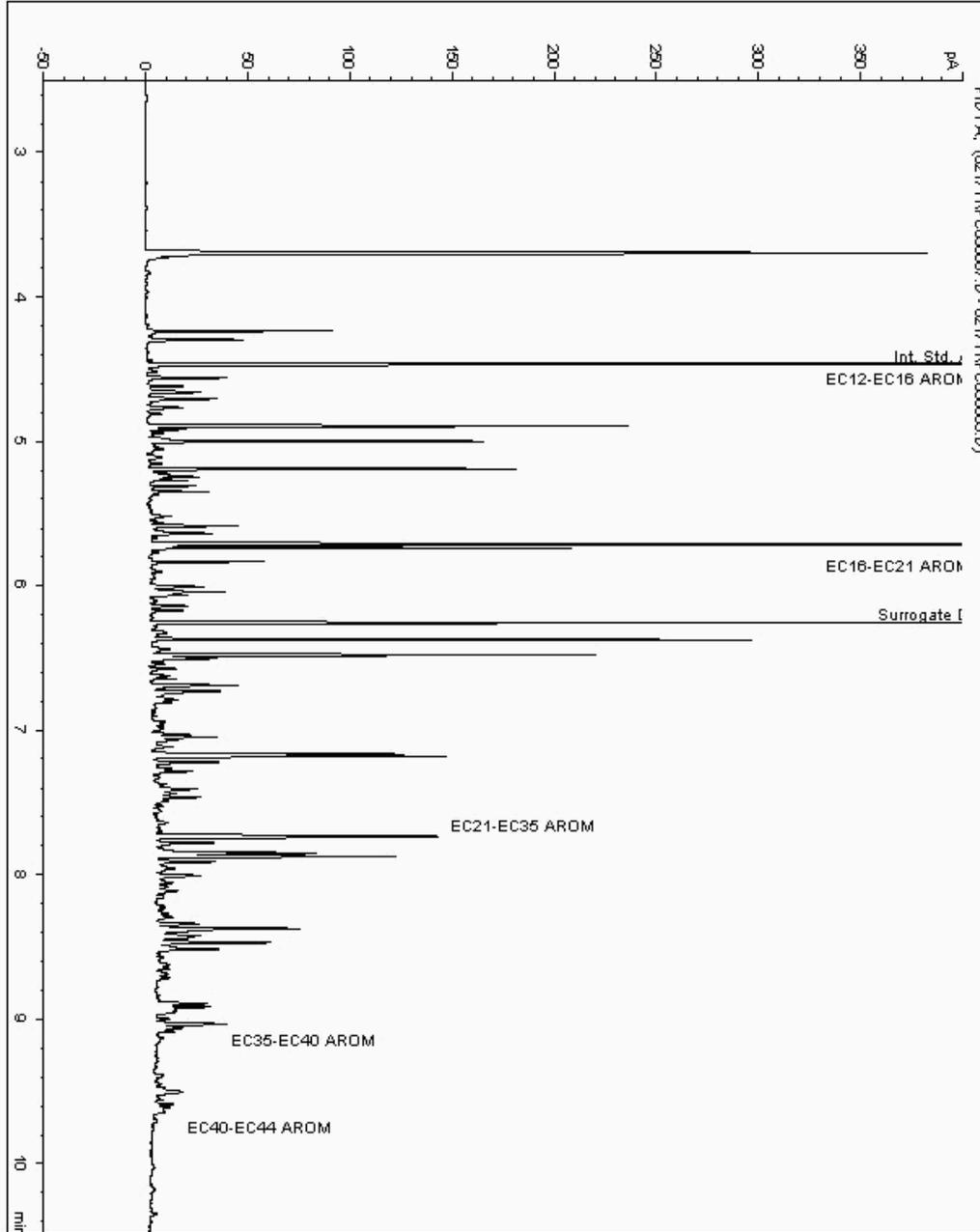
Analysis: EPH CWG (Aromatic) GC (S)

Sample No : 2889021
Sample ID : WS104

Depth : 1.50 - 1.70

Alcontrol/Geochem Analytical Services
Speciated TPH - AROM (C12 - C40)

Sample Identity: 2950033-2889021
Date Acquired : 18/02/11 11:05:00 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.970





CERTIFICATE OF ANALYSIS

SDG: 110216-40
Job: H_ARCADIS_LEE-40
Client Reference: 96234.01

Location: Forge Lane, Dewsbury
Customer: ARCADIS Geraghty & Miller
Attention: Andrew Smith

Order Number:
Report Number: 119764
Superseded Report: 119153

Chromatogram

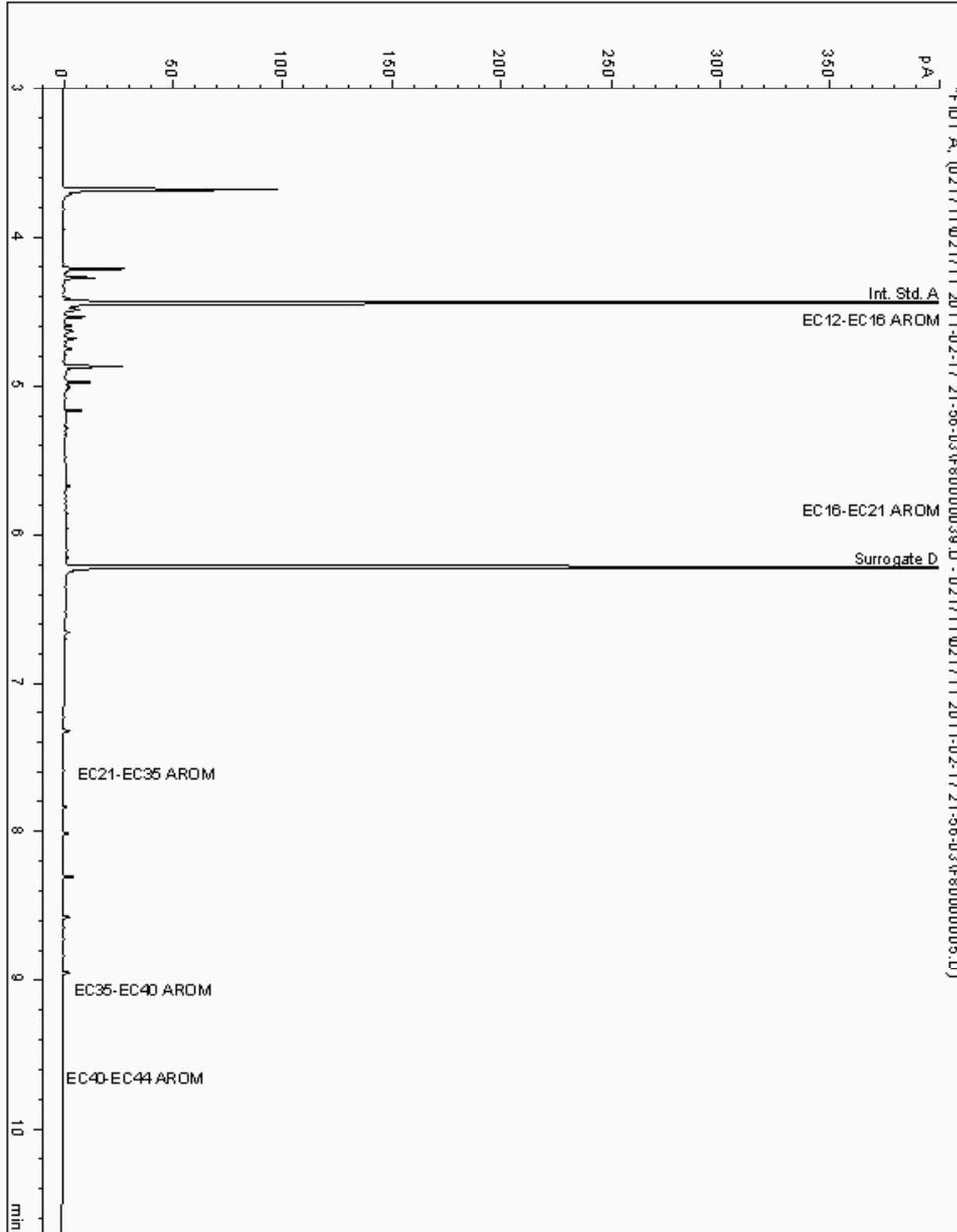
Analysis: EPH CWG (Aromatic) GC (S)

Sample No : 2891033
Sample ID : WS106

Depth : 2.30 - 2.60

Alcontrol/Geochem Analytical Services
Speciated TPH - AROM (C12 - C40)

Sample Identity: 2950130-2891033
Date Acquired : 18/02/11 09:52:30
Units : ppb
Dilution :
CF : 1
Multiplier : 1.020





CERTIFICATE OF ANALYSIS

SDG: 110216-40
Job: H_ARCADIS_LEE-40
Client Reference: 96234.01

Location: Forge Lane, Dewsbury
Customer: ARCADIS Geraghty & Miller
Attention: Andrew Smith

Order Number:
Report Number: 119764
Superseded Report: 119153

Chromatogram

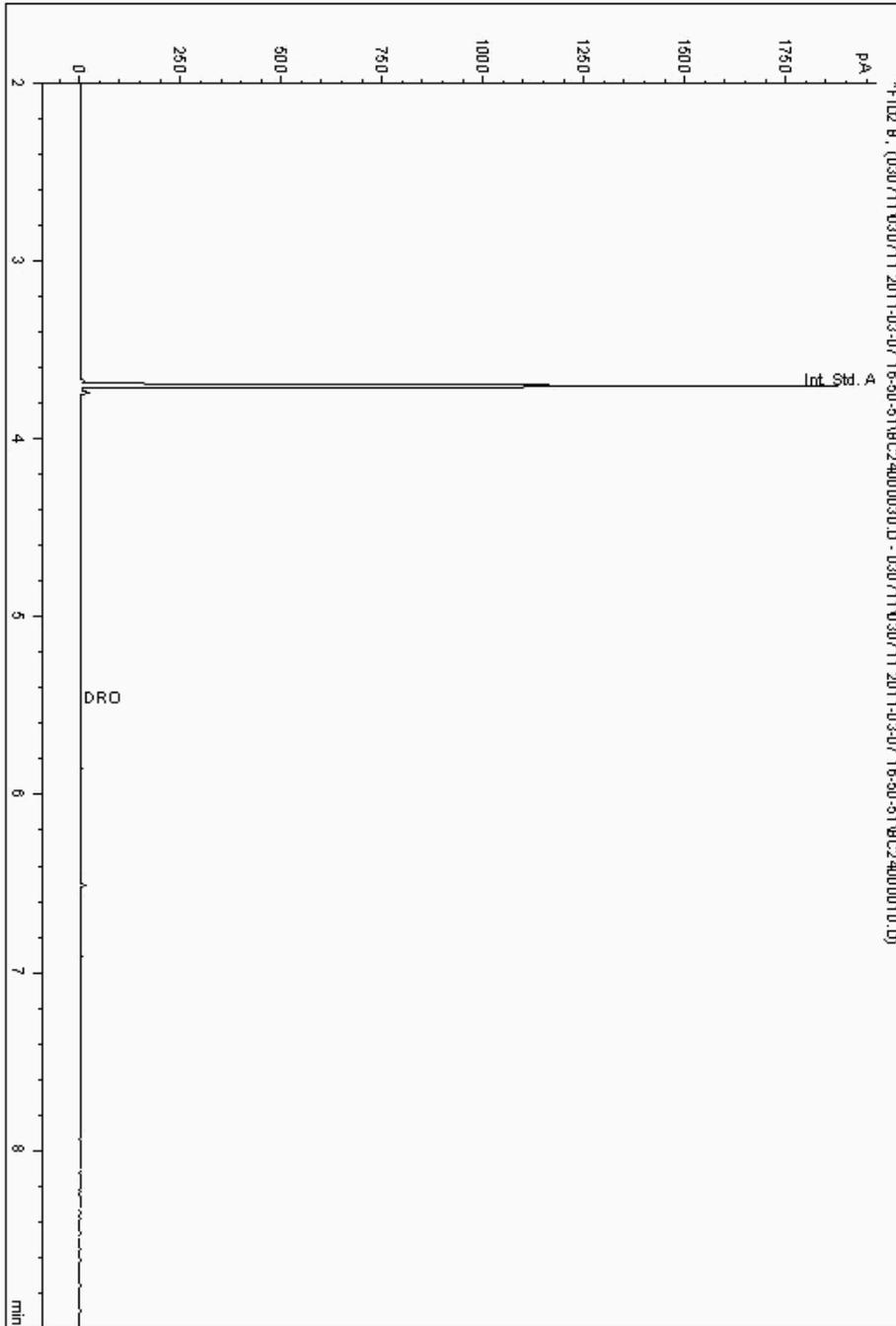
Analysis: EPH (DRO) (C10-C40) Aqueous (W)

Sample No : 2987771
Sample ID : WS105

Depth : 2.30 - 2.50

Alcontrol Analytical Services
EPH Range Organics (C10 - C40)

Sample Identity: 3033603-2987771
Date Acquired : 08/03/11 02:53:51 AM
Units :
Sample Volume: 0 ml's
Dilution:





CERTIFICATE OF ANALYSIS

SDG: 110216-40
Job: H_ARCADIS_LEE-40
Client Reference: 96234.01

Location: Forge Lane, Dewsbury
Customer: ARCADIS Geraghty & Miller
Attention: Andrew Smith

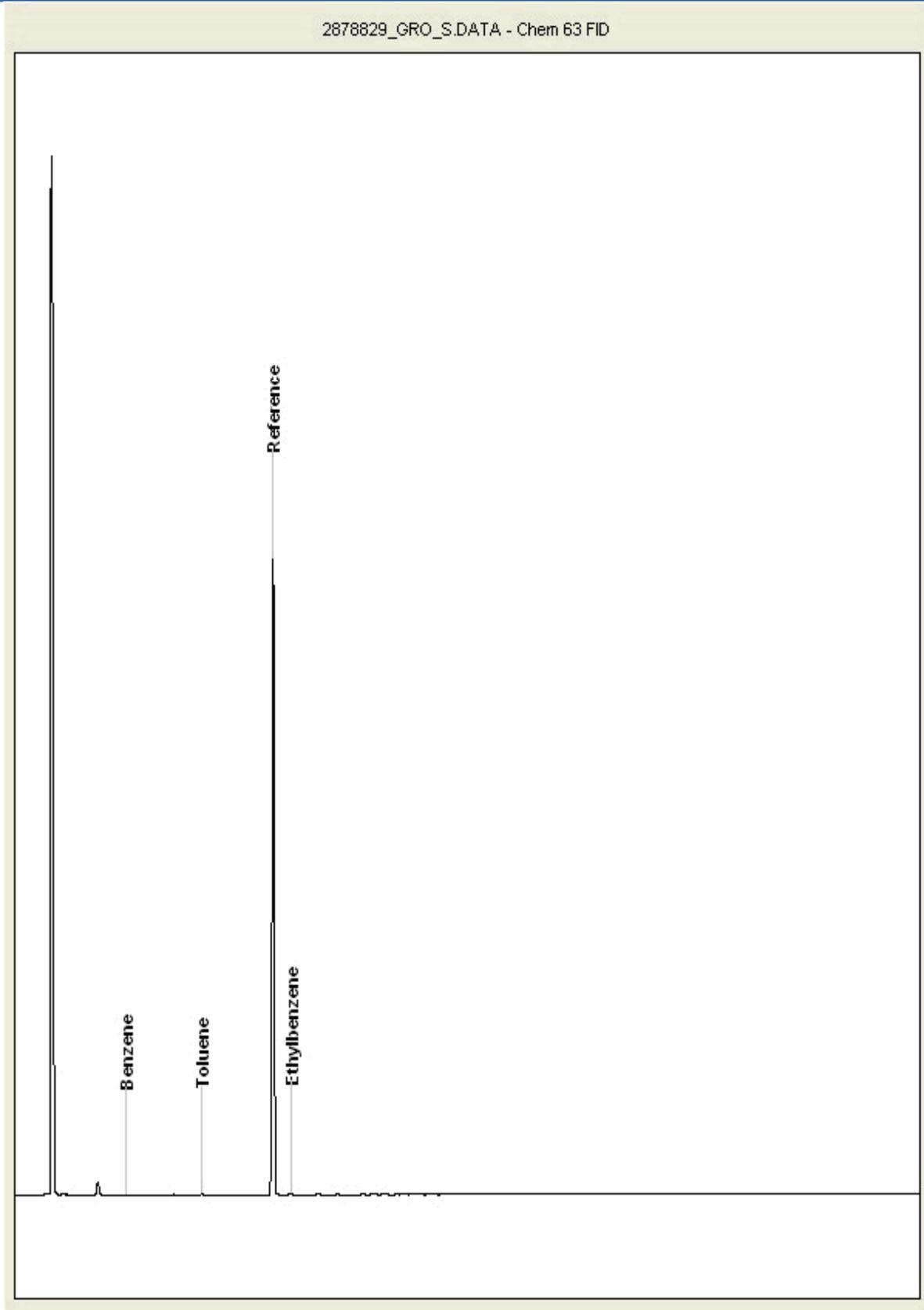
Order Number:
Report Number: 119764
Superseded Report: 119153

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 2878829
Sample ID : WS104

Depth : 1.50 - 1.70





CERTIFICATE OF ANALYSIS

SDG: 110216-40
Job: H_ARCADIS_LEE-40
Client Reference: 96234.01

Location: Forge Lane, Dewsbury
Customer: ARCADIS Geraghty & Miller
Attention: Andrew Smith

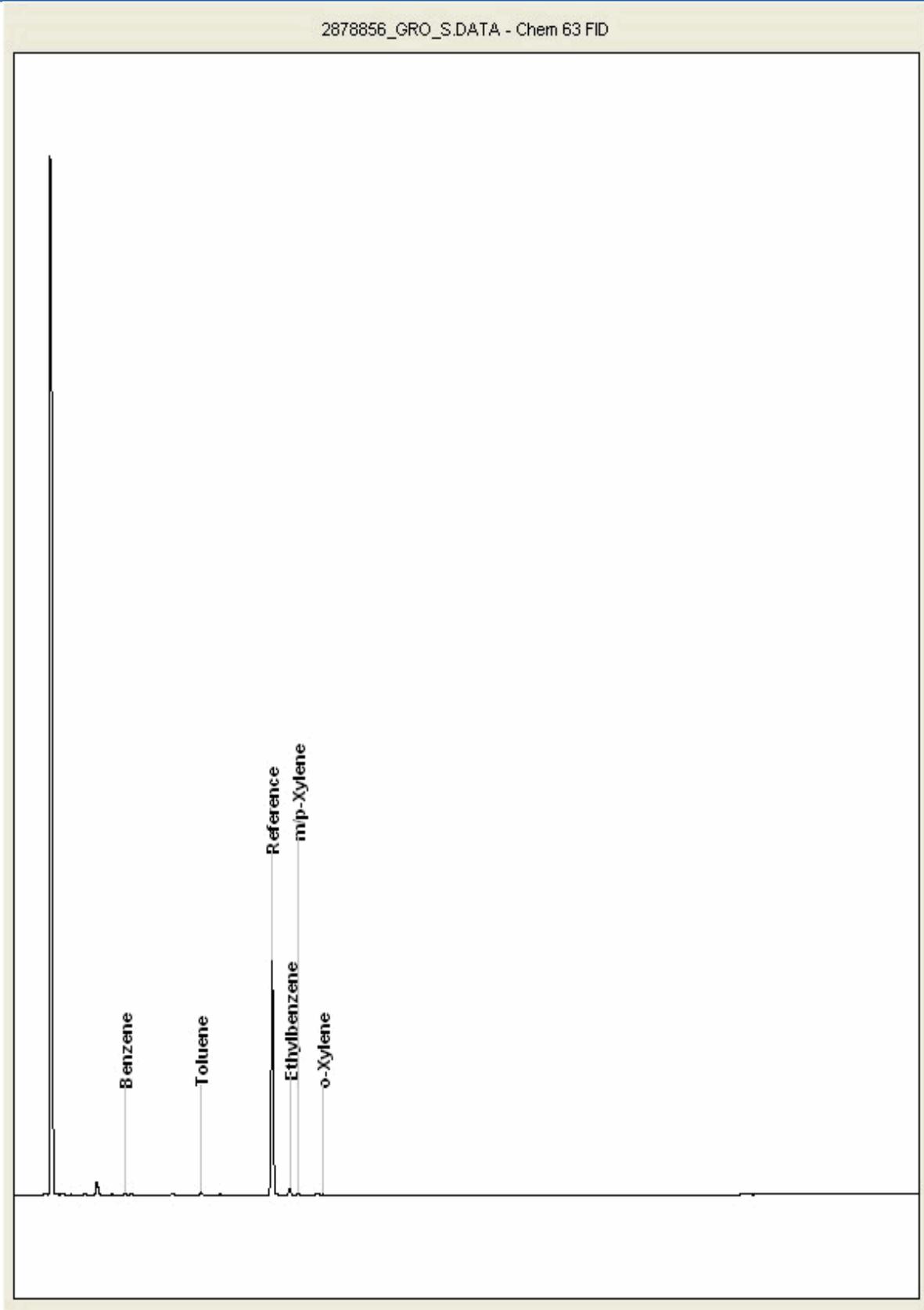
Order Number:
Report Number: 119764
Superseded Report: 119153

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 2878856
Sample ID : WS105

Depth : 0.80 - 1.00





CERTIFICATE OF ANALYSIS

SDG: 110216-40
Job: H_ARCADIS_LEE-40
Client Reference: 96234.01

Location: Forge Lane, Dewsbury
Customer: ARCADIS Geraghty & Miller
Attention: Andrew Smith

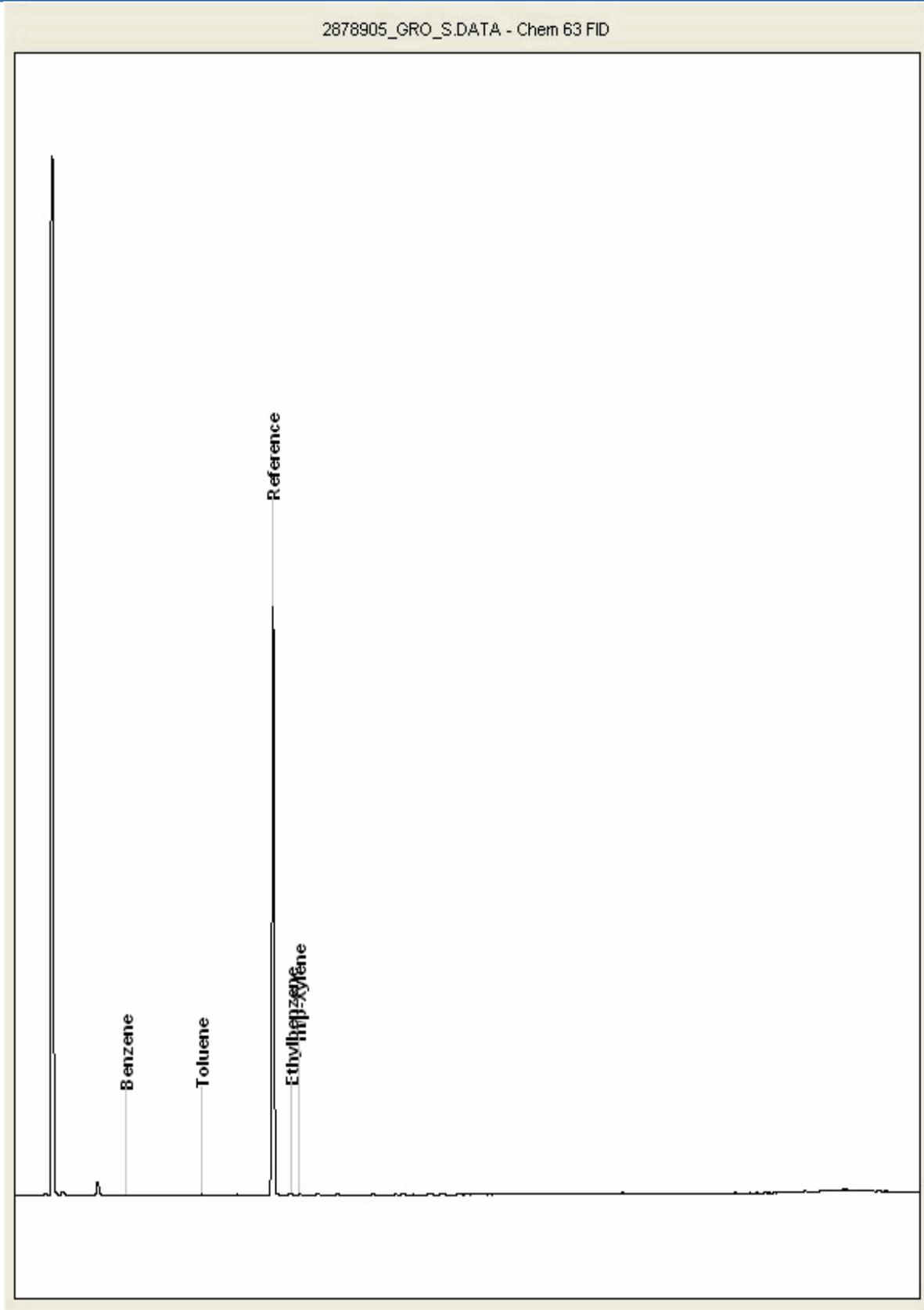
Order Number:
Report Number: 119764
Superseded Report: 119153

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 2878905
Sample ID : WS106

Depth : 2.30 - 2.60



SDG: 110216-40
Job: H_ARCADIS_LEE-40
Client Reference: 96234.01

Location: Forge Lane, Dewsbury
Customer: ARCADIS Geraghty & Miller
Attention: Jonathan Harris

Order Number:
Report Number: 119764
Superseded Report: 119153

Appendix

1. Results are expressed on a dry weight basis (dried at 35°C) for all soil analyses except for the following: NRA Leach tests, flash point, ammonium as NH4 by the BRE method, VOC TICS, SVOC TICS, TOF-MS SCAN/SEARCH and TOF-MS TICS.

2. Samples will be run in duplicate upon request, but an additional charge may be incurred.

3. If sufficient sample is received a sub sample will be retained free of charge for 30 days after analysis is completed (e-mailed) for both soil jars, tubs and volatile jars. All waters and vials will be discarded 10 days after the analysis is completed (e-mailed). All material removed during an asbestos containing material screen and analysed for the presence of asbestos will be retained for a period of 6 months after the analysis date. All samples received and not scheduled will be disposed of one month after the date of receipt unless we are instructed to the contrary. Once the initial period has expired, a storage charge will be applied for each month or part thereof until the client cancels the request for sample storage. ALcontrol Laboratories reserve the right to charge for samples received and stored but not analysed.

4. With respect to turnaround, we will always endeavour to meet client requirements wherever possible, but turnaround times cannot be absolutely guaranteed due to so many variables beyond our control.

5. We take responsibility for any test performed by sub-contractors (marked with an asterisk). We endeavour to use UKAS/MCERTS Accredited Laboratories, who either complete a quality questionnaire or are audited by ourselves. For some determinands there are no UKAS/MCERTS Accredited Laboratories, in this instance a laboratory with a known track record will be utilised.

6. When requested, the individual sub sample scheduled will be screened in house for the presence of large asbestos containing material fragments/pieces. If no asbestos containing material is found this will be reported as 'no asbestos containing material detected'. If asbestos containing material is detected it will be removed and analysed by our documented in house method TM048 based on HSG 248 (2005), which is accredited to ISO17025. If asbestos containing material is present no further analysis will be undertaken. At no point is the fibre content of the soil sample determined.

7. If no separate volatile sample is supplied by the client, the integrity of the data may be compromised if the laboratory is required to create a sub-sample from the bulk sample -similarly, if a headspace or sediment is present in the volatile sample. This will be flagged up as an invalid VOC on the test schedule or recorded on the log sheet.

8. If appropriate preserved bottles are not received preservation will take place on receipt. However, the integrity of the data may be compromised.

9. NDP -No determination possible due to insufficient/unsuitable sample.

10. Metals in water are performed on a filtered sample, and therefore represent dissolved metals -total metals must be requested separately.

11. A table containing the date of analysis for each parameter is not routinely included with the report, but is available upon request.

12. Results relate only to the items tested

13. **Surrogate recoveries** -Most of our organic methods include surrogates, the recovery of which is monitored and reported. For EPH, MO, PAH, GRO and VOCs on soils the result is not surrogate corrected, but a percentage recovery is quoted. Acceptable limits for most organic methods are 70 -130 %.

14. **Product analyses** -Organic analyses on products can only be semi-quantitative due to the matrix effects and high dilution factors employed.

15. Phenols monohydric by HPLC include phenol, cresols (2-Methylphenol, 3-Methylphenol and 4-Methylphenol) and Xylenols (2,3 Dimethylphenol, 2,4 Dimethylphenol, 2,5 Dimethylphenol, 2,6 Dimethylphenol, 3,4 Dimethylphenol, 3,5 Dimethylphenol).

16. Total of 5 speciated phenols by HPLC includes Phenol, 2,3,5-Trimethyl Phenol, 2-Isopropylphenol, Cresols and Xylenols (as detailed in 14).

17. Stones/debris are not routinely removed. We always endeavour to take a representative sub sample from the received sample.

18. Our MCERTS accreditation for PAHs by GCMS applies to all product types apart from Kerosene, where naphthalene only is not accredited.

19. In certain circumstances the method detection limit may be elevated due to the sample being outside the calibration range. Other factors that may contribute to this include possible interferences. In both cases the sample would be diluted which would cause the method detection limit to be raised.

20. Mercury results quoted on soils will not include volatile mercury as the analysis is performed on a dried and crushed sample.

21. For the BSEN 12457-3 two batch process to allow the cumulative release to be calculated, the volume of the leachate produced is measured and filtered for all tests. We therefore cannot carry out any unfiltered analysis. The tests affected include volatiles GCFID/GCMS and all subcontracted analysis.

22. For all leachate preparations (NRA, DIN, TCLP, BSEN 12457-1, 2, 3) volatile loss may occur, as we do not employ zero headspace extraction.

23. We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials -whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample. Other coarse granular material such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

24. Analysis and identification of specific compounds using GCFID is by retention time only, and we routinely calibrate and quantify for benzene, toluene, ethylbenzenes and xylenes (BTEX). For total volatiles in the C4 -C10 range, the total area of the chromatogram is integrated and expressed as ug/kg or ug/l. Although this analysis is commonly used for the quantification of gasoline range organics (GRO), the system will also detect other compounds such as chlorinated solvents, and this may lead to a falsely high result with respect to hydrocarbons only. It is not possible to specifically identify these non-hydrocarbons, as standards are not routinely run for any other compounds, and for more definitive identification, volatiles by GCMS should be utilised.

SOLID MATRICES EXTRACTION SUMMARY				
ANALYSIS	D/C OR WET	EXTRACTION SOLVENT	EXTRACTION METHOD	ANALYSIS
SOLVENT EXTRACTABLE MATTER	D&C	DOM	SOX THERM	GRAMMETRIC
CYCLOHEXANE EXT. MATTER	D&C	CYCLOHEXANE	SOX THERM	GRAMMETRIC
THIN LAYER CHROMATOGRAPHY	D&C	DOM	SOX THERM	IATROSCAN
ELEMENTAL SULPHUR	D&C	DOM	SOX THERM	HPLC
PHENOLS BY GCMS	WET	DOM	SOX THERM	GCMS
HERBICIDES	D&C	HEXANE ACETONE	SOX THERM	GCMS
PESTICIDES	D&C	HEXANE ACETONE	SOX THERM	GCMS
EPH (DRO)	D&C	HEXANE ACETONE	END OVER END	GC/FID
EPH (MIN OIL)	D&C	HEXANE ACETONE	END OVER END	GC/FID
EPH (CLEANED UP)	D&C	HEXANE ACETONE	END OVER END	GC/FID
EPH CWG BY GC	D&C	HEXANE ACETONE	END OVER END	GC/FID
PCB TOT / PCB CON	D&C	HEXANE ACETONE	END OVER END	GCMS
POLYAROMATIC HYDROCARBONS (MS)	WET	HEXANE ACETONE	MICROWAVE TM28.	GCMS
C8-C10 (C8-C10) EZ FLASH	WET	HEXANE ACETONE	SHAKER	GC/EZ
POLYAROMATIC HYDROCARBONS RAPID GC	WET	HEXANE ACETONE	SHAKER	GC/EZ
SEM VOLATILE ORGANIC COMPOUNDS	WET	DOM ACETONE	SONICATE	GCMS

LIQUID MATRICES EXTRACTION SUMMARY			
ANALYSIS	EXTRACTION SOLVENT	EXTRACTION METHOD	ANALYSIS
PAHMS	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GCMS
EPH	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC/FID
EPH CWG	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC/FID
MINERAL OIL	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC/FID
PCB 7 CONGENERS	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GCMS
PCB TOTAL	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GCMS
SVOC	DOM	LIQUID/LIQUID SHAKE	GCMS
FREESULPHUR	DOM	SOLID PHASE EXTRACTION	HPLC
PEST COP/OPP	DOM	LIQUID/LIQUID SHAKE	GCMS
TRIAZINE HERBS	DOM	LIQUID/LIQUID SHAKE	GCMS
PHENOLS MS	DOM	SOLID PHASE EXTRACTION	GCMS
TPH by INFRARED (R)	TCE	LIQUID/LIQUID SHAKE	HPLC
MINERAL OIL BY R	TCE	LIQUID/LIQUID SHAKE	HPLC
GLYCOLS	NONE	DIRECT INJECTION	GCMS

Identification of Asbestos in Bulk Materials

The results for asbestos identification for soil samples are obtained from possible Asbestos Containing Material, removed during the 'Screening of soils for Asbestos Containing Materials', which have been examined to determine the presence of asbestos fibres using Alcontrol Laboratories (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2005).

Asbestos Type	Common Name
Chrysotile	White Asbestos
Amosite	Brown Asbestos
Crocidolite	Blue Asbestos
Fibrous Actinolite	-
Fibrous Anorthophyllite	-
Fibrous Tremolite	-

Visual Estimation Of Fibre Content

Estimation of fibre content is not permitted as part of our UKAS accredited test other than: - Trace -Where only one or two asbestos fibres were identified.

Further guidance on typical asbestos fibre content of manufactured products can be found in MDHS 100.

The identification of asbestos containing materials falls within our schedule of tests for which we hold UKAS accreditation, however opinions, interpretations and all other information contained in the report are outside the scope of UKAS accreditation.



ARCADIS Geraghty & Miller
1 Whitehall Riverside
Leeds
West Yorkshire
LS1 4BN

Attention: Jonathan Harris

CERTIFICATE OF ANALYSIS

Date: 24 February 2011
Customer: H_ARCADIS_LEE
Sample Delivery Group (SDG): 110217-14
Your Reference: 96234.01
Location: Forge Lane, Dewsbury
Report No: 117660

We received 9 samples on Thursday February 17, 2011 and 9 of these samples were scheduled for analysis which was completed on Thursday February 24, 2011. Accredited laboratory tests are defined within the report, but opinions, interpretations and on-site data expressed herein are outside the scope of ISO 17025 accreditation.

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

All chemical testing (unless subcontracted) is performed at ALcontrol Hawarden Laboratories.

Asbestos testing - we are not accredited for screening soil samples for asbestos fibres. We are only accredited to identify asbestos fibres in bulk material (ACM).

Approved By: _____

Sonia McWhan
Operations Manager





SDG: 110217-14
Job: H_ARCADIS_LEE-40
Client Reference: 96234.01

Location: Forge Lane, Dewsbury
Customer: ARCADIS Geraghty & Miller
Attention: Jonathan Harris

Order Number:
Report Number: 117660
Superseded Report:

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
2885759	SEDIMENT 1		1.00 - 1.00	16/02/2011
2885751	TP102		0.20 - 0.30	16/02/2011
2885753	TP103		0.50 - 0.60	16/02/2011
2885754	WS107		0.70 - 1.00	15/02/2011
2886058	WS108		0.60 - 0.75	16/02/2011
2885757	WS109		1.00 - 2.00	16/02/2011

Only received samples which have had analysis scheduled will be shown on the following pages.



SDG: 110217-14
 Job: H_ARCADIS_LEE-40
 Client Reference: 96234.01

Location: Forge Lane, Dewsbury
 Customer: ARCADIS Geraghty & Miller
 Attention: Jonathan Harris

Order Number:
 Report Number: 117660
 Superseded Report:

SOLID Results Legend  Test  No Determination Possible	Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container	
		2885759	SEDIMENT 1		1.00 - 1.00	250g Amber Jar 1kg TUB
		2885750	TP101		0.20 - 0.30	250g Amber Jar 1kg TUB
		2885751	TP102		0.20 - 0.30	250g Amber Jar 1kg TUB
		2885753	TP103		0.50 - 0.60	250g Amber Jar 1kg TUB
	2885754	WS107		0.70 - 1.00	250g Amber Jar 1kg TUB	
	2885756	WS108		1.00 - 1.30	250g Amber Jar 1kg TUB	
	2886058	WS108		0.60 - 0.75	250g Amber Jar 1kg TUB	
	2885757	WS109		1.00 - 2.00	250g Amber Jar 1kg TUB	
	2885758	WS109		2.50 - 2.80	250g Amber Jar 1kg TUB	
Alkali Metals by iCap-OES (Soil)	All	NDPs: 0 Tests: 9				
Ammonium Soil by Titration	All	NDPs: 0 Tests: 6				
Anions by Kone (soil)	All	NDPs: 0 Tests: 9				
Anions by Kone (w)	All	NDPs: 0 Tests: 2				
Asbestos Containing Material Screen	All	NDPs: 0 Tests: 9				
Boron Water Soluble	All	NDPs: 0 Tests: 9				
CEN Readings	All	NDPs: 0 Tests: 2				
Cyanide Comp/Free/Total/Thiocyanate	All	NDPs: 0 Tests: 9				
Dissolved Metals by ICP-MS	All	NDPs: 0 Tests: 2				
Easily Liberated Sulphide	All	NDPs: 0 Tests: 5				
Elemental Sulphur	All	NDPs: 0 Tests: 5				
EPH (DRO) (C10-C40) Aqueous (W)	All	NDPs: 0 Tests: 2				
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 6				
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 9				
Fluoride	All	NDPs: 0 Tests: 2				



SDG: 110217-14
 Job: H_ARCADIS_LEE-40
 Client Reference: 96234.01

Location: Forge Lane, Dewsbury
 Customer: ARCADIS Geraghty & Miller
 Attention: Jonathan Harris

Order Number:
 Report Number: 117660
 Superseded Report:

SOLID Results Legend Test No Determination Possible	Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container	
		2885759	SEDIMENT 1		1.00 - 1.00	60g VOC 250g Amber Jar 1kg TUB
		2885750	TP101		0.20 - 0.30	60g VOC 250g Amber Jar 1kg TUB
		2885751	TP102		0.20 - 0.30	60g VOC 250g Amber Jar 1kg TUB
		2885753	TP103		0.50 - 0.60	60g VOC 250g Amber Jar 1kg TUB
	2885754	WS107		0.70 - 1.00	60g VOC 250g Amber Jar 1kg TUB	
	2885756	WS108		1.00 - 1.30	60g VOC 250g Amber Jar 1kg TUB	
	2886058	WS108		0.60 - 0.75	60g VOC 250g Amber Jar 1kg TUB	
	2885757	WS109		1.00 - 2.00	60g VOC 250g Amber Jar 1kg TUB	
	2885758	WS109		2.50 - 2.80	60g VOC 250g Amber Jar 1kg TUB	
Fluoride (soluble)	All	NDPs: 0 Tests: 9				
Free Sulphur	All	NDPs: 0 Tests: 2				
GRO by GC-FID (S)	All	NDPs: 0 Tests: 9				
Hexavalent Chromium (s)	All	NDPs: 0 Tests: 9				
Hexavalent Chromium (w)	All	NDPs: 0 Tests: 2				
Mercury Dissolved	All	NDPs: 0 Tests: 2				
Metals by iCap-OES (Soil)	Aluminium	NDPs: 0 Tests: 9				
	Arsenic	NDPs: 0 Tests: 9				
	Beryllium	NDPs: 0 Tests: 9				
	Cadmium	NDPs: 0 Tests: 9				
	Chromium	NDPs: 0 Tests: 9				
	Copper	NDPs: 0 Tests: 9				
	Iron	NDPs: 0 Tests: 9				
	Lead	NDPs: 0 Tests: 9				
	Mercury	NDPs: 0 Tests: 9				



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SOLID Results Legend	Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container														
						2885759	2885750	2885751	2885753	2885754	2885756	2886058	2885757	2885758					
X Test N No Determination Possible		SEDIMENT 1		1.00 - 1.00	60g VOC 250g Amber Jar 1kg TUB														
		TP101		0.20 - 0.30	60g VOC 250g Amber Jar 1kg TUB														
		TP102		0.20 - 0.30	60g VOC 250g Amber Jar 1kg TUB														
		TP103		0.50 - 0.60	60g VOC 250g Amber Jar 1kg TUB														
		WS107		0.70 - 1.00	60g VOC 250g Amber Jar 1kg TUB														
	WS108		1.00 - 1.30	60g VOC 250g Amber Jar 1kg TUB															
	WS108		0.60 - 0.75	60g VOC 250g Amber Jar 1kg TUB															
	WS109		1.00 - 2.00	60g VOC 250g Amber Jar 1kg TUB															
	WS109		2.50 - 2.80	60g VOC 250g Amber Jar 1kg TUB															
Metals by iCap-OES (Soil)	Molybdenum	NDPs: 0 Tests: 9																	
	Nickel	NDPs: 0 Tests: 9																	
	Tin	NDPs: 0 Tests: 9																	
	Vanadium	NDPs: 0 Tests: 9																	
	Zinc	NDPs: 0 Tests: 9																	
Metals by iCap-OES Dissolved (W)	All	NDPs: 0 Tests: 2																	
NO3, NO2 and TON by KONE (s)	All	NDPs: 0 Tests: 9																	
PAH by GCMS	All	NDPs: 0 Tests: 9																	
PAH Spec MS - Aqueous (W)	All	NDPs: 0 Tests: 2																	
PCBs by GCMS	All	NDPs: 0 Tests: 7																	
pH	All	NDPs: 0 Tests: 9																	
pH Value	All	NDPs: 0 Tests: 2																	
Phenols by HPLC (S)	All	NDPs: 0 Tests: 5																	
Phenols by HPLC (W)	All	NDPs: 0 Tests: 2																	
Phosphate (Ortho as PO4) (s)	All	NDPs: 0 Tests: 9																	



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Order Number:
 Report Number: 117660
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SOLID Results Legend Test No Determination Possible	Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container	
		2885759	SEDIMENT 1		1.00 - 1.00	250g Amber Jar 1kg TUB
		2885750	TP101		0.20 - 0.30	250g Amber Jar 1kg TUB
		2885751	TP102		0.20 - 0.30	250g Amber Jar 1kg TUB
		2885753	TP103		0.50 - 0.60	250g Amber Jar 1kg TUB
	2885754	WS107		0.70 - 1.00	250g Amber Jar 1kg TUB	
	2885756	WS108		1.00 - 1.30	250g Amber Jar 1kg TUB	
	2886058	WS108		0.60 - 0.75	250g Amber Jar 1kg TUB	
	2885757	WS109		1.00 - 2.00	250g Amber Jar 1kg TUB	
	2885758	WS109		2.50 - 2.80	250g Amber Jar 1kg TUB	
Sample description	All	NDPs: 0 Tests: 9				
Semi Volatile Organic Compounds	All	NDPs: 0 Tests: 4				
Silver	All	NDPs: 0 Tests: 9				
Sulphide	All	NDPs: 0 Tests: 2				
Total Organic Carbon	All	NDPs: 0 Tests: 4				
Total Sulphur	All	NDPs: 0 Tests: 5				
TPH CWG GC (S)	All	NDPs: 0 Tests: 9				
VOC MS (S)	All	NDPs: 0 Tests: 4				

SDG: 110217-14
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Report Number: 117660
Superseded Report:

Sample Descriptions

Grain Sizes

very fine	<0.063mm	fine	0.063mm - 0.1mm	medium	0.1mm - 2mm	coarse	2mm - 10mm	very coarse	>10mm
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Lab Sample No(s)	Customer Sample Ref.	Depth (m)	Colour	Description	Grain size	Inclusions	Inclusions 2
2885759	SEDIMENT 1	1.00 - 1.00	Light Brown	Sludge / Sediment	<0.063 mm	None	None
2885750	TP101	0.20 - 0.30	Dark Brown	Sandy Clay Loam	0.063 - 0.1 mm	Stones	None
2885751	TP102	0.20 - 0.30	Dark Brown	Sandy Clay Loam	0.063 - 0.1 mm	Stones	None
2885753	TP103	0.50 - 0.60	Dark Brown	Clay Loam	0.063 - 0.1 mm	Stones	Vegetation
2885754	WS107	0.70 - 1.00	Dark Brown	Top Soil	0.063 - 0.1 mm	Stones	None
2885756	WS108	1.00 - 1.30	Dark Brown	Sludge / Sediment	<0.063 mm	None	None
2886058	WS108	0.60 - 0.75	Dark Brown	Clay Loam	0.063 - 0.1 mm	Stones	None
2885757	WS109	1.00 - 2.00	Orange	Sandy Clay Loam	<0.063 mm	None	None
2885758	WS109	2.50 - 2.80	Dark Brown	Silt Loam	0.063 - 0.1 mm	Stones	Oil/Petroleum

These descriptions are only intended to act as a cross check if sample identities are questioned, and to provide a log of sample matrices with respect to MCERTS validation. They are not intended as full geological descriptions.

We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample.

Other coarse granular materials such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.



CERTIFICATE OF ANALYSIS

SDG: 110217-14
Job: H_ARCADIS_LEE-40
Client Reference: 96234.01

Location: Forge Lane, Dewsbury
Customer: ARCADIS Geraghty & Miller
Attention: Jonathan Harris

Order Number:
Report Number: 117660
Superseded Report:

Results Legend		Customer Sample R	SEDIMENT 1	TP101	TP102	TP103	WS107	WS108
#	ISO17025 accredited.	Depth (m) Sample Type Date Sampled Date Received SDG Ref Lab Sample No.(s) AGS Reference	1.00 - 1.00	0.20 - 0.30	0.20 - 0.30	0.50 - 0.60	0.70 - 1.00	0.60 - 0.75
M	mCERTS accredited.		Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
S	Non-conforming work.		16/02/2011	16/02/2011	16/02/2011	16/02/2011	15/02/2011	16/02/2011
aq	Aqueous / settled sample.		17/02/2011	17/02/2011	17/02/2011	17/02/2011	17/02/2011	17/02/2011
diss.filt	Dissolved / filtered sample.		110217-14	110217-14	110217-14	110217-14	110217-14	110217-14
tot.unfilt	Total / unfiltered sample.		2885759	2885750	2885751	2885753	2885754	2886058
*	subcontracted test.							
**	% recovery of the surrogate standard to check the efficiency of the method. The results of the individual compounds within the samples are not corrected for this recovery.							
Component	LOD/Units		Method					
Moisture	%	PM114		21.1				
Moisture content ratio	%	PM114		26.8				
Dry matter content ratio	%	PM114		78.9				
Asbestos Containing Material Screen	-	TM001	No ACM Detected					
Ammoniacal Nitrogen as N	<15 mg/kg	TM024	36.4	<15		<15	<15	<15
Catechol	<0.01 mg/kg	TM062 (S)	<0.01	<0.01			<0.01	<0.01
Phenol	<0.01 mg/kg	TM062 (S)	<0.01	<0.01			<0.01	<0.01
Cresols	<0.01 mg/kg	TM062 (S)	<0.01	<0.01			<0.01	<0.01
Resorcinol	<0.05 mg/kg	TM062 (S)	<0.05	<0.05			<0.05	<0.05
Xylenols	<0.015 mg/kg	TM062 (S)	<0.015	<0.015			<0.015	<0.015
1-Naphthol	<0.01 mg/kg	TM062 (S)	<0.01	<0.01			<0.01	<0.01
2,3,5-Trimethylphenol	<0.01 mg/kg	TM062 (S)	<0.01	<0.01			<0.01	<0.01
2-Isopropylphenol	<0.015 mg/kg	TM062 (S)	<0.015	<0.015			<0.015	<0.015
Phenols, Total 8 Speciated	<0.15 mg/kg	TM062 (S)	<0.15	<0.15			<0.15	<0.15
Organic Carbon, Total	<0.2 %	TM132	2.22				4.35	4.79
Sulphur, Total	<0.02 %	TM132	0.06	0.09			0.2	0.16
pH	1 pH Units	TM133	6.59	7.31	6.97	6.44	6.93	7.12
Sulphur, Elemental	<5 mg/kg	TM136	336	11.9			16.3	67.9
Chromium, Hexavalent	<0.6 mg/kg	TM151	<3	<0.6	<0.6	<1.2	<0.6	<0.6
Cyanide, Total	<1 mg/kg	TM153	1.77	<1	<1	<1	<1	2.93
Cyanide, Free	<1 mg/kg	TM153	<1	<1	<1	<1	<1	<1
PCB congener 28	<0.003 mg/kg	TM168	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCB congener 52	<0.003 mg/kg	TM168	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCB congener 101	<0.003 mg/kg	TM168	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCB congener 118	<0.003 mg/kg	TM168	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCB congener 138	<0.003 mg/kg	TM168	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCB congener 153	<0.003 mg/kg	TM168	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCB congener 180	<0.003 mg/kg	TM168	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCBs, Total ICES 7	<0.003 mg/kg	TM168	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Sulphide, Easily liberated	<15 mg/kg	TM180	<15	<15			<15	<15
Aluminium	<11 mg/kg	TM181	19300	11000	11900	17600	6440	14500
Arsenic	<0.6 mg/kg	TM181	19.6	38.7	43.2	123	77.9	58.7
Beryllium	<0.01 mg/kg	TM181	1.47	1.41	1.52	2.39	0.656	2.07
Cadmium	<0.02 mg/kg	TM181	0.597	<0.02	<0.02	<0.02	<0.2	0.624
Chromium	<0.9 mg/kg	TM181	32.7	24	25.9	30.2	201	33.1