Thomas Arthur Roberts
(trading as Arch Motors)
(Claimant)

and

Conwy Borough Council
(Defendant)

EXHIBIT KHN 4

CHEMICAL TESTING

ALcontrol Laboratories

Unit 7-8 Hawarden Business Park
Manor Road (off Manor Lane)
Hawarden
Deeside
CH5 3US
Tel: (01244) 528700
Fax: (01244) 528701
email: mkt@alcontrol.com
Website: www.alcontrol.com

Geotechnics Ltd
The Geotechnical Centre, Unit 1
Borders Industrial Estate, River Lane
Saltney
Chester
Cheshire
CH4 8RJ

Attention: Keith Nicholls

CERTIFICATE OF ANALYSIS

Date:	25 March 2010		
Customer:	H_GEOTECHLT_CHE-32		
Sample Delivery Group (SDG):	100312-116	**Report No.:**	78047
Your Reference:	PN050946		
Location:	Arch Motors		

We received 12 samples on Friday March 12, 2010 and 12 of these samples were scheduled for analysis which was completed on Thursday March 25, 2010. 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:

Iain Swinton

Operations Director - Land UK & Ireland

mCERTS
THE ENVIRONMENT AGENCY'S MONITORING CERTIFICATION SCHEME

UKAS TESTING
1291

GROUP

Validated

ALcontrol Laboratories Analytical Services

SDG:	100312-116	**Customer:**	Geotechnics Ltd
Job:	H_GEOTECHLT_CHE-32	**Attention:**	Keith Nicholls
Client Reference:	PN050946	**Order No.:**	
Location:	Arch Motors	**Report No:**	78047

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	Depth (m)	Sampled Date
1210985	TP6	0.20 - 0.40	11/03/2010
1211006	TP6	0.45 - 0.85	11/03/2010
1211017	TP6	1.20 - 1.20	11/03/2010
1211039	TP7	0.00 - 0.20	11/03/2010
1211028	TP7	0.20 - 0.75	11/03/2010
1211046	TP8	0.00 - 0.20	11/03/2010
1211071	TP8	0.20 - 0.30	11/03/2010
1211066	TP8	0.40 - 0.50	11/03/2010
1211052	TP8	1.10 - 1.10	11/03/2010
1211077	TP9	0.00 - 0.30	11/03/2010
1211079	TP9	0.30 - 0.55	11/03/2010
1211082	TP9	0.55 - 0.60	11/03/2010

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

Validated

ALcontrol Laboratories Analytical Services

SDG:	100312-116	**Customer:**	Geotechnics Ltd
Job:	H_GEOTECHLT_CHE-32	**Attention:**	Keith Nicholls
Client Reference:	PN050946	**Order No.:**	
Location:	Arch Motors	**Report No:**	78047

SOLID

Results Legend

X Test

N No Determination Possible

	Lab Sample No(s)	Customer Sample Ref.	Depth (m)	Container	Total
	1210985	TP6	0.20 - 0.40	250g Amber Jar	
	1211006	TP6	0.45 - 0.85	250g Amber Jar	
	1211017	TP6	1.20 - 1.20	250g Amber Jar	
	1211028	TP7	0.20 - 0.75	250g Amber Jar	
	1211039	TP7	0.00 - 0.20	250g Amber Jar	
	1211046	TP8	0.00 - 0.20	250g Amber Jar	
	1211052	TP8	1.10 - 1.10	250g Amber Jar	
	1211066	TP8	0.40 - 0.50	250g Amber Jar	
	1211071	TP8	0.20 - 0.30	250g Amber Jar	
	1211077	TP9	0.00 - 0.30	250g Amber Jar	
	1211079	TP9	0.30 - 0.55	250g Amber Jar	
	1211082	TP9	0.55 - 0.60	250g Amber Jar	
EPH by FID	All				0 12
Metals by iCap-OES (Soil)	Arsenic				0 12
	Chromium				0 12
	Lead				0 12
	Nickel				0 12
Sample description	All				0 12

Validated

ALcontrol Laboratories Analytical Services

SDG:	100312-116	**Customer:**	Geotechnics Ltd
Job:	H_GEOTECHLT_CHE-32	**Attention:**	Keith Nicholls
Client Reference:	PN050946	**Order No.:**	
Location:	Arch Motors	**Report No:**	78047

Sample Descriptions

Grain Sizes:
<0.063mm very fine,
0.063mm - 0.1mm fine,
0.1mm - 2mm medium,
2mm - 10mm coarse,
>10mm very coarse

Lab Sample No(s)	Customer Sample Ref.	Depth (m)	Colour	Description	Grain size	Inclusions
1210985	TP6	0.20 - 0.40	Dark Brown	Silty Clay	0.063 - 0.1 mm	N/A
1211006	TP6	0.45 - 0.85	Dark Brown	Silt Loam	0.063 - 0.1 mm	Stones
1211017	TP6	1.20 - 1.20	Dark Brown	Silty Clay	0.063 - 0.1 mm	Stones
1211028	TP7	0.20 - 0.75	Dark Brown	Silty Clay	0.063 - 0.1 mm	Stones
1211039	TP7	0.00 - 0.20	Dark Brown	Silty Clay	0.063 - 0.1 mm	Stones
1211046	TP8	0.00 - 0.20	Dark Brown	Silty Sand	0.063 - 0.1 mm	Stones
1211052	TP8	1.10 - 1.10	Dark Brown	Silty Clay	0.063 - 0.1 mm	Stones
1211066	TP8	0.40 - 0.50	Dark Brown	Silty Sand	0.063 - 0.1 mm	Stones
1211071	TP8	0.20 - 0.30	Light Brown	Sandy Silt Loam	0.063 - 0.1 mm	Stones
1211077	TP9	0.00 - 0.30	Dark Brown	Sandy Silt Loam	0.063 - 0.1 mm	Stones
1211079	TP9	0.30 - 0.55	Dark Brown	Silty Sand	0.063 - 0.1 mm	Stones
1211082	TP9	0.55 - 0.60	Dark Brown	Silty Clay	0.063 - 0.1 mm	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 ocurring 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.

Validated

ALcontrol Laboratories Analytical Services

SDG:	100312-116	**Customer:**	Geotechnics Ltd
Job:	H_GEOTECHLT_CHE-32	**Attention:**	Keith Nicholls
Client Reference:	PN050946	**Order No.:**	
Location:	Arch Motors	**Report No:**	78047

Test Completion dates

SDG reference: 100312-116

Lab Sample No(s)	1210985	1211006	1211017	1211028	1211039	1211046	1211052	1211066	1211071	1211077	1211079	1211082
Customer Sample Ref.	TP6	TP6	TP6	TP7	TP7	TP8	TP8	TP8	TP8	TP9	TP9	TP9
Depth	0.20 - 0.40	0.45 - 0.85	1.20 - 1.20	0.20 - 0.75	0.00 - 0.20	0.00 - 0.20	1.10 - 1.10	0.40 - 0.50	0.20 - 0.30	0.00 - 0.30	0.30 - 0.55	0.55 - 0.60
Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
EPH by FID	23/03/2010	23/03/2010	23/03/2010	23/03/2010	23/03/2010	25/03/2010	23/03/2010	23/03/2010	23/03/2010	23/03/2010	24/03/2010	23/03/2010
Metals by ICap-OES (Soil)	22/03/2010	22/03/2010	22/03/2010	24/03/2010	22/03/2010	23/03/2010	22/03/2010	23/03/2010	23/03/2010	22/03/2010	22/03/2010	23/03/2010
Sample description	19/03/2010	19/03/2010	19/03/2010	19/03/2010	19/03/2010	19/03/2010	19/03/2010	19/03/2010	19/03/2010	19/03/2010	19/03/2010	19/03/2010

Validated

ALcontrol Laboratories Analytical Services

SDG:	100312-116	**Customer:**	Geotechnics Ltd
Job:	H_GEOTECHLT_CHE-32	**Attention:**	Keith Nicholls
Client Reference:	PN050946	**Order No.:**	
Location:	Arch Motors	**Report No:**	78047

Results Legend

#	ISO17025 accredited.
M	MCERTS accredited.
aq	Aqueous / settled sample.
diss.fil.	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	Customer Sample Ref.	TP6	TP6	TP6	TP7	TP7	TP8
			Depth (m)	0.20 - 0.40	0.45 - 0.85	1.20 - 1.20	0.00 - 0.20	0.20 - 0.75	0.00 - 0.20
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	11/03/2010	11/03/2010	11/03/2010	11/03/2010	11/03/2010	11/03/2010
			Date Received	12/03/2010	12/03/2010	12/03/2010	12/03/2010	12/03/2010	12/03/2010
			SDG Ref	100312-116	100312-116	100312-116	100312-116	100312-116	100312-116
			Lab Sample No.(s)	1210985	1211006	1211017	1211039	1211028	1211046
% Surrogate Recovery**	%	TM061		107	102	103	101	106	106
EPH Band C10-12	<35 mg/kg	TM061		<35 #	<35 #	<35 #	<35 #	<35 #	<35 #
EPH Band C12-16	<35 mg/kg	TM061		70.1 #	105 #	54.9 #	69.4 #	103 #	<35 #
EPH Band C16-21	<35 mg/kg	TM061		<35 #	202 #	71 #	215 #	<35 #	95.9 #
EPH Band C21-28	<35 mg/kg	TM061		50.9	435	148	235	<35	582
EPH Band C35-40	<35 mg/kg	TM061		<35	175	74.9	84.4	<35	677
EPH Band C28-35	<35 mg/kg	TM061		48.8	442	271	184	<35	1120
EPH Range Organics (C10 - C	<35 mg/kg	TM061		246 M	1380 M	631 M	796 M	203 M	2510 M
Arsenic	<0.6 mg/kg	TM181		16.8 M	88.9 M	28.3 M	3.97 M	22.9 M	3.8 M
Chromium	<0.9 mg/kg	TM181		34.7 M	47.3 M	22.2 M	8.15 M	40.8 M	12.4 M
Lead	<0.7 mg/kg	TM181		56.3 M	6650 M	362 M	84.6 M	49.1 M	343 M
Nickel	<0.2 mg/kg	TM181		30.6 M	111 M	38.4 M	7.28 M	50.6 M	8.84 M

Validated

ALcontrol Laboratories Analytical Services

SDG: 100312-116
Job: H_GEOTECHLT_CHE-32
Client Reference: PN050946
Location: Arch Motors

Customer: Geotechnics Ltd
Attention: Keith Nicholls
Order No.:
Report No: 78047

Results Legend
ISO17025 accredited.
M MCERTS accredited.
a Aqueous / settled sample.
diss... 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	Customer Sample Ref.	TP8	TP8	TP8	TP9	TP9	TP9
			Depth (m)	0.20 - 0.30	0.40 - 0.50	1.10 - 1.10	0.00 - 0.30	0.30 - 0.55	0.55 - 0.60
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	11/03/2010	11/03/2010	11/03/2010	11/03/2010	11/03/2010	11/03/2010
			Date Received	12/03/2010	12/03/2010	12/03/2010	12/03/2010	12/03/2010	12/03/2010
			SDG Ref	100312-116	100312-116	100312-116	100312-116	100312-116	100312-116
			Lab Sample No.(s)	1211071	1211066	1211052	1211077	1211079	1211082
% Surrogate Recovery**	%	TM061		107	110	108	95	97.6	109
EPH Band C10-12	<35 mg/kg	TM061		<35 #	<35 #	<35 #	<35 #	<70 #	<35 #
EPH Band C12-16	<35 mg/kg	TM061		<35 #	59.1 #	36.1 #	40.3 #	143 #	<35 #
EPH Band C16-21	<35 mg/kg	TM061		97.5 #	222 #	<35 #	54.8 #	530 #	<35 #
EPH Band C21-28	<35 mg/kg	TM061		95.9	270	<35	631	2660	59.6
EPH Band C35-40	<35 mg/kg	TM061		<35	207	<35	178	1380	<35
EPH Band C28-35	<35 mg/kg	TM061		55.5	336	<35	727	3100	76.1
EPH Range Organics (C10 - C	<35 mg/kg	TM061		301 M	1100 M	121 M	1640 M	7850 M	218 M
Arsenic	<0.6 mg/kg	TM181		1.26 M	94.3 M	14.7 M	7.11 M	23.3 M	23.6 M
Chromium	<0.9 mg/kg	TM181		4.22 M	35.2 M	29.2 M	16 M	35.8 M	29.7 M
Lead	<0.7 mg/kg	TM181		16.9 M	990 M	65.1 M	165 M	5160 M	133 M
Nickel	<0.2 mg/kg	TM181		1.47 M	87.1 M	32.7 M	12.1 M	46.5 M	30.7 M

Table of Results - Appendix

SDG Number: 100312-116 Client: Geotechnics Ltd Client Ref: PN050946

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

REPORT KEY

ND	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]
PM001		Preparation of Samples for Metals Analysis	Dry
PM024	Modified BS 1377	Soil preparation including homogenisation, moisture screens of soils for Asbestos Containing Material	Wet
TM061	Method for the Determination of EPH,Massachusetts Dept.of EP, 1998	Determination of Extractable Petroleum Hydrocarbons by GC-FID (C10-C40)	Dry
TM181	US EPA Method 6010B	Determination of Routine Metals in Soil by iCap 6500 Duo ICP-OES	Dry

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

Extractable Petroleum Hydrocarbons (EPH) By GC-FID
EPH (DRO) (C10-C40)

SDG Number 100312-116 **Client** H_GEOTECHLT_CHE

Matrix (Units) mg/kg **Client Ref** PN050946

Sample No	Customer Sample Ref.	Depth	Matrix	EPH	Interpretation
1259682	TP6	0.20 - 0.40	SOLID	246	Kerosene Type Residues/Humic Acids
1259604	TP6	0.45 - 0.85	SOLID	1380	PAHS
1259566	TP6	1.20 - 1.20	SOLID	631	PAHS/Humic Acids
1259619	TP7	0.20 - 0.75	SOLID	203	Kerosene Type Residues
1259588	TP7	0.00 - 0.20	SOLID	796	PAHS
1262370	TP8	0.00 - 0.20	SOLID	2510	PAH/Possible Bitumen/Tar
1259643	TP9	0.30 - 0.55	SOLID	7850	PAHS/Possible Bitumen/Tar
1259659	TP8	1.10 - 1.10	SOLID	121	Kerosene Type Residues/Humic Acids
1262197	TP8	0.40 - 0.50	SOLID	1100	Biodegraded Diesel/PAHS/Possible Bitumen/Tar
1262291	TP8	0.20 - 0.30	SOLID	301	Biodegraded Diesel
1259671	TP9	0.00 - 0.30	SOLID	1640	Possible Bitumen/Tar
1262126	TP9	0.55 - 0.60	SOLID	218	PAHS/Humic Acids

Extractable Petroleum Hydrocarbons (formally Diesel Range Organics) :- Any compound extractable in n-hexane within the carbon range C10-C40, includes Aliphatic (Min Oil), Aromatic (PAHs) and naturally occurring compounds.

Validated

ALcontrol Laboratories Analytical Services

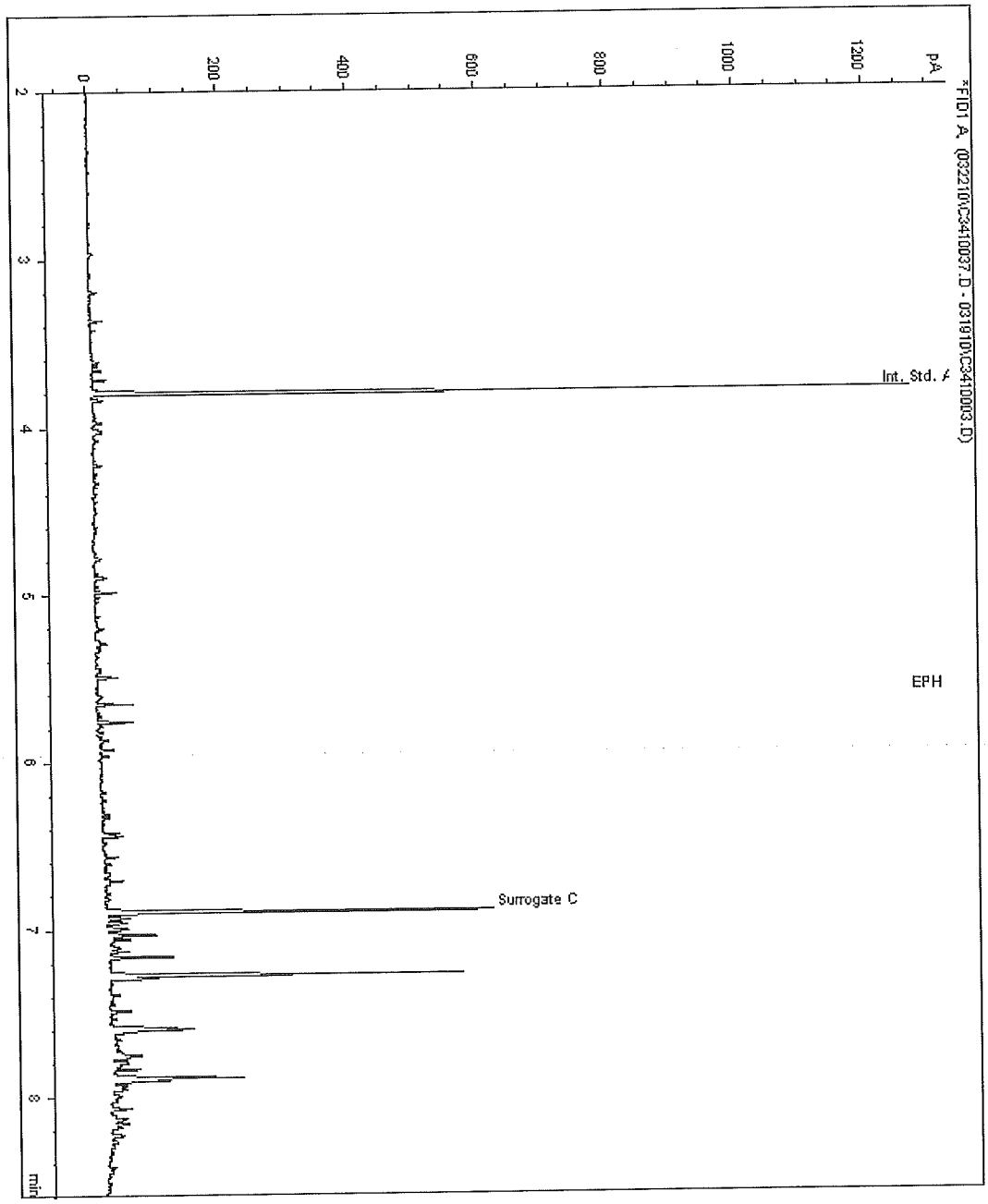
SDG:	100312-116	**Customer:**	Geotechnics Ltd
Job:	H_GEOTECHLT_CHE-32	**Attention:**	Keith Nicholls
Client Ref.:	PN050946	**Order No.:**	
Location:	Arch Motors	**Report No:**	78047

Chromatogram

Analysis:	EPH by FID	**Sample No**	1259566
		Sample ID	TP6
		Depth	1.20 - 1.20

Alcontrol Laboratories
EPH Range Organics (C10 - C40)

Sample Identity	:	1372712-1259566
Date Acquired	:	22/03/10 22:35:32 PM
Units	:	mg/kg
Sample Multiplier	:	0.000
Dilution	:	1.0



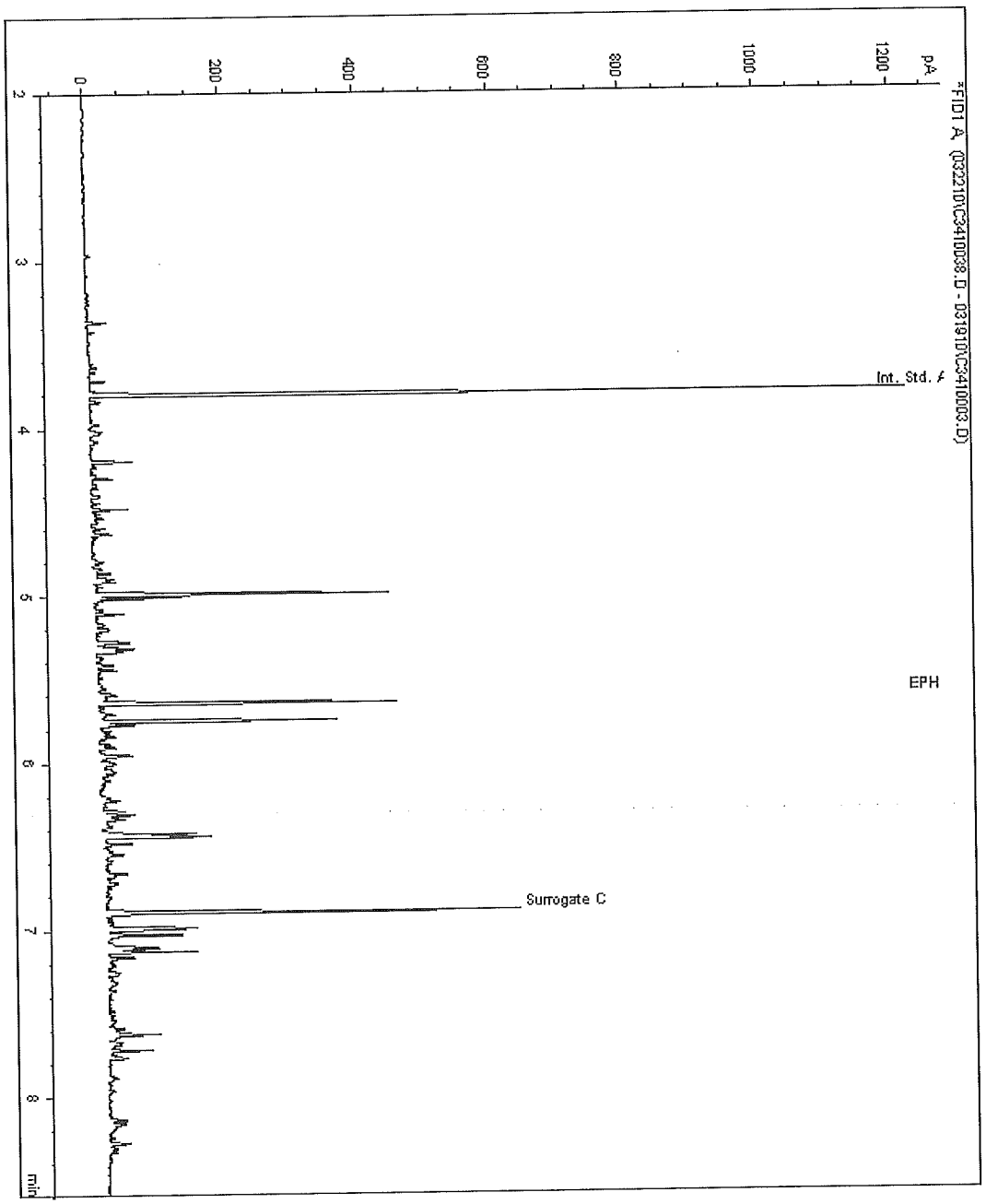
Validated

ALcontrol Laboratories Analytical Services

SDG:	100312-116	**Customer:**	Geotechnics Ltd
Job:	H_GEOTECHLT_CHE-32	**Attention:**	Keith Nicholls
Client Ref.:	PN050946	**Order No.:**	
Location:	Arch Motors	**Report No:**	78047
Analysis:	EPH by FID	**Sample No**	1259588
		Sample ID	TP7
		Depth	0.00 - 0.20

Alcontrol Laboratories
EPH Range Organics (C10 - C40)

Sample Identity	:	1372724-1259588
Date Acquired	:	22/03/10 22:57:32 PM
Units	:	mg/kg
Sample Multiplier	:	0.000
Dilution	:	1.0



Validated

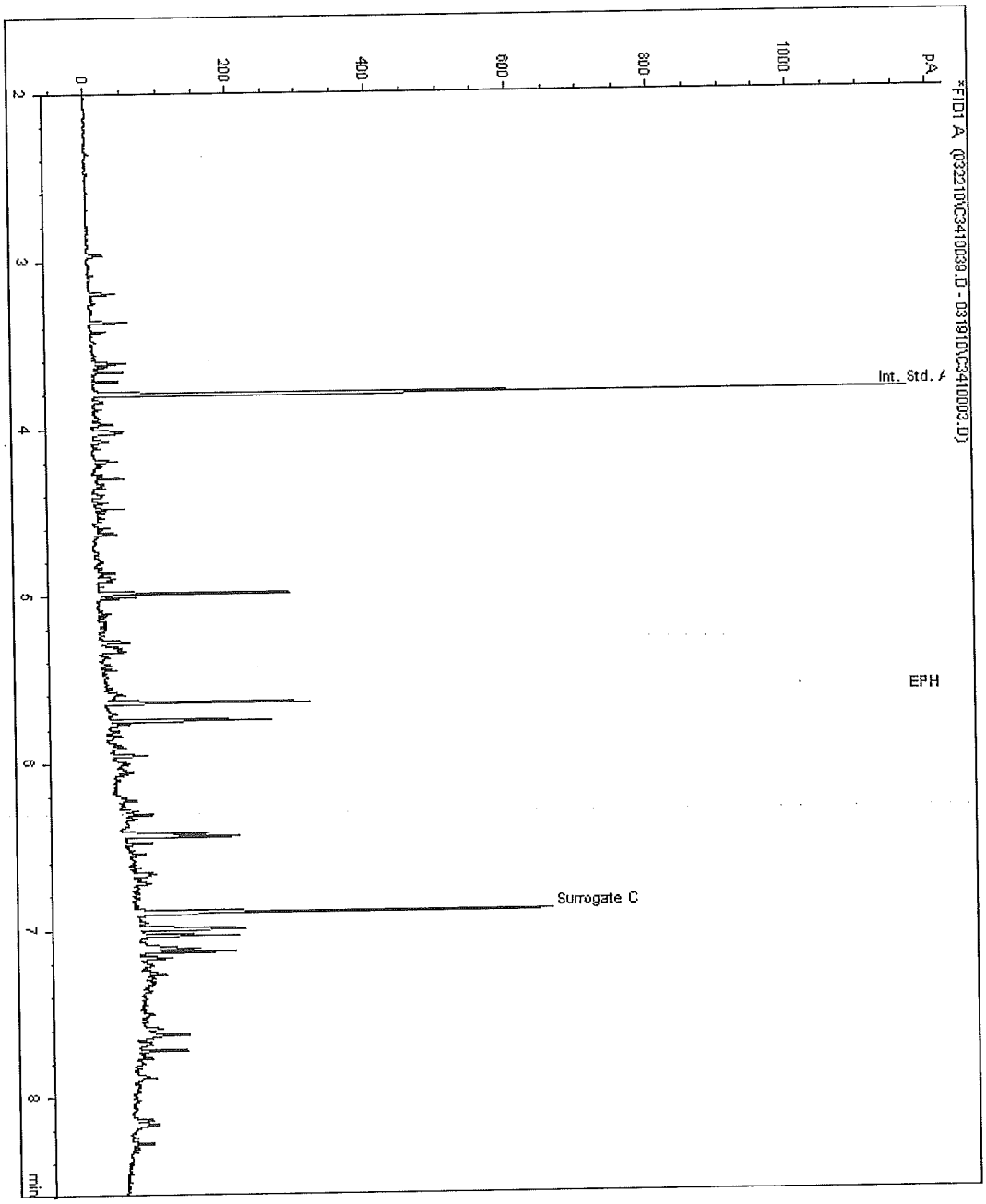
ALcontrol Laboratories Analytical Services

SDG:	100312-116	**Customer:**	Geotechnics Ltd
Job:	H_GEOTECHLT_CHE-32	**Attention:**	Keith Nicholls
Client Ref.:	PN050946	**Order No.:**	
Location:	Arch Motors	**Report No:**	78047
Analysis:	EPH by FID	**Sample No**	1259604
		Sample ID	TP6
		Depth	0.45 - 0.85

Alcontrol Laboratories
EPH Range Organics (C10 - C40)

Sample Identity	:	1372706-1259604
Date Acquired	:	22/03/10 23:19:43 PM
Units	:	mg/kg
Sample Multiplier	:	0.000
Dilution	:	1.0

->



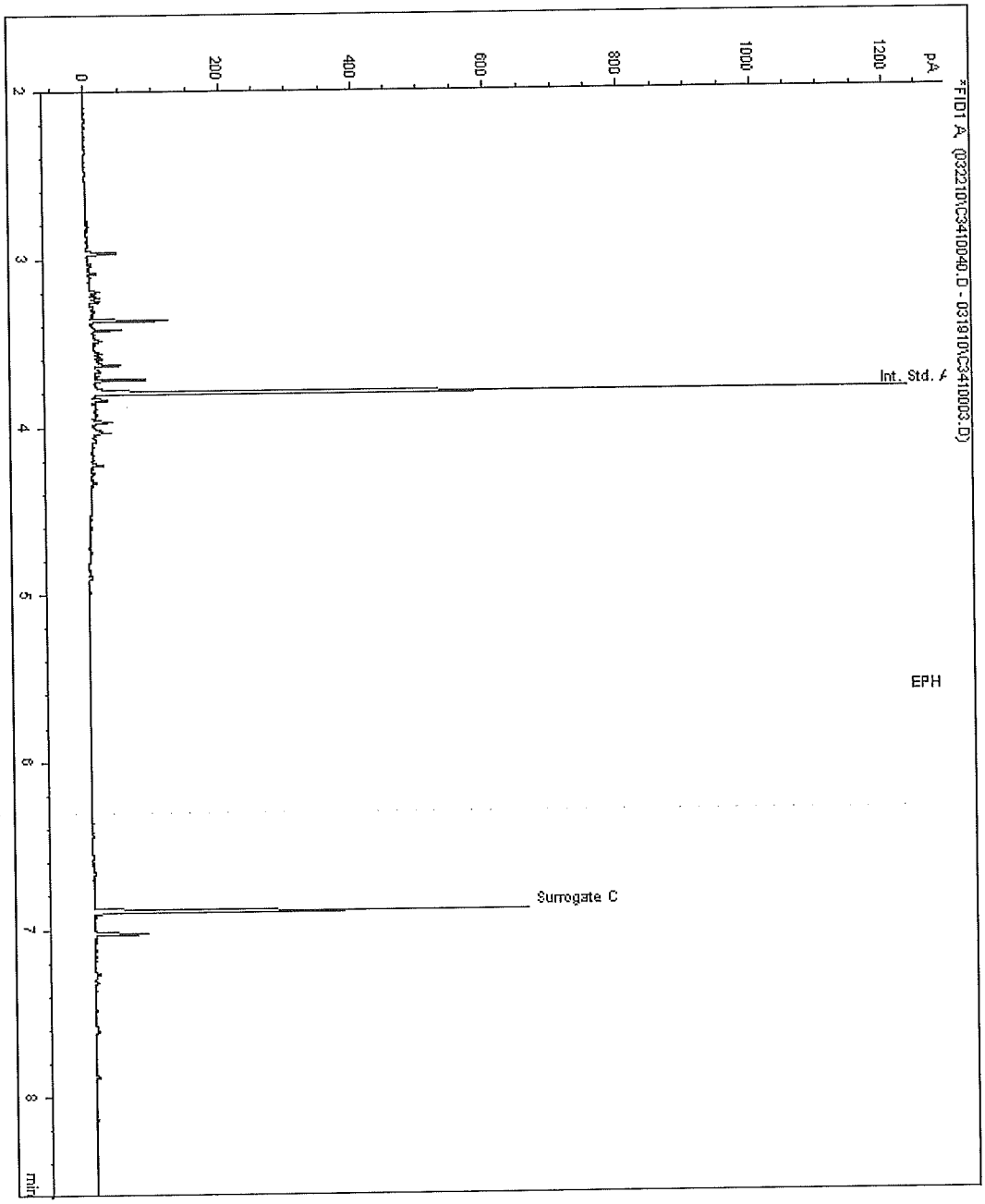
Validated

ALcontrol Laboratories Analytical Services

SDG:	100312-116	**Customer:**	Geotechnics Ltd
Job:	H_GEOTECHLT_CHE-32	**Attention:**	Keith Nicholls
Client Ref.:	PN050946	**Order No.:**	
Location:	Arch Motors	**Report No:**	78047
Analysis:	EPH by FID	**Sample No**	1259619
		Sample ID	TP7
		Depth	0.20 - 0.75

Alcontrol Laboratories
EPH Range Organics (C10 - C40)

Sample Identity	:	1372718-1259619
Date Acquired	:	22/03/10 23:41:40 PM
Units	:	mg/kg
Sample Multiplier	:	0.000
Dilution	:	1.0



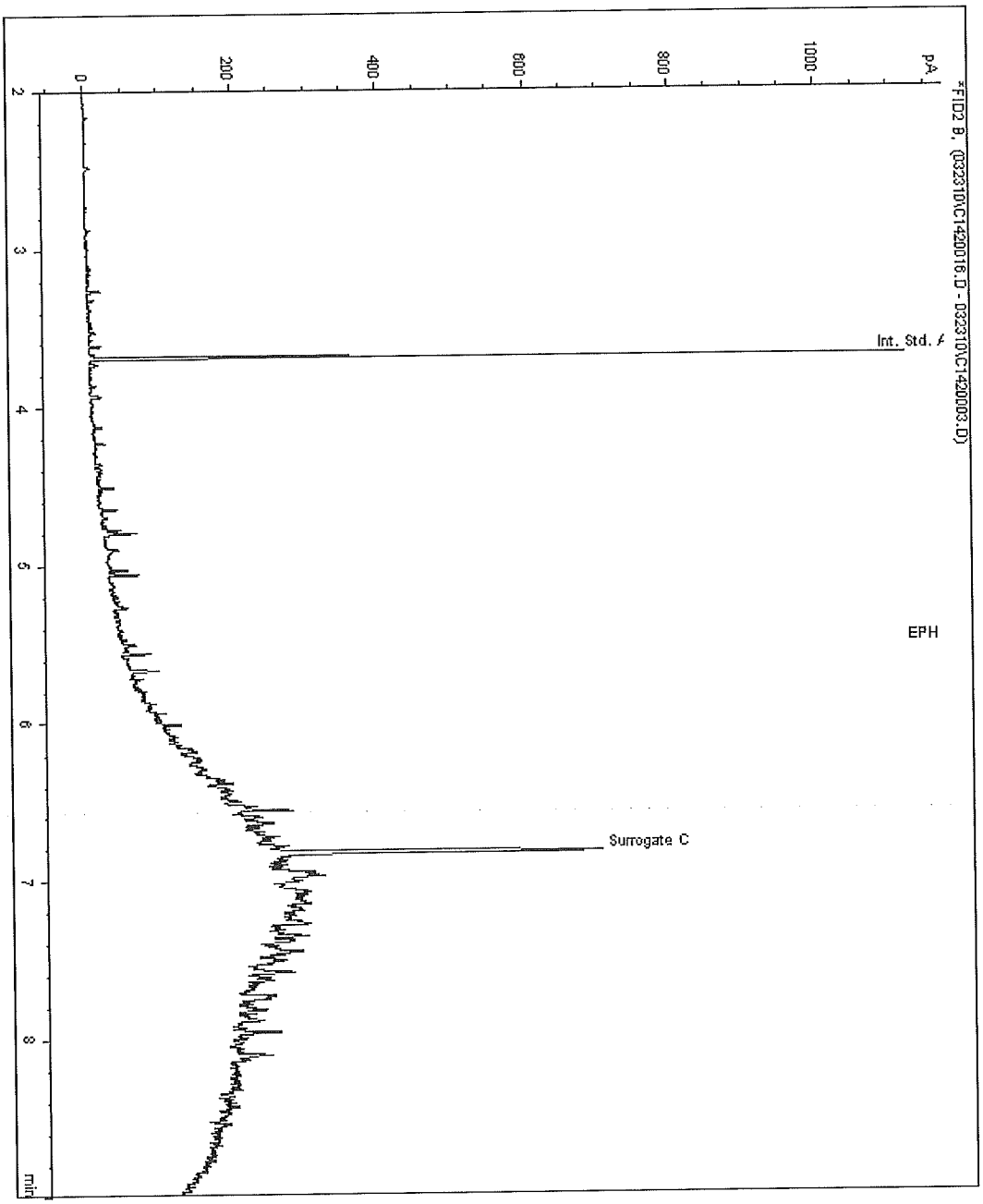
Validated

ALcontrol Laboratories Analytical Services

SDG:	100312-116	**Customer:**	Geotechnics Ltd
Job:	H_GEOTECHLT_CHE-32	**Attention:**	Keith Nicholls
Client Ref.:	PN050946	**Order No.:**	
Location:	Arch Motors	**Report No:**	78047
Analysis:	EPH by FID	**Sample No**	1259643
		Sample ID	TP9
		Depth	0.30 - 0.55

Alcontrol/Geochem Analytical Services
EPH Range Organics (C10 - C40)

Sample Identity : 1372763-1259643
Date Acquired : 23/03/10 13:43:04 PM
Units : mg/kg
Sample Multiplier : 0.000
Dilution :



Validated

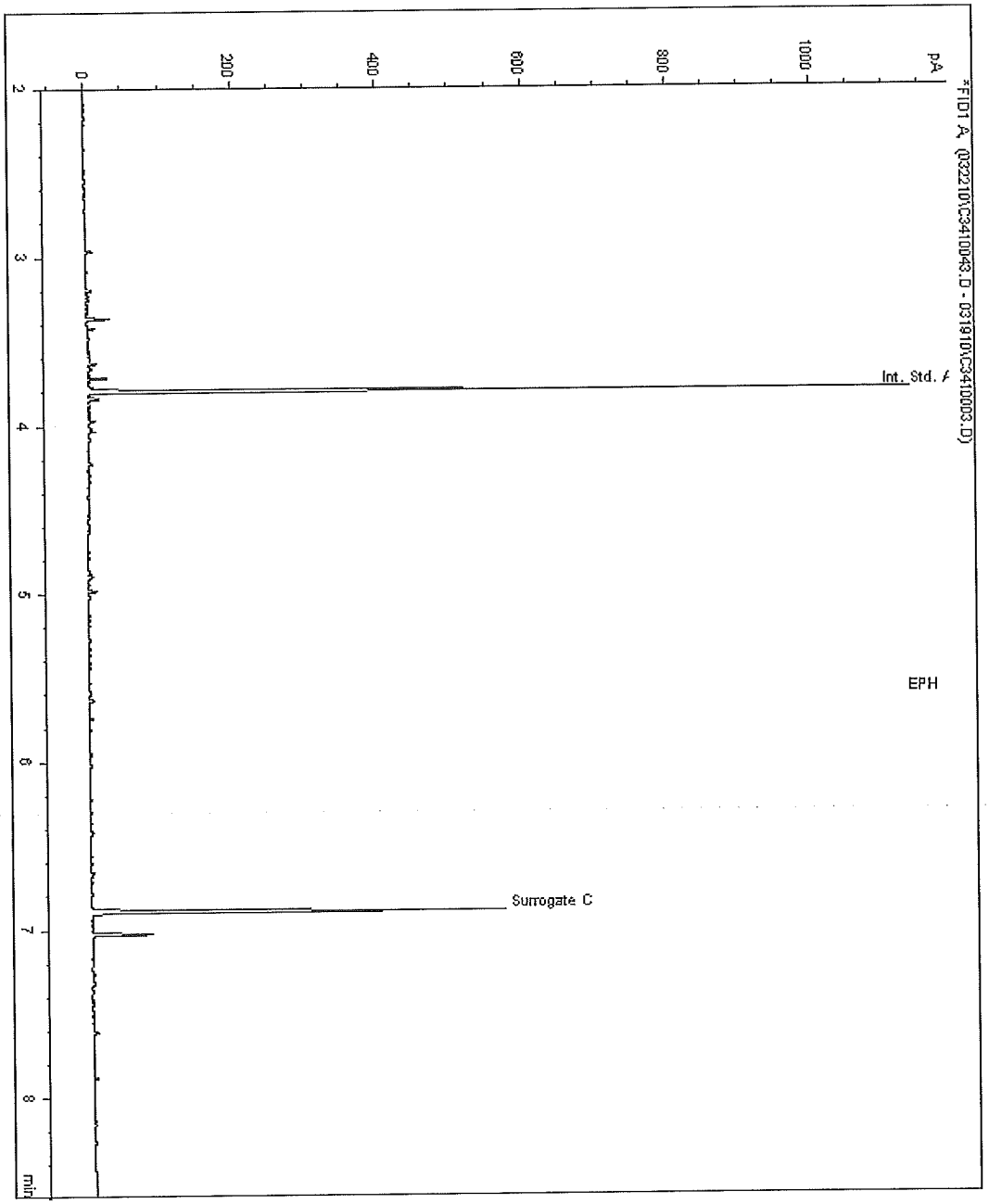
ALcontrol Laboratories Analytical Services

SDG:	100312-116	**Customer:**	Geotechnics Ltd
Job:	H_GEOTECHLT_CHE-32	**Attention:**	Keith Nicholls
Client Ref.:	PN050946	**Order No.:**	
Location:	Arch Motors	**Report No:**	78047
Analysis:	EPH by FID	**Sample No**	1259659
		Sample ID	TP8
		Depth	1.10 - 1.10

Alcontrol Laboratories
EPH Range Organics (C10 - C40)

Sample Identity	:	1372736-1259659
Date Acquired	:	23/03/10 00:47:30 PM
Units	:	mg/kg
Sample Multiplier	:	0.000
Dilution	:	1.0

->



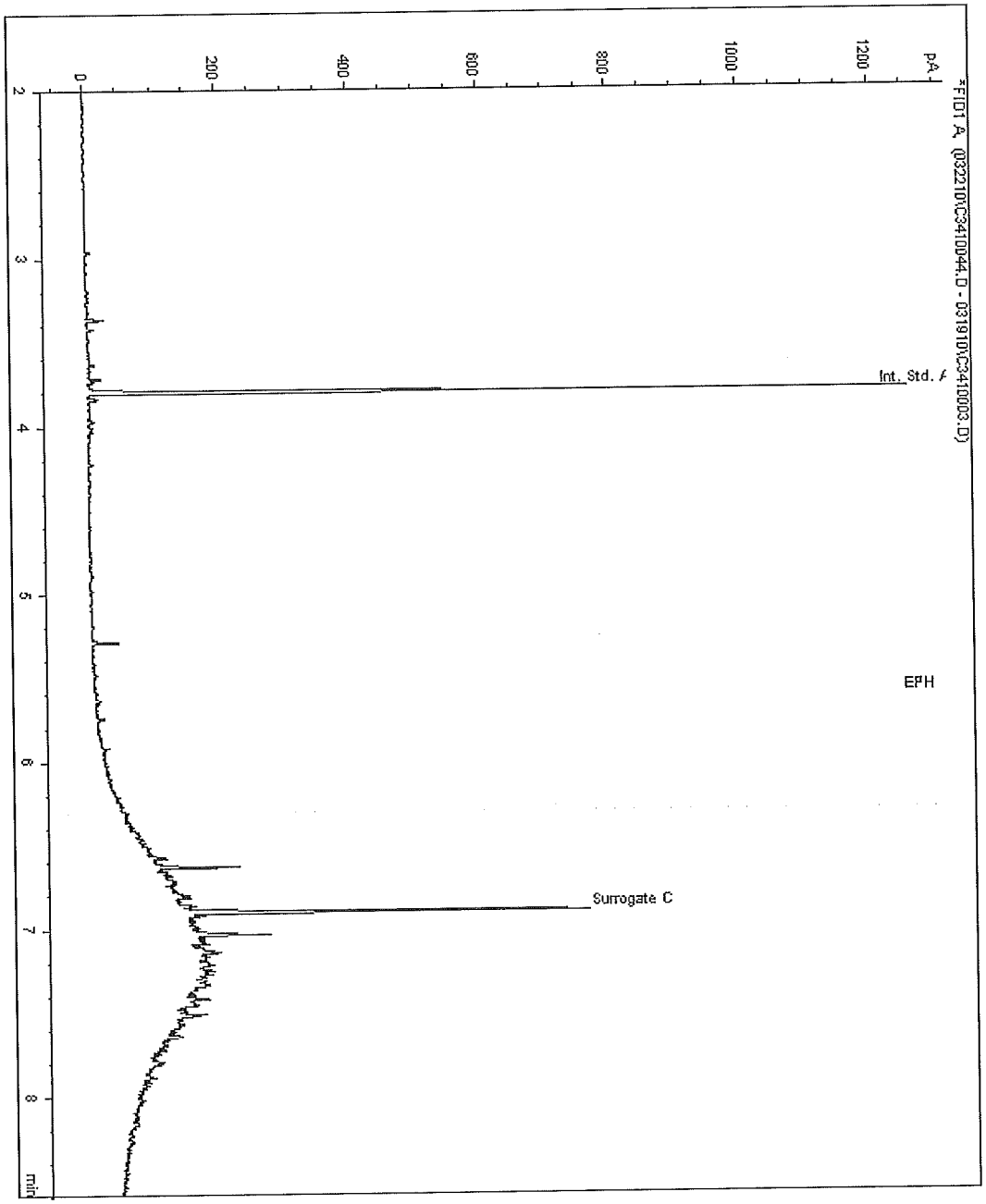
Validated

ALcontrol Laboratories Analytical Services

SDG:	100312-116	**Customer:**	Geotechnics Ltd
Job:	H_GEOTECHLT_CHE-32	**Attention:**	Keith Nicholls
Client Ref.:	PN050946	**Order No.:**	
Location:	Arch Motors	**Report No:**	78047
Analysis:	EPH by FID	**Sample No**	1259671
		Sample ID	TP9
		Depth	0.00 - 0.30

Alcontrol Laboratories
EPH Range Organics (C10 - C40)

Sample Identity	:	1372754-1259671
Date Acquired	:	23/03/10 01:09:19 PM
Units	:	mg/kg
Sample Multiplier	:	0.000
Dilution	:	1.0



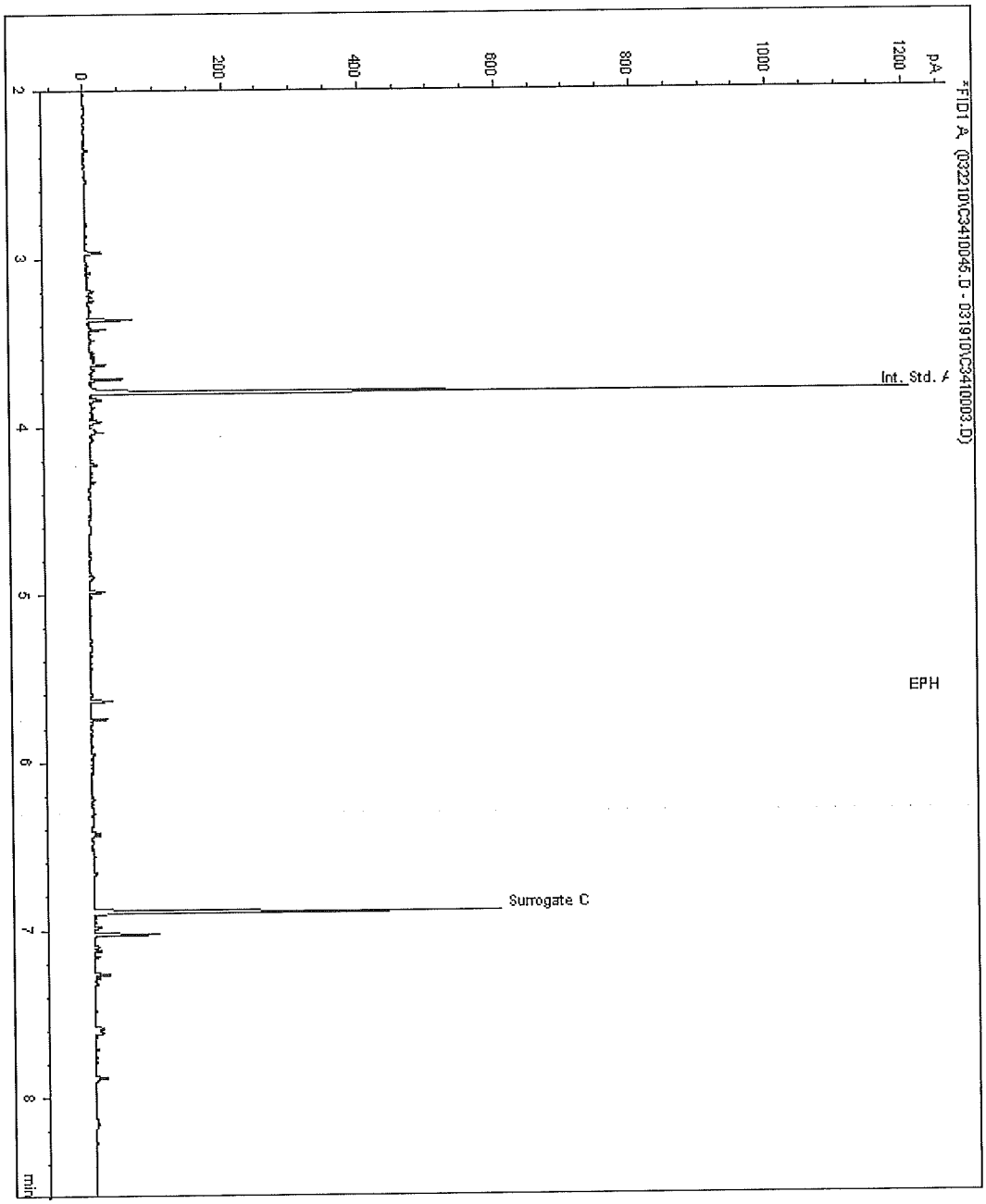
Validated

ALcontrol Laboratories Analytical Services

SDG:	100312-116	**Customer:**	Geotechnics Ltd
Job:	H_GEOTECHLT_CHE-32	**Attention:**	Keith Nicholls
Client Ref.:	PN050946	**Order No.:**	
Location:	Arch Motors	**Report No:**	78047
Analysis:	EPH by FID	**Sample No**	1259682
		Sample ID	TP6
		Depth	0.20 - 0.40

Alcontrol Laboratories
EPH Range Organics (C10 - C40)

Sample Identity	:	1372699-1259682
Date Acquired	:	23/03/10 01:31:21 PM
Units	:	mg/kg
Sample Multiplier	:	0.000
Dilution	:	1.0



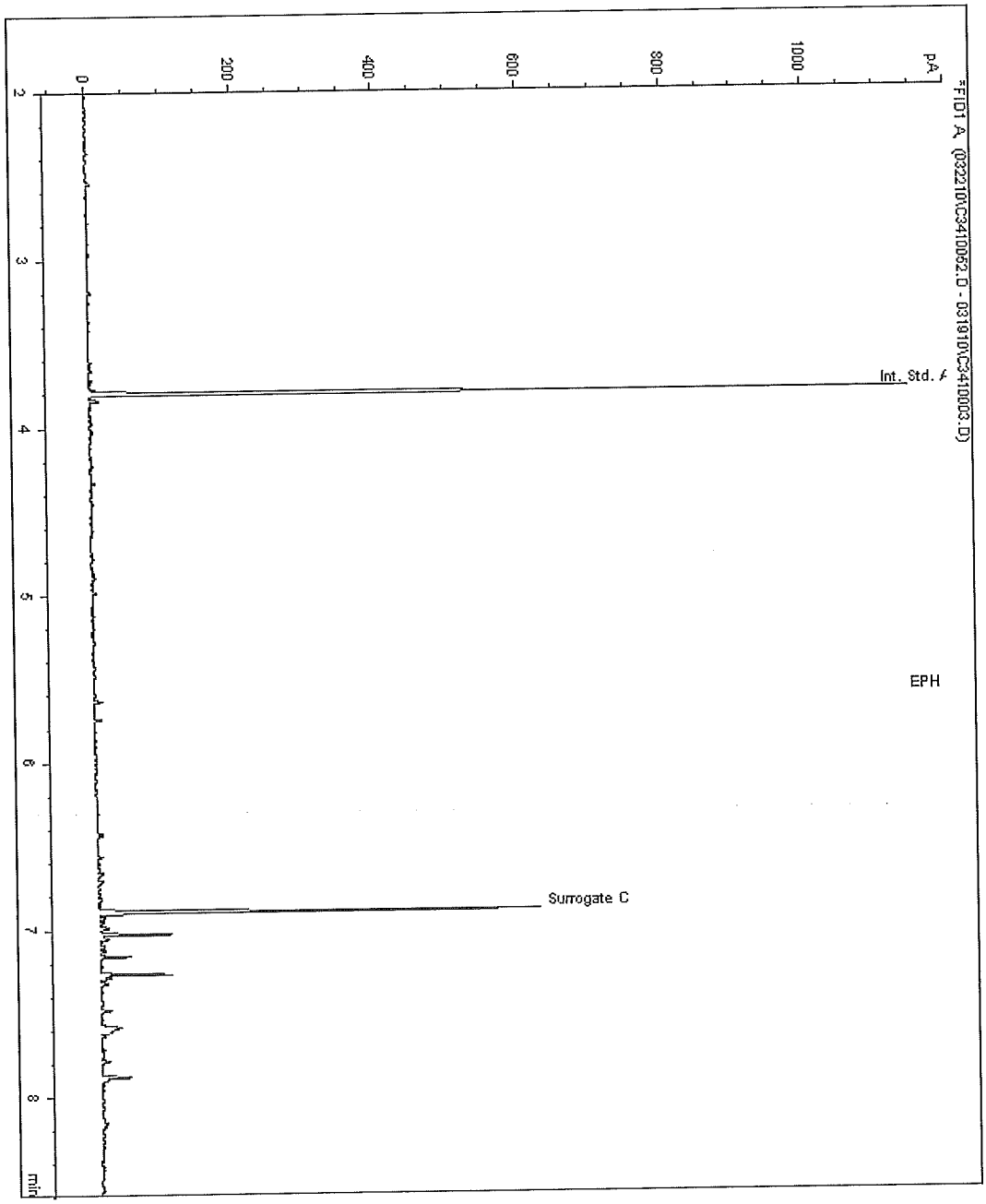
Validated

ALcontrol Laboratories Analytical Services

SDG:	100312-116	**Customer:**	Geotechnics Ltd
Job:	H_GEOTECHLT_CHE-32	**Attention:**	Keith Nicholls
Client Ref.:	PN050946	**Order No.:**	
Location:	Arch Motors	**Report No:**	78047
Analysis:	EPH by FID	**Sample No**	1262126
		Sample ID	TP9
		Depth	0.55 - 0.60

Alcontrol Laboratories
EPH Range Organics (C10 - C40)

Sample Identity	:	1372770-1262126
Date Acquired	:	23/03/10 04:04:29 PM
Units	:	mg/kg
Sample Multiplier	:	0.000
Dilution	:	1.0



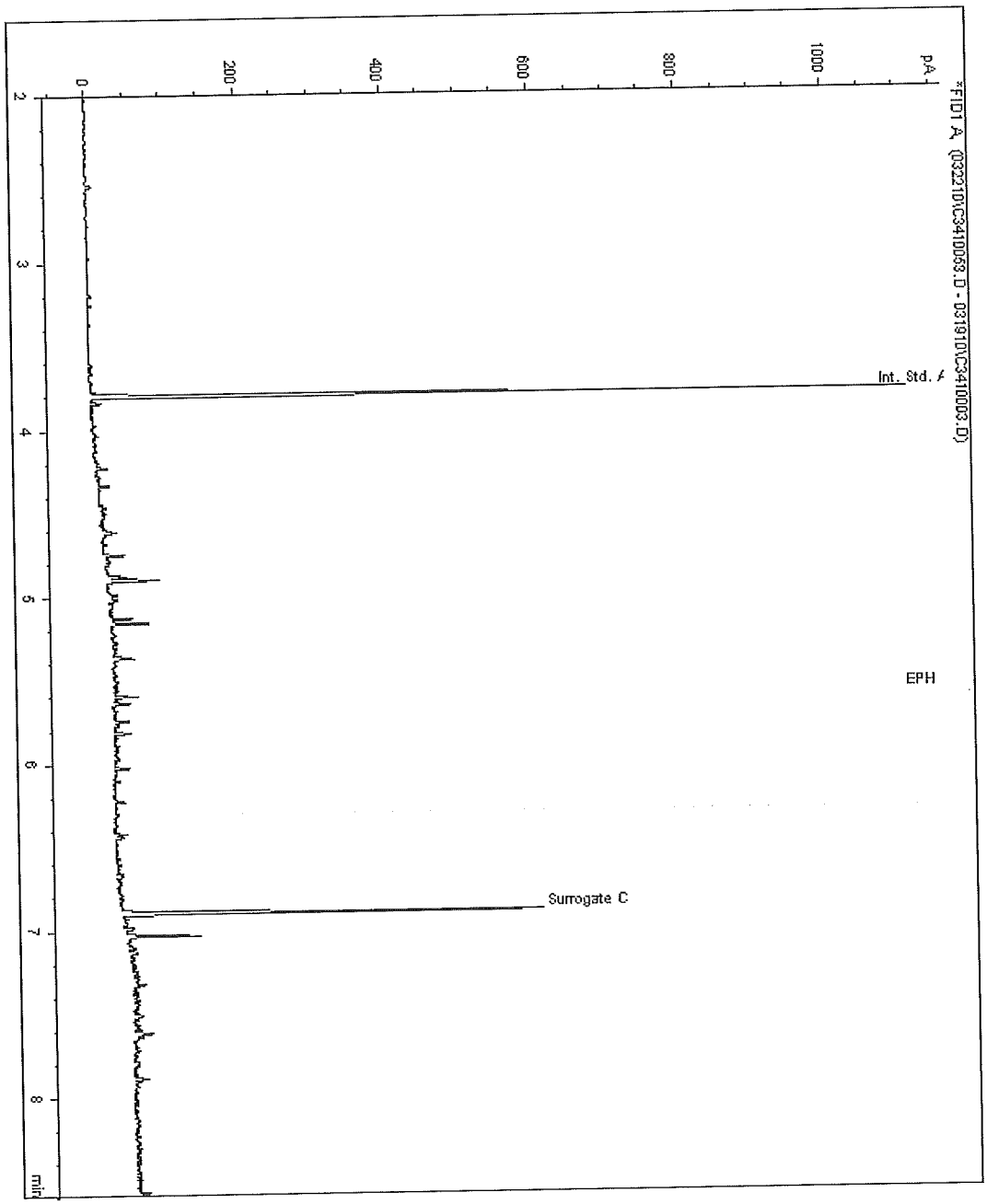
Validated

ALcontrol Laboratories Analytical Services

SDG:	100312-116	**Customer:**	Geotechnics Ltd
Job:	H_GEOTECHLT_CHE-32	**Attention:**	Keith Nicholls
Client Ref.:	PN050946	**Order No.:**	
Location:	Arch Motors	**Report No:**	78047
Analysis:	EPH by FID	**Sample No**	1262197
		Sample ID	TP8
		Depth	0.40 - 0.50

Alcontrol Laboratories
EPH Range Organics (C10 - C40)

Sample Identity	:	1372742-1262197
Date Acquired	:	23/03/10 04:26:18 PM
Units	:	mg/kg
Sample Multiplier	:	0.000
Dilution	:	1.0



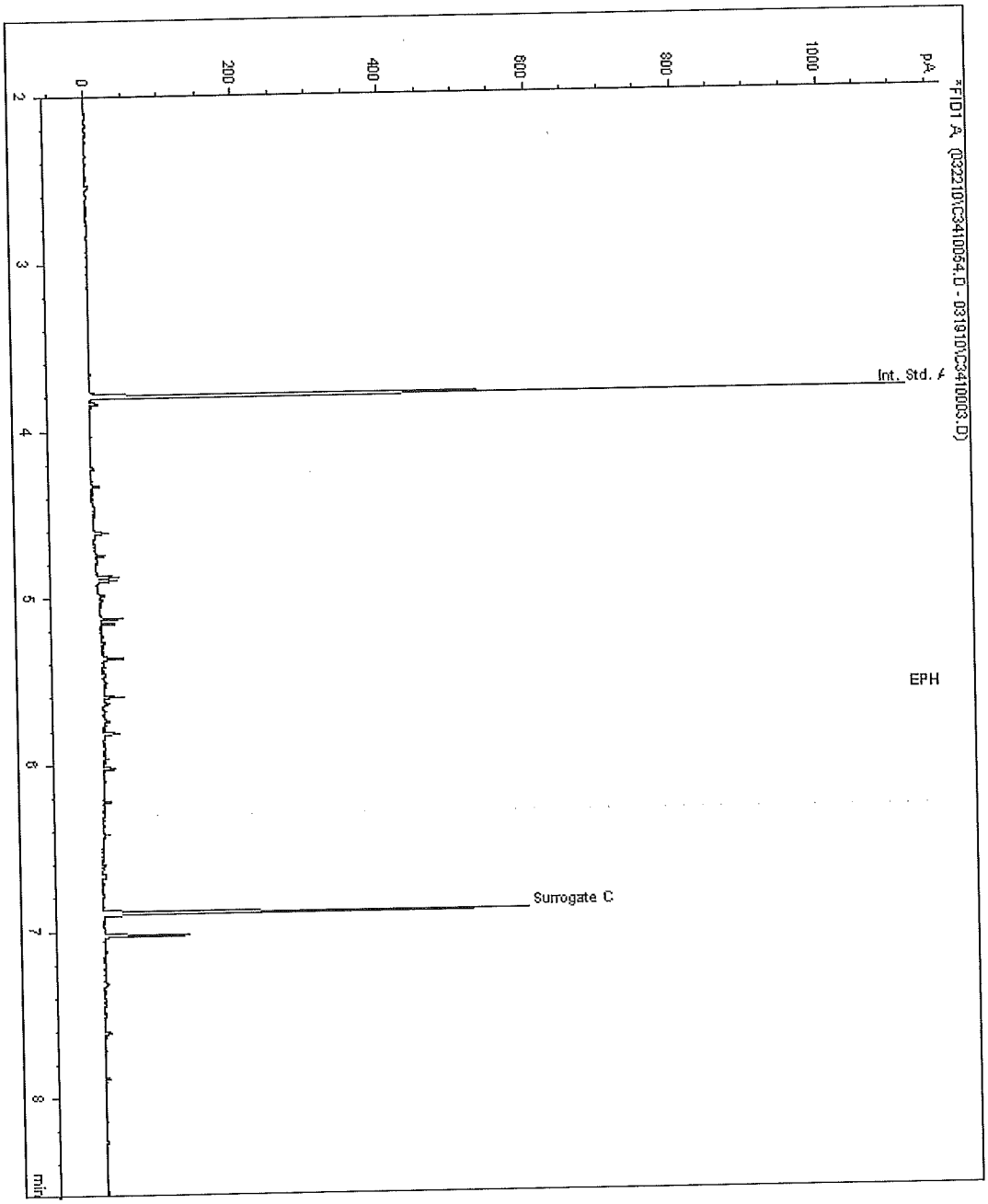
Validated

ALcontrol Laboratories Analytical Services

SDG:	100312-116	**Customer:**	Geotechnics Ltd
Job:	H_GEOTECHLT_CHE-32	**Attention:**	Keith Nicholls
Client Ref.:	PN050946	**Order No.:**	
Location:	Arch Motors	**Report No:**	78047
Analysis:	EPH by FID	**Sample No**	1262291
		Sample ID	TP8
		Depth	0.20 - 0.30

Alcontrol Laboratories
EPH Range Organics (C10 - C40)

Sample Identity	:	1372748-1262291
Date Acquired	:	23/03/10 04:48:25 PM
Units	:	mg/kg
Sample Multiplier	:	0.000
Dilution	:	1.0



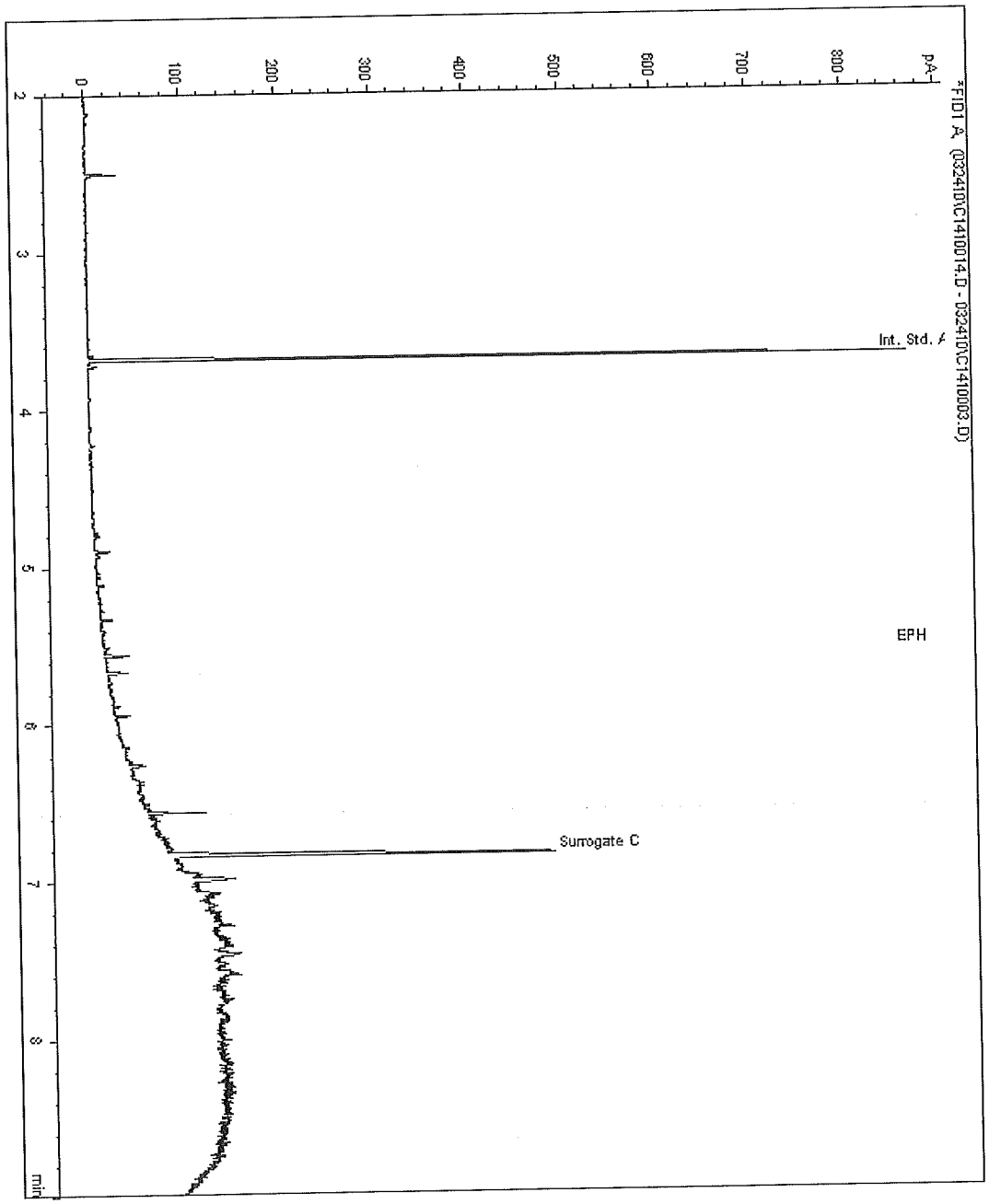
Validated

ALcontrol Laboratories Analytical Services

SDG:	100312-116	**Customer:**	Geotechnics Ltd
Job:	H_GEOTECHLT_CHE-32	**Attention:**	Keith Nicholls
Client Ref.:	PN050946	**Order No.:**	
Location:	Arch Motors	**Report No:**	78047
Analysis:	EPH by FID	**Sample No**	1262370
		Sample ID	TP8
		Depth	0.00 - 0.20

Alcontrol/Geochem Analytical Services
EPH Range Organics (C10 - C40)

Sample Identity : 1372730-1262370
Date Acquired : 24/03/10 12:10:52 PM
Units : mg/kg
Sample Multiplier : 0.000
Dilution :



APPENDIX

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 NH_4 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. **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.
13. **Product analyses** – Organic analyses on products can only be semi-quantitative due to the matrix effects and high dilution factors employed.
14. 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 Dimethyphenol, 3,5 Dimethylphenol).
15. Total of 5 speciated phenols by HPLC includes Phenol, 2,3,5-Trimethyl Phenol, 2-Isopropylphenol, Cresols and Xylenols (as detailed in 14).
16. Stones/debris are not routinely removed. We always endeavour to take a representative sub sample from the received sample.
17. Our MCERTS accreditation for PAHs by GCMS applies to all product types apart from Kerosene, where naphthalene only is not accredited.
18. 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.
19. Mercury results quoted on soils will not include volatile mercury as the analysis is performed on a dried and crushed sample.
20. 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.
21. For all leachate preparations (NRA, DIN, TCLP, BSEN 12457-1, 2, 3) volatile loss may occur, as we do not employ zero headspace extraction.
22. 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.
23. 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.

LIQUID MATRICES EXTRACTION SUMMARY

ANALYSIS	EXTRACTION SOLVENT	EXTRACTION METHOD	ANALYSIS
PAH MS	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC MS
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)	GC MS
PCB TOTAL	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GS MS
SVOC	DCM	LIQUID/LIQUID SHAKEN SVOC	GC MS
FREE SULPHUR	DCM	SOLID PHASE EXTRACTION	HPLC
PEST OCP/OPP	DCM/EA	SOLID PHASE EXTRACTION	GC MS
TRIAZINE HERBS	DCM/EA	SOLID PHASE EXTRACTION	GC MS
PHENOLS MS	DCM	SOLID PHASE EXTRACTION	GC MS
TPH by INFRA RED (IR)	TCE	LIQUID/LIQUID EXTRACTION	HPLC
MINERAL OIL by IR	TCE	LIQUID/LIQUID EXTRACTION	HPLC
SAPONIFIABLE	TCE	LIQUID/LIQUID EXTRACTION	HPLC
UNSAPONIFIABLE	TCE	LIQUID/LIQUID EXTRACTION	HPLC
GLYCOLS	DCM	LIQUID/LIQUID EXTRACTION	EZ FLASH

SOLID MATRICES EXTRACTION SUMMARY

ANALYSIS	D/C OR WET	EXTRACTION SOLVENT	EXTRACTION METHOD	ANALYSIS
Solvent Extractable Matter	D&C	DCM	SOXTHERM	GRAVIMETRIC
Cyclohexane Ext. Matter	D&C	CYCLOHEXANE	SOXTHERM	GRAVIMETRIC
Thin Layer Chromatography	D&C	DCM	SOXTHERM	IATROSCAN
Elemental Sulphur	D&C	DCM	SOXTHERM	HPLC
Phenols by GCMS	WET	DCM	SOXTHERM	GC-MS
Herbicides	D&C	HEXANE:ACETONE	SOXTHERM	GC-MS
Pesticides	D&C	HEXANE:ACETONE	SOXTHERM	GC-MS
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	GC-MS
Polyaromatic Hydrocarbons (MS)	WET	HEXANE:ACETONE	Microwave TM218.	GC-MS
C8-C40 (C6-C40)EZ Flash	WET	HEXANE:ACETONE	SHAKER	GC-EZ
Polyaromatic Hydrocarbons Rapid GC	WET	HEXANE:ACETONE	SHAKER	GC-EZ
Semi Volatile Organic Compounds	WET	DCM:ACETONE	SONICATE	GC-MS

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).

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.

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

Thomas Arthur Roberts
(trading as Arch Motors)
(Claimant)

and

Conwy Borough Council
(Defendant)

EXHIBIT KHN 5

ANNOTATED ENGINEERING LOGS

TRIAL PIT RECORD

Trial Pit

Project ARTHUR ROBERTS - SCRAP YARD, LLANDUDNO

Engineer ARCH MOTORS

Trial Pit TP6

Project No PN050946

EPH C12 - C16

Client ARCH MOTORS

Scale 1:50

Samples and Tests				Strata		
Depth	Type	Stratum No	Results 30 to 60	Description	Depth	Legend
					G.L.	
0.20- 0.40	D			MADE GROUND: comprising firm to stiff brown, mottled pale grey, in places black; slightly sandy gravelly clay with frequent cobbles of brick and sandstone. Cobbles are generally angular to subrounded	0.40	1
0.20- 0.40	ES					
0.45- 0.85	D			MADE GROUND: comprising black, slightly clayey, gravelly sand (ash), gravel includes fragments of glass, metal, ceramic materials, slate obstruction from 0.85m with occasional large cobbles of fused orange ash / slag. Materials fused in with the ash include caster wheels, ceramic tiles etc At 1.00m refractory brick		2
0.45- 0.85	ES					
0.85	B					
1.20	D				1.20	3
1.20	ES			Soft to firm dark grey organic sandy SILT with organic fragments and rootlets (Possible Relict Topsoil)	1.25	
				End of Excavation		

Excavation

Plant Client supplied tracked mini

Date 12/03/2010

Shoring None.

Stability Stable during excavation.

Width (B) 0.75

Length (C) 1.20

Date Backfilled 11/03/2010

Groundwater

Depth Observed	Depth of Pit	Details
0.95		below 0.95m pit becomes damp

Remarks Pit excavated by Client's machine, and backfilled on completion using arisings

Logged by KHN

Figure 1 of 1

25/03/2010

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

geotechnics

TRIAL PIT RECORD

Trial Pit

Project ARTHUR ROBERTS - SCRAP YARD, LLANDUDNO

Engineer ARCH MOTORS

Trial Pit TP6

Project No PN050946

EPH C16 - C21

Client ARCH MOTORS

Scale 1:50

Samples and Tests				Strata		
Depth	Type	Stratum No	Results 100 200	Description	Depth	Legend
					G.L.	
				MADE GROUND: comprising firm to stiff brown, mottled pale grey, in places black; slightly sandy gravelly clay with frequent cobbles of brick and sandstone. Cobbles are generally angular to subrounded	0.40	1
0.20- 0.40	D					
0.20- 0.40	ES					
0.45- 0.85	D					
0.45- 0.85	ES					
				MADE GROUND: comprising black, slightly clayey, gravelly sand (ash), gravel includes fragments of glass, metal, ceramic materials, slate obstruction		2
0.85	B			from 0.85m with occasional large cobbles of fused orange ash / slag. Materials fused in with the ash include caster wheels, ceramic tiles etc		
				At 1.00m refractory brick	1.20	3
1.20	D				1.25	
1.20	ES					
				Soft to firm dark grey organic sandy SILT with organic fragments and rootlets (Possible Relict Topsoil)		
				End of Excavation		

Excavation

Plant Client supplied tracked mini

Date 12/03/2010

Shoring None.

Width (B) 0.75

Length (C) 1.20

Date Backfilled 11/03/2010

Stability Stable during excavation.

Groundwater

Depth Observed	Depth of Pit	Details
0.95		below 0.95m pit becomes damp

Remarks Pit excavated by Client's machine, and backfilled on completion using arisings

Logged by KHN

Figure 1 of 1

25/03/2010

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

geotechnics

TRIAL PIT RECORD

Trial Pit

Project ARTHUR ROBERTS - SCRAP YARD, LLANDUDNO

Engineer ARCH MOTORS

Trial Pit TP6
Project No PN050946

EPM C21 - C28

Client ARCH MOTORS

Scale 1:50

Samples and Tests				Strata		
Depth	Type	Stratum No	Results	Description	Depth	Legend
					G.L.	
0.20- 0.40	D			MADE GROUND: comprising firm to stiff brown, mottled pale grey, in places black; slightly sandy gravelly clay with frequent cobbles of brick and sandstone. Cobbles are generally angular to subrounded	0.40	1
0.20- 0.40	ES					
0.45- 0.85	D			MADE GROUND: comprising black, slightly clayey, gravelly sand (ash), gravel includes fragments of glass, metal, ceramic materials, slate obstruction		2
0.45- 0.85	ES					
0.85	B			from 0.85m with occasional large cobbles of fused orange ash / slag. Materials fused in with the ash include caster wheels, ceramic tiles etc	1.20	
1.20	D			At 1.00m refractory brick	1.25	3
1.20	ES			Soft to firm dark grey organic sandy SILT with organic fragments and rootlets (Possible Relict Topsoil)		
				End of Excavation		

Excavation

Plant Client supplied tracked mini
Date 12/03/2010
Shoring None.
Stability Stable during excavation.

Width (B) 0.75
Length (C) 1.20
Date Backfilled 11/03/2010

Groundwater

Depth Observed	Depth of Pit	Details
0.95		below 0.95m pit becomes damp

Remarks Pit excavated by Client's machine, and backfilled on completion using arisings

Logged by KHN

Figure 1 of 1
25/03/201

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

geotechnics

TRIAL PIT RECORD — Trial Pit

Project ARTHUR ROBERTS - SCRAP YARD, LLANDUDNO

Engineer ARCH MOTORS

Trial Pit TP6

Project No PN050946

EPH C35 - C40

Client ARCH MOTORS

Scale 1:50

Samples and Tests

Depth	Type	Stratum No	Results
0.20- 0.40	D		
0.20- 0.40	ES		
0.45- 0.85	D		
0.45- 0.85	ES		
0.85	B		
1.20	D		
1.20	ES		

Strata

Description	Depth	Legend
	G.L.	
MADE GROUND: comprising firm to stiff brown, mottled pale grey, in places black; slightly sandy gravelly clay with frequent cobbles of brick and sandstone. Cobbles are generally angular to subrounded	0.40	1
MADE GROUND: comprising black, slightly clayey, gravelly sand (ash), gravel includes fragments of glass, metal, ceramic materials, slate obstruction from 0.85m with occasional large cobbles of fused orange ash / slag. Materials fused in with the ash include caster wheels, ceramic tiles etc At 1.00m refractory brick	1.20	2
Soft to firm dark grey organic sandy SILT with organic fragments and rootlets (Possible Relict Topsoil)	1.25	3
End of Excavation		

Excavation

Plant Client supplied tracked mini

Date 12/03/2010

Shoring None.

Stability Stable during excavation.

Width (B) 0.75

Length (C) 1.20

Date Backfilled 11/03/2010

Groundwater

Depth Observed	Depth of Pit	Details
0.95		below 0.95m pit becomes damp

Remarks Pit excavated by Client's machine, and backfilled on completion using arisings

Logged by KHN

Figure 1 of 1

25/03/2010

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

geotechnics

TRIAL PIT RECORD — Trial Pit

Project ARTHUR ROBERTS - SCRAP YARD, LLANDUDNO

Engineer ARCH MOTORS

Trial Pit TP6

Project No PN050946

EH C28 - C35

Client ARCH MOTORS

Scale 1:50

Samples and Tests				Strata		
Depth	Type	Stratum No	Results	Description	Depth	Legend
					G.L.	
0.20- 0.40	D			MADE GROUND: comprising firm to stiff brown, mottled pale grey, in places black; slightly sandy gravelly clay with frequent cobbles of brick and sandstone. Cobbles are generally angular to subrounded	0.40	1
0.20- 0.40	ES					
0.45- 0.85	D			MADE GROUND: comprising black, slightly clayey, gravelly sand (ash), gravel includes fragments of glass, metal, ceramic materials, slate obstruction		2
0.45- 0.85	ES					
0.85	B			from 0.85m with occasional large cobbles of fused orange ash / slag. Materials fused in with the ash include caster wheels, ceramic tiles etc	1.20	3
1.20	D			At 1.00m refractory brick	1.25	
1.20	ES			Soft to firm dark grey organic sandy SILT with organic fragments and rootlets (Possible Relict Topsoil)		
				End of Excavation		

Excavation

Plant Client supplied tracked mini

Date 12/03/2010

Shoring None.

Stability Stable during excavation.

Width (B) 0.75

Length (C) 1.20

Date Backfilled 11/03/2010

Groundwater

Depth Observed	Depth of Pit	Details
0.95		below 0.95m pit becomes damp

Remarks Pit excavated by Client's machine, and backfilled on completion using arisings

Logged by KHN

Figure 1 of 1

25/03/2010

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

geotechnics

TRIAL PIT RECORD

Trial Pit

Project ARTHUR ROBERTS - SCRAP YARD, LLANDUDNO

Engineer ARCH MOTORS

Trial Pit TP6
Project No PN050946

EPH Range Organics C10 - C40

Client ARCH MOTORS

Scale 1:50

Samples and Tests				Strata		
Depth	Type	Stratum No	Results	Description	Depth	Legend
					G.L.	
0.20- 0.40	D			MADE GROUND: comprising firm to stiff brown, mottled pale grey, in places black; slightly sandy gravelly clay with frequent cobbles of brick and sandstone. Cobbles are generally angular to subrounded	0.40	1
0.20- 0.40	ES					
0.45- 0.85	D			MADE GROUND: comprising black, slightly clayey, gravelly sand (ash), gravel includes fragments of glass, metal, ceramic materials, slate obstruction		2
0.45- 0.85	ES					
0.85	B			from 0.85m with occasional large cobbles of fused orange ash / slag. Materials fused in with the ash include caster wheels, ceramic tiles etc	1.20	3
1.20	D			At 1.00m refractory brick	1.25	
1.20	ES			Soft to firm dark grey organic sandy SILT with organic fragments and rootlets (Possible Relict Topsoil)		
				End of Excavation		

Excavation

Plant Client supplied tracked mini
Date 12/03/2010
Shoring None.
Stability Stable during excavation.

Width (B) 0.75
Length (C) 1.20
Date Backfilled 11/03/2010

Groundwater

Depth Observed	Depth of Pit	Details
0.95		below 0.95m pit becomes damp

Remarks Pit excavated by Client's machine, and backfilled on completion using arisings

Logged by KHN

Figure 1 of 1
25/03/2010

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

geotechnics

TRIAL PIT RECORD — Trial Pit

Project ARTHUR ROBERTS - SCRAP YARD, LLANDUDNO

Engineer ARCH MOTORS

Trial Pit TP6

Project No PN050946

ARSENIC

Client ARCH MOTORS

Scale 1:50

Samples and Tests				Strata		
Depth	Type	Stratum No	Results	Description	Depth	Legend
				MADE GROUND: comprising firm to stiff brown, mottled pale grey, in places black; slightly sandy gravelly clay with frequent cobbles of brick and sandstone. Cobbles are generally angular to subrounded	G.L.	1
0.20- 0.40	D				0.40	
0.20- 0.40	ES					
0.45- 0.85	D			MADE GROUND: comprising black, slightly clayey, gravelly sand (ash), gravel includes fragments of glass, metal, ceramic materials, slate obstruction		2
0.45- 0.85	ES					
0.85	B			from 0.85m with occasional large cobbles of fused orange ash / slag. Materials fused in with the ash include caster wheels, ceramic tiles etc	1.20	
1.20	D			At 1.00m refractory brick	1.25	3
1.20	ES			Soft to firm dark grey organic sandy SILT with organic fragments and rootlets (Possible Relict Topsoil)		
				End of Excavation		

Excavation

Plant Client supplied tracked mini

Date 12/03/2010

Shoring None.

Width (B) 0.75

Length (C) 1.20

Date Backfilled 11/03/2010

Stability Stable during excavation.

Groundwater

Depth Observed	Depth of Pit	Details
0.95		below 0.95m pit becomes damp

Remarks Pit excavated by Client's machine, and backfilled on completion using arisings

Logged by KHN

Figure 1 of 1

25/03/2010

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

geotechnics

TRIAL PIT RECORD

Trial Pit

Project ARTHUR ROBERTS - SCRAP YARD, LLANDUDNO

Engineer ARCH MOTORS

Trial Pit TP6

Project No PN050946

Chromium

Client ARCH MOTORS

Scale 1:50

Samples and Tests				Strata		
Depth	Type	Stratum No	Results	Description	Depth	Legend
				MADE GROUND: comprising firm to stiff brown, mottled pale grey, in places black; slightly sandy gravelly clay with frequent cobbles of brick and sandstone. Cobbles are generally angular to subrounded	G.L.	1
0.20- 0.40	D				0.40	
0.20- 0.40	ES					
0.45- 0.85	D					
0.45- 0.85	ES					
0.85	B			MADE GROUND: comprising black, slightly clayey, gravelly sand (ash), gravel includes fragments of glass, metal, ceramic materials, slate obstruction from 0.85m with occasional large cobbles of fused orange ash / slag. Materials fused in with the ash include caster wheels, ceramic tiles etc At 1.00m refractory brick		2
1.20	D				1.20	3
1.20	ES			Soft to firm dark grey organic sandy SILT with organic fragments and rootlets (Possible Relict Topsoil)	1.25	
				End of Excavation		

Excavation

Plant Client supplied tracked mini

Date 12/03/2010

Shoring None.

Width (B) 0.75

Length (C) 1.20

Date Backfilled 11/03/2010

Stability Stable during excavation.

Groundwater

Depth Observed	Depth of Pit	Details
0.95		below 0.95m pit becomes damp

Remarks Pit excavated by Client's machine, and backfilled on completion using arisings

Logged by KHN

Figure 1 of 1

25/03/2010

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

geotechnics

TRIAL PIT RECORD

Trial Pit

Project ARTHUR ROBERTS - SCRAP YARD, LLANDUDNO

Engineer ARCH MOTORS

Trial Pit TP6
Project No PN050946

Lead

Client ARCH MOTORS

Scale 1:50

Samples and Tests				Strata		
Depth	Type	Stratum No	Results	Description	Depth	Legend
					G.L.	
0.20- 0.40	D			MADE GROUND: comprising firm to stiff brown, mottled pale grey, in places black; slightly sandy gravelly clay with frequent cobbles of brick and sandstone. Cobbles are generally angular to subrounded	0.40	1
0.20- 0.40	ES					
0.45- 0.85	D			MADE GROUND: comprising black, slightly clayey, gravelly sand (ash), gravel includes fragments of glass, metal, ceramic materials, slate obstruction from 0.85m with occasional large cobbles of fused orange ash / slag. Materials fused in with the ash include caster wheels, ceramic tiles etc At 1.00m refractory brick		2
0.45- 0.85	ES					
0.85	B				1.20	3
1.20	D			Soft to firm dark grey organic sandy SILT with organic fragments and rootlets (Possible Relict Topsoil)	1.25	
1.20	ES			End of Excavation		

Excavation

Plant Client supplied tracked mini
Date 12/03/2010
Shoring None.
Stability Stable during excavation.

Width (B) 0.75
Length (C) 1.20
Date Backfilled 11/03/2010

Groundwater

Depth Observed	Depth of Pit	Details
0.95		below 0.95m pit becomes damp

Remarks Pit excavated by Client's machine, and backfilled on completion using arisings

Logged by KHN

Figure 1 of 1
25/03/201

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

geotechnics

TRIAL PIT RECORD

Trial Pit

Project ARTHUR ROBERTS - SCRAP YARD, LLANDUDNO

Engineer ARCH MOTORS

Trial Pit TP6

Project No PN050946

NICKEL

Client ARCH MOTORS

Scale 1:50

Samples and Tests				Strata		
Depth	Type	Stratum No	Results	Description	Depth	Legend
					G.L.	
0.20- 0.40	D			MADE GROUND: comprising firm to stiff brown, mottled pale grey, in places black; slightly sandy gravelly clay with frequent cobbles of brick and sandstone. Cobbles are generally angular to subrounded	0.40	1
0.20- 0.40	ES					
0.45- 0.85	D			MADE GROUND: comprising black, slightly clayey, gravelly sand (ash), gravel includes fragments of glass, metal, ceramic materials, slate obstruction		2
0.45- 0.85	ES					
0.85	B			from 0.85m with occasional large cobbles of fused orange ash / slag. Materials fused in with the ash include caster wheels, ceramic tiles etc	1.20	
1.20	D			At 1.00m refractory brick	1.25	3
1.20	ES			Soft to firm dark grey organic sandy SILT with organic fragments and rootlets (Possible Relict Topsoil)		
				End of Excavation		

Excavation

Plant Client supplied tracked mini
Date 12/03/2010
Shoring None.
Stability Stable during excavation.

Width (B) 0.75
Length (C) 1.20
Date Backfilled 11/03/2010

Groundwater

Depth Observed	Depth of Pit	Details
0.95		below 0.95m pit becomes damp

Remarks Pit excavated by Client's machine, and backfilled on completion using arisings

Logged by KHN

Figure 1 of 1

25/03/2010

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

geotechnics

TRIAL PIT RECORD

Trial Pit

Project ARTHUR ROBERTS - SCRAP YARD, LLANDUDNO

Engineer ARCH MOTORS

Trial Pit TP7
Project No PN050946

EPH C12 - C16

Client ARCH MOTORS

Scale 1:50

Samples and Tests				Strata		
Depth	Type	Stratum No	Results	Description	Depth	Legend
0.00- 0.20	D			MADE GROUND: comprising loose to medium dense greyish brown, in places mottled red and white; locally clayey coarse gravel and cobbles. Cobbles include whole and 1/2 bricks, occasional metal fragments	G.L.	1
0.00- 0.20	ES				0.20	
0.20- 0.75	D			MADE GROUND: comprising grey very gravelly clay. Gravel is tabular, angular, of mudstone		3
0.20- 0.75	ES				0.75	2
0.75- 1.00	D			MADE GROUND comprising black mottled white and orange, locally green, sandy gravel with frequent cobbles. Sand is ash, gravel and cobbles include clinker and fused slag, ceramic fragments, porcelain tiles etc	1.20	4
0.75- 1.00	ES				1.25	
				Soft to firm grey slightly sandy CLAY with root fragments		
				End of Excavation		

Excavation

Plant Client suppled tracked mini-
Date 12/03/2010
Shoring None.

Width (B) 0.75
Length (C) 1.25

Date Backfilled 11/03/2010

Stability Stable during excavation.

Groundwater

Depth Observed	Depth of Pit	Details
0.80		Slow seepage

Logged by KHN

Figure 1 of 1
25/03/2010

Remarks

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

geotechnics

TRIAL PIT RECORD

Trial Pit

Project ARTHUR ROBERTS - SCRAP YARD, LLANDUDNO

Engineer ARCH MOTORS

Trial Pit TP7

Project No PN050946

EPN C16 - C21

nt ARCH MOTORS

Scale 1:50

Samples and Tests				Strata		
Depth	Type	Stratum No	Results	Description	Depth	Legend
0.00- 0.20	D			MADE GROUND: comprising loose to medium dense greyish brown, in places mottled red and white; locally clayey coarse gravel and cobbles. Cobbles include whole and 1/2 bricks, occasional metal fragments	G.L.	1
0.00- 0.20	ES				0.20	
0.20- 0.75	D			MADE GROUND: comprising grey very gravelly clay. Gravel is tabular, angular, of mudstone	0.75	3
0.20- 0.75	ES					2
0.75- 1.00	D			MADE GROUND comprising black mottled white and orange, locally green, sandy gravel with frequent cobbles. Sand is ash, gravel and cobbles include clinker and fused slag, ceramic fragments, porcelain tiles etc	1.20	4
0.75- 1.00	ES				1.25	
				Soft to firm grey slightly sandy CLAY with root fragments		
				End of Excavation		

Excavation

Plant Client suppled tracked mini-
Date 12/03/2010
Shoring None.
Stability Stable during excavation.

Width (B) 0.75
Length (C) 1.25
Date Backfilled 11/03/2010

Groundwater

Depth Observed	Depth of Pit	Details
0.80		Slow seepage

Logged by KHN

Figure 1 of 1

25/03/2010

Remarks

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

geotechnics

TRIAL PIT RECORD

Trial Pit

Project ARTHUR ROBERTS - SCRAP YARD, LLANDUDNO

Engineer ARCH MOTORS

Trial Pit TP7

Project No PN050946

C21 - C28

Client ARCH MOTORS

Scale 1:50

Samples and Tests				Strata		
Depth	Type	Stratum No	Results	Description	Depth	Legend
					G.L.	
0.00- 0.20	D			MADE GROUND: comprising loose to medium dense greyish brown, in places mottled red and white; locally clayey coarse gravel and cobbles. Cobbles include whole and 1/2 bricks, occasional metal fragments	0.20	1
0.00- 0.20	ES					3
0.20- 0.75	D			MADE GROUND: comprising grey very gravelly clay. Gravel is tabular, angular, of mudstone	0.75	2
0.20- 0.75	ES					
0.75- 1.00	D			MADE GROUND comprising black mottled white and orange, locally green, sandy gravel with frequent cobbles. Sand is ash, gravel and cobbles include clinker and fused slag, ceramic fragments, porcelain tiles etc	1.20	4
0.75- 1.00	ES				1.25	
				Soft to firm grey slightly sandy CLAY with root fragments		
				End of Excavation		

Excavation

Plant Client suppled tracked mini-

Date 12/03/2010

Shoring None.

Stability Stable during excavation.

Width (B) 0.75

Length (C) 1.25

Date Backfilled 11/03/2010

Groundwater

Depth Observed	Depth of Pit	Details
0.80		Slow seepage

Logged by KHN

Figure 1 of 1

25/03/2010

Remarks

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

geotechnics

TRIAL PIT RECORD

Trial Pit

Project ARTHUR ROBERTS - SCRAP YARD, LLANDUDNO

Engineer ARCH MOTORS

Trial Pit TP7

Project No PN050946

EPH C35 - C40

Client ARCH MOTORS

Scale 1:50

Samples and Tests				Strata		
Depth	Type	Stratum No	Results	Description	Depth	Legend
					G.L.	
0.00- 0.20	D			MADE GROUND: comprising loose to medium dense greyish brown, in places mottled red and white; locally clayey coarse gravel and cobbles. Cobbles include whole and 1/2 bricks, occasional metal fragments	0.20	1
0.00- 0.20	ES					3
0.20- 0.75	D			MADE GROUND: comprising grey very gravelly clay. Gravel is tabular, angular, of mudstone	0.75	2
0.20- 0.75	ES					
0.75- 1.00	D			MADE GROUND comprising black mottled white and orange, locally green, sandy gravel with frequent cobbles. Sand is ash, gravel and cobbles include clinker and fused slag, ceramic fragments, porcelain tiles etc	1.20	4
0.75- 1.00	ES				1.25	
				Soft to firm grey slightly sandy CLAY with root fragments		
				End of Excavation		

Excavation

Plant Client suppled tracked mini-

Date 12/03/2010

Shoring None.

Stability Stable during excavation.

Width (B) 0.75

Length (C) 1.25

Date Backfilled 11/03/2010

Groundwater

Depth Observed	Depth of Pit	Details
0.80		Slow seepage

Logged by KHN

Figure 1 of 1

25/03/2010

Remarks

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

geotechnics

TRIAL PIT RECORD — Trial Pit

Project ARTHUR ROBERTS - SCRAP YARD, LLANDUDNO

Engineer ARCH MOTORS

Trial Pit TP7
Project No PN050946

(EPH C28 - C35)

Client ARCH MOTORS

Scale 1:50

Samples and Tests				Strata		
Depth	Type	Stratum No	Results	Description	Depth	Legend
0.00- 0.20	D			MADE GROUND: comprising loose to medium dense greyish brown, in places mottled red and white; locally clayey coarse gravel and cobbles. Cobbles include whole and 1/2 bricks, occasional metal fragments	G.L.	1
0.00- 0.20	ES				0.20	
0.20- 0.75	D			MADE GROUND: comprising grey very gravelly clay. Gravel is tabular, angular, of mudstone		3
0.20- 0.75	ES				0.75	2
0.75- 1.00	D			MADE GROUND comprising black mottled white and orange, locally green, sandy gravel with frequent cobbles. Sand is ash, gravel and cobbles include clinker and fused slag, ceramic fragments, porcelain tiles etc	1.20	4
0.75- 1.00	ES				1.25	
				Soft to firm grey slightly sandy CLAY with root fragments		
				End of Excavation		

Excavation

Plant Client suppled tracked mini-
Date 12/03/2010
Shoring None.
Stability Stable during excavation.

Width (B) 0.75
Length (C) 1.25
Date Backfilled 11/03/2010

Groundwater

Depth Observed	Depth of Pit	Details
0.80		Slow seepage

Logged by KHN

Figure 1 of 1
25/03/2010

Remarks

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

geotechnics

TRIAL PIT RECORD — Trial Pit

Project ARTHUR ROBERTS - SCRAP YARD, LLANDUDNO

Engineer ARCH MOTORS

Trial Pit TP7

Project No PN050946

EPH ORGANICS CRO - C4

Client ARCH MOTORS

Scale 1:50

Samples and Tests				Strata		
Depth	Type	Stratum No	Results	Description	Depth	Legend
0.00- 0.20	D			MADE GROUND: comprising loose to medium dense greyish brown, in places mottled red and white; locally clayey coarse gravel and cobbles. Cobbles include whole and 1/2 bricks, occasional metal fragments	G.L.	1
0.00- 0.20	ES				0.20	
0.20- 0.75	D			MADE GROUND: comprising grey very gravelly clay. Gravel is tabular, angular, of mudstone	0.75	3
0.20- 0.75	ES					2
0.75- 1.00	D			MADE GROUND comprising black mottled white and orange, locally green, sandy gravel with frequent cobbles. Sand is ash, gravel and cobbles include clinker and fused slag, ceramic fragments, porcelain tiles etc	1.20	4
0.75- 1.00	ES				1.25	
				Soft to firm grey slightly sandy CLAY with root fragments		
				End of Excavation		

Excavation

Plant Client suppled tracked mini-

Date 12/03/2010

Shoring None.

Stability Stable during excavation.

Width (B) 0.75

Length (C) 1.25

Date Backfilled 11/03/2010

Groundwater

Depth Observed	Depth of Pit	Details
0.80		Slow seepage

Logged by KHN

Figure 1 of 1

25/03/2010

Remarks

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

geotechnics

TRIAL PIT RECORD — Trial Pit

Project ARTHUR ROBERTS - SCRAP YARD, LLANDUDNO

Engineer ARCH MOTORS

Trial Pit TP7
Project No PN050946

Arsenic

Client ARCH MOTORS

Scale 1:50

Samples and Tests

Depth	Type	Stratum No	Results
0.00- 0.20	D		
0.00- 0.20	ES		
0.20- 0.75	D		
0.20- 0.75	ES		
0.75- 1.00	D		
0.75- 1.00	ES		

Strata

Description	Depth	Legend
	G.L.	
MADE GROUND: comprising loose to medium dense greyish brown, in places mottled red and white; locally clayey coarse gravel and cobbles. Cobbles include whole and 1/2 bricks, occasional metal fragments	0.20	1
MADE GROUND: comprising grey very gravelly clay. Gravel is tabular, angular, of mudstone	0.75	3
MADE GROUND comprising black mottled white and orange, locally green, sandy gravel with frequent cobbles. Sand is ash, gravel and cobbles include clinker and fused slag, ceramic fragments, porcelain tiles etc	1.20	2
Soft to firm grey slightly sandy CLAY with root fragments	1.25	4
End of Excavation		

Excavation

Plant Client suppled tracked mini-
Date 12/03/2010
Shoring None.
Stability Stable during excavation.

Width (B) 0.75
Length (C) 1.25
Date Backfilled 11/03/2010

Groundwater

Depth Observed	Depth of Pit	Details
0.80		Slow seepage

Logged by KHN

Figure 1 of 1
25/03/2010

Remarks

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

geotechnics

TRIAL PIT RECORD — Trial Pit

Project ARTHUR ROBERTS - SCRAP YARD, LLANDUDNO

Engineer ARCH MOTORS

Trial Pit TP7
Project No PN050946

Chromium

Client ARCH MOTORS

Scale 1:50

Samples and Tests

Depth	Type	Stratum No	Results
0.00- 0.20	D		
0.00- 0.20	ES		
0.20- 0.75	D		
0.20- 0.75	ES		
0.75- 1.00	D		
0.75- 1.00	ES		

Strata

Description	Depth	Legend
	G.L.	
MADE GROUND: comprising loose to medium dense greyish brown, in places mottled red and white; locally clayey coarse gravel and cobbles. Cobbles include whole and 1/2 bricks, occasional metal fragments	0.20	1
MADE GROUND: comprising grey very gravelly clay. Gravel is tabular, angular, of mudstone	0.75	3
MADE GROUND comprising black mottled white and orange, locally green, sandy gravel with frequent cobbles. Sand is ash, gravel and cobbles include clinker and fused slag, ceramic fragments, porcelain tiles etc	1.20	2
Soft to firm grey slightly sandy CLAY with root fragments	1.25	4
End of Excavation		

Excavation

Plant Client suppled tracked mini-
Date 12/03/2010
Shoring None.
Stability Stable during excavation.

Width (B) 0.75
Length (C) 1.25
Date Backfilled 11/03/2010

Groundwater

Depth Observed	Depth of Pit	Details
0.80		Slow seepage

Logged by KHN

Figure 1 of 1
25/03/2010

Remarks

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

geotechnics

TRIAL PIT RECORD

Trial Pit

Project ARTHUR ROBERTS - SCRAP YARD, LLANDUDNO

Engineer ARCH MOTORS

Trial Pit TP7
Project No PN050946

Lead

Client ARCH MOTORS

Scale 1:50

Samples and Tests				Strata		
Depth	Type	Stratum No	Results	Description	Depth	Legend
0.00- 0.20	D			MADE GROUND: comprising loose to medium dense greyish brown, in places mottled red and white; locally clayey coarse gravel and cobbles. Cobbles include whole and 1/2 bricks, occasional metal fragments	G.L.	1
0.00- 0.20	ES				0.20	
0.20- 0.75	D			MADE GROUND: comprising grey very gravelly clay. Gravel is tabular, angular, of mudstone		3
0.20- 0.75	ES				0.75	2
0.75- 1.00	D			MADE GROUND comprising black mottled white and orange, locally green, sandy gravel with frequent cobbles. Sand is ash, gravel and cobbles include clinker and fused slag, ceramic fragments, porcelain tiles etc	1.20	4
0.75- 1.00	ES				1.25	
				Soft to firm grey slightly sandy CLAY with root fragments		
				End of Excavation		

Excavation

Plant Client suppled tracked mini-
Date 12/03/2010
Shoring None.

Width (B) 0.75
Length (C) 1.25

Date Backfilled 11/03/2010

Stability Stable during excavation.

Groundwater

Depth Observed	Depth of Pit	Details
0.80		Slow seepage

Logged by KHN

Figure 1 of 1
25/03/2010

Remarks

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

geotechnics

TRIAL PIT RECORD

Trial Pit

Project ARTHUR ROBERTS - SCRAP YARD, LLANDUDNO

Engineer ARCH MOTORS

Trial Pit TP7
Project No PN050946

NICKED

Client ARCH MOTORS

Scale 1:50

Samples and Tests				Strata		
Depth	Type	Stratum No	Results	Description	Depth	Legend
0.00- 0.20	D			MADE GROUND: comprising loose to medium dense greyish brown, in places mottled red and white; locally clayey coarse gravel and cobbles. Cobbles include whole and 1/2 bricks, occasional metal fragments	G.L.	
0.00- 0.20	ES				0.20	1
0.20- 0.75	D			MADE GROUND: comprising grey very gravelly clay. Gravel is tabular, angular, of mudstone		3
0.20- 0.75	ES				0.75	2
0.75- 1.00	D			MADE GROUND comprising black mottled white and orange, locally green, sandy gravel with frequent cobbles. Sand is ash, gravel and cobbles include clinker and fused slag, ceramic fragments, porcelain tiles etc	1.20	4
0.75- 1.00	ES				1.25	
				Soft to firm grey slightly sandy CLAY with root fragments		
				End of Excavation		

Excavation

Plant Client suppled tracked mini-
Date 12/03/2010
Shoring None.

Width (B) 0.75
Length (C) 1.25

Date Backfilled 11/03/2010

Stability Stable during excavation.

Groundwater

Depth Observed	Depth of Pit	Details
0.80		Slow seepage

Logged by KHN

Figure 1 of 1
25/03/2010

Remarks

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

geotechnics

TRIAL PIT RECORD — Trial Pit

Project ARTHUR ROBERTS - SCRAP YARD, LLANDUDNO

Engineer ARCH MOTORS

Trial Pit TP8
Project No PN050946

EPH C12 - C16

Client ARCH MOTORS

Scale 1:50

Samples and Tests				Strata		
Depth	Type	Stratum No	Results	Description	Depth	Legend
					G.L.	
0.00- 0.20	D			MADE GROUND: comprising grey sandy coarse gravel and cobbles, with a few roots and fragments of cloth, glass, metal, locally is weakly cemented	0.20	1
0.00- 0.20	ES				0.30	2
0.20- 0.30	D			MADE GROUND: comprising pinkish brown sandy medium to coarse angular limestone gravel		3
0.20- 0.30	ES					
0.30- 0.65	D			MADE GROUND: comprising black, gravelly sand (ash) with fragments of ceramics, pieces of metal glass etc	1.05	
0.40- 0.50	D				1.10	4
0.40- 0.50	ES			From 0.65m with occasional cobbles and boulder sized fragments of orange brown mottled black, olive green, vesicular slaggy material		
1.10	D					
1.10	ES			Firm brown sandy CLAY		
				End of Excavation		

Excavation

Plant Client supplied tracked mini
Date 12/03/2010
Shoring None.
Stability Stable during excavation.

Width (B) 0.75
Length (C) 1.25
Date Backfilled 11/03/2010

Groundwater

Depth Observed	Depth of Pit	Details
		None encountered during excavation.

Remarks Excavated using clients own tracked excavator, backfilled with arising on completion

Logged by KHN

Figure 1 of 1
25/03/2010

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

geotechnics

TRIAL PIT RECORD — Trial Pit

Project ARTHUR ROBERTS - SCRAP YARD, LLANDUDNO

Engineer ARCH MOTORS

Trial Pit TP8
Project No PN050946

EPH C16 – C21

Client ARCH MOTORS

Scale 1:50

Samples and Tests				Strata		
Depth	Type	Stratum No	Results	Description	Depth	Legend
					G.L.	
0.00- 0.20	D			MADE GROUND: comprising grey sandy coarse gravel and cobbles, with a few roots and fragments of cloth, glass, metal, locally is weakly cemented	0.20	1
0.00- 0.20	ES					2
0.20- 0.30	D			MADE GROUND: comprising pinkish brown sandy medium to coarse angular limestone gravel	0.30	
0.20- 0.30	ES					3
0.30- 0.65	D			MADE GROUND: comprising black, gravelly sand (ash) with fragments of ceramics, pieces of metal glass etc	1.05	
0.40- 0.50	D					
0.40- 0.50	ES			From 0.65m with occasional cobbles and boulder sized fragments of orange brown mottled black, olive green, vesicular slaggy material	1.10	4
1.10	D					
1.10	ES			Firm brown sandy CLAY		
				End of Excavation		

Excavation

Plant Client supplied tracked mini
Date 12/03/2010
Shoring None.
Stability Stable during excavation.

Width (B) 0.75
Length (C) 1.25
Date Backfilled 11/03/2010

Groundwater

Depth Observed	Depth of Pit	Details
		None encountered during excavation.

Remarks LB DES Excavated using clients own tracked excavator, backfilled with arising on completion

Logged by KHN

Figure 1 of 1
25/03/2010

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

geotechnics

TRIAL PIT RECORD — Trial Pit

Project ARTHUR ROBERTS - SCRAP YARD, LLANDUDNO

Engineer ARCH MOTORS

Trial Pit TP8

Project No PN050946

EPH C21 - C28

Client ARCH MOTORS

Scale 1:50

Samples and Tests

Depth	Type	Stratum No	Results
0.00- 0.20	D		
0.00- 0.20	ES		
0.20- 0.30	D		
0.20- 0.30	ES		
0.30- 0.65	D		
0.40- 0.50	D		
0.40- 0.50	ES		
1.10	D		
1.10	ES		

Strata

Description	Depth	Legend
	G.L.	
MADE GROUND: comprising grey sandy coarse gravel and cobbles, with a few roots and fragments of cloth, glass, metal, locally is weakly cemented	0.20	1
MADE GROUND: comprising pinkish brown sandy medium to coarse angular limestone gravel	0.30	2
MADE GROUND: comprising black, gravelly sand (ash) with fragments of ceramics, pieces of metal glass etc	1.05	3
From 0.65m with occasional cobbles and boulder sized fragments of orange brown mottled black, olive green, vesicular slaggy material	1.10	
Firm brown sandy CLAY		4
End of Excavation		

Excavation

Plant Client supplied tracked mini

Date 12/03/2010

Shoring None.

Stability Stable during excavation.

Width (B) 0.75

Length (C) 1.25

Date Backfilled 11/03/2010

Groundwater

Depth Observed	Depth of Pit	Details
		None encountered during excavation.

Remarks Excavated using clients own tracked excavator, backfilled with arising on completion

Logged by KHN

Figure 1 of 1

25/03/2010

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

geotechnics

TRIAL PIT RECORD

Trial Pit

Project ARTHUR ROBERTS - SCRAP YARD, LLANDUDNO

Engineer ARCH MOTORS

Trial Pit TP8

Project No PN050946

EPH C35 - C40

Client ARCH MOTORS

Scale 1:50

Samples and Tests				Strata		
Depth	Type	Stratum No	Results	Description	Depth	Legend
					G.L.	
0.00- 0.20	D			MADE GROUND: comprising grey sandy coarse gravel and cobbles, with a few roots and fragments of cloth, glass, metal, locally is weakly cemented	0.20	1
0.00- 0.20	ES					2
0.20- 0.30	D			MADE GROUND: comprising pinkish brown sandy medium to coarse angular limestone gravel	0.30	
0.20- 0.30	ES					3
0.30- 0.65	D			MADE GROUND: comprising black, gravelly sand (ash) with fragments of ceramics, pieces of metal glass etc	1.05	
0.40- 0.50	D					
0.40- 0.50	ES			From 0.65m with occasional cobbles and boulder sized fragments of orange brown mottled black, olive green, vesicular slaggy material	1.10	4
1.10	D					
1.10	ES			Firm brown sandy CLAY		
				End of Excavation		

Excavation

Plant Client supplied tracked mini

Date 12/03/2010

Shoring None.

Stability Stable during excavation.

Width (B) 0.75

Length (C) 1.25

Date Backfilled 11/03/2010

Groundwater

Depth Observed	Depth of Pit	Details
		None encountered during excavation.

Remarks Excavated using clients own tracked excavator, backfilled with arising on completion

Logged by KHN

Figure 1 of 1

25/03/2010

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

geotechnics

TRIAL PIT RECORD

Trial Pit

Project ARTHUR ROBERTS - SCRAP YARD, LLANDUDNO

Engineer ARCH MOTORS

Trial Pit TP8
Project No PN050946

EPM 026-035

Client ARCH MOTORS

Scale 1:50

Samples and Tests				Strata		
Depth	Type	Stratum No	Results	Description	Depth	Legend
					G.L.	
0.00- 0.20	D			MADE GROUND: comprising grey sandy coarse gravel and cobbles, with a few roots and fragments of cloth, glass, metal, locally is weakly cemented	0.20	1
0.00- 0.20	ES					2
0.20- 0.30	D			MADE GROUND: comprising pinkish brown sandy medium to coarse angular limestone gravel	0.30	
0.20- 0.30	ES					3
0.30- 0.65	D			MADE GROUND: comprising black, gravelly sand (ash) with fragments of ceramics, pieces of metal glass etc	1.05	
0.40- 0.50	D			From 0.65m with occasional cobbles and boulder sized fragments of orange brown mottled black, olive green, vesicular slaggy material	1.10	4
0.40- 0.50	ES					
1.10	D			Firm brown sandy CLAY		
1.10	ES			End of Excavation		

Excavation

Plant Client supplied tracked mini
Date 12/03/2010
Shoring None.
Stability Stable during excavation.

Width (B) 0.75
Length (C) 1.25
Date Backfilled 11/03/2010

Groundwater

Depth Observed	Depth of Pit	Details
		None encountered during excavation.

Remarks Excavated using clients own tracked excavator, backfilled with arising on completion

Logged by KHN

Figure 1 of 1
25/03/2010

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

geotechnics

TRIAL PIT RECORD — Trial Pit

Project ARTHUR ROBERTS - SCRAP YARD, LLANDUDNO

Engineer ARCH MOTORS

Trial Pit TP8
Project No PN050946

EPH Organics C10 - C40

Client ARCH MOTORS

Scale 1:50

Samples and Tests				Strata		
Depth	Type	Stratum No	Results	Description	Depth	Legend
					G.L.	
0.00- 0.20	D			MADE GROUND: comprising grey sandy coarse gravel and cobbles, with a few roots and fragments of cloth, glass, metal, locally is weakly cemented	0.20	1
0.00- 0.20	ES				0.30	2
0.20- 0.30	D			MADE GROUND: comprising pinkish brown sandy medium to coarse angular limestone gravel		3
0.20- 0.30	ES					
0.30- 0.65	D			MADE GROUND: comprising black, gravelly sand (ash) with fragments of ceramics, pieces of metal glass etc	1.05	4
0.40- 0.50	D			From 0.65m with occasional cobbles and boulder sized fragments of orange brown mottled black, olive green, vesicular slaggy material	1.10	
0.40- 0.50	ES					
1.10	D			Firm brown sandy CLAY		
1.10	ES			End of Excavation		

Excavation

Plant Client supplied tracked mini
Date 12/03/2010
Shoring None.
Stability Stable during excavation.

Width (B) 0.75
Length (C) 1.25
Date Backfilled 11/03/2010

Groundwater

Depth Observed	Depth of Pit	Details
		None encountered during excavation.

Remarks Excavated using clients own tracked excavator, backfilled with arising on completion

Logged by KHN

Figure 1 of 1
25/03/2010

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

geotechnics

TRIAL PIT RECORD — Trial Pit

Project ARTHUR ROBERTS - SCRAP YARD, LLANDUDNO

Engineer ARCH MOTORS

Trial Pit TP8
Project No PN050946

ARSENIC

Client ARCH MOTORS

Scale 1:50

Samples and Tests				Strata		
Depth	Type	Stratum No	Results 25 50 75	Description	Depth	Legend
					G.L.	
0.00- 0.20	D			MADE GROUND: comprising grey sandy coarse gravel and cobbles, with a few roots and fragments of cloth, glass, metal, locally is weakly cemented	0.20	1
0.00- 0.20	ES					2
0.20- 0.30	D			MADE GROUND: comprising pinkish brown sandy medium to coarse angular limestone gravel	0.30	
0.20- 0.30	ES					3
0.30- 0.65	D			MADE GROUND: comprising black, gravelly sand (ash) with fragments of ceramics, pieces of metal glass etc	1.05	
0.40- 0.50	D			From 0.65m with occasional cobbles and boulder sized fragments of orange brown mottled black, olive green, vesicular slaggy material	1.10	4
0.40- 0.50	ES					
1.10	D			Firm brown sandy CLAY		
1.10	ES			End of Excavation		

Excavation

Plant Client supplied tracked mini
Date 12/03/2010
Shoring None.
Stability Stable during excavation.

Width (B) 0.75
Length (C) 1.25
Date Backfilled 11/03/2010

Groundwater

Depth Observed	Depth of Pit	Details
		None encountered during excavation.

Remarks Excavated using clients own tracked excavator, backfilled with arising on completion

Logged by KHN

Figure 1 of 1
25/03/2010

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

geotechnics

TRIAL PIT RECORD

Trial Pit

Project ARTHUR ROBERTS - SCRAP YARD, LLANDUDNO

Engineer ARCH MOTORS

Trial Pit TP8
Project No PN050946

Chromium

Client ARCH MOTORS

Scale 1:50

Samples and Tests

Depth	Type	Stratum No	Results
0.00- 0.20	D		
0.00- 0.20	ES		
0.20- 0.30	D		
0.20- 0.30	ES		
0.30- 0.65	D		
0.40- 0.50	D		
0.40- 0.50	ES		
1.10	D		
1.10	ES		

Strata

Description	Depth	Legend
	G.L.	
MADE GROUND: comprising grey sandy coarse gravel and cobbles, with a few roots and fragments of cloth, glass, metal, locally is weakly cemented	0.20	1
MADE GROUND: comprising pinkish brown sandy medium to coarse angular limestone gravel	0.30	2
MADE GROUND: comprising black, gravelly sand (ash) with fragments of ceramics, pieces of metal glass etc	1.05	3
From 0.65m with occasional cobbles and boulder sized fragments of orange brown mottled black, olive green, vesicular slaggy material	1.10	4
Firm brown sandy CLAY		
End of Excavation		

Excavation

Plant Client supplied tracked mini
Date 12/03/2010
Shoring None.
Stability Stable during excavation.

Width (B) 0.75
Length (C) 1.25
Date Backfilled 11/03/2010

Groundwater

Depth Observed	Depth of Pit	Details
		None encountered during excavation.

Remarks Excavated using clients own tracked excavator, backfilled with arising on completion

Logged by KHN

Figure 1 of 1
25/03/2010

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

geotechnics

TRIAL PIT RECORD

Trial Pit

Project ARTHUR ROBERTS - SCRAP YARD, LLANDUDNO

Engineer ARCH MOTORS

Trial Pit TP8
Project No PN050946

LEAD

Client ARCH MOTORS

Scale 1:50

Samples and Tests				Strata		
Depth	Type	Stratum No	Results	Description	Depth	Legend
					G.L.	
0.00- 0.20	D			MADE GROUND: comprising grey sandy coarse gravel and cobbles, with a few roots and fragments of cloth, glass, metal, locally is weakly cemented	0.20	1
0.00- 0.20	ES					2
0.20- 0.30	D			MADE GROUND: comprising pinkish brown sandy medium to coarse angular limestone gravel	0.30	
0.20- 0.30	ES					3
0.30- 0.65	D			MADE GROUND: comprising black, gravelly sand (ash) with fragments of ceramics, pieces of metal glass etc	1.05	
0.40- 0.50	D					
0.40- 0.50	ES			From 0.65m with occasional cobbles and boulder sized fragments of orange brown mottled black, olive green, vesicular slaggy material	1.10	4
1.10	D					
1.10	ES			Firm brown sandy CLAY		
				End of Excavation		

Excavation

Plant Client supplied tracked mini
Date 12/03/2010
Shoring None.
Stability Stable during excavation.

Width (B) 0.75
Length (C) 1.25
Date Backfilled 11/03/2010

Groundwater

Depth Observed	Depth of Pit	Details
		None encountered during excavation.

Remarks Excavated using clients own tracked excavator, backfilled with arising on completion

Logged by KHN

Figure 1 of 1
25/03/2010

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

geotechnics

TRIAL PIT RECORD

Trial Pit

Project ARTHUR ROBERTS - SCRAP YARD, LLANDUDNO

Engineer ARCH MOTORS

Trial Pit TP8
Project No PN050946

NICKEL

Client ARCH MOTORS

Scale 1:50

Samples and Tests				Strata		
Depth	Type	Stratum No	Results	Description	Depth	Legend
0.00- 0.20	D			MADE GROUND: comprising grey sandy coarse gravel and cobbles, with a few roots and fragments of cloth, glass, metal, locally is weakly cemented	G.L.	1
0.00- 0.20	ES				0.20	
0.20- 0.30	D			MADE GROUND: comprising pinkish brown sandy medium to coarse angular limestone gravel	0.30	2
0.20- 0.30	ES					
0.30- 0.65	D			MADE GROUND: comprising black, gravelly sand (ash) with fragments of ceramics, pieces of metal glass etc	1.05	3
0.40- 0.50	D					
0.40- 0.50	ES			From 0.65m with occasional cobbles and boulder sized fragments of orange brown mottled black, olive green, vesicular slaggy material	1.10	4
1.10	D					
1.10	ES			Firm brown sandy CLAY		
				End of Excavation		

Excavation

Plant Client supplied tracked mini
Date 12/03/2010
Shoring None.
Stability Stable during excavation.

Width (B) 0.75
Length (C) 1.25
Date Backfilled 11/03/2010

Groundwater

Depth Observed	Depth of Pit	Details
		None encountered during excavation.

Remarks Excavated using clients own tracked excavator, backfilled with arising on completion

Logged by KHN

Figure 1 of 1
25/03/2010

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

geotechnics

TRIAL PIT RECORD — Trial Trench

Project ARTHUR ROBERTS - SCRAP YARD, LLANDUDNO

Engineer ARCH MOTORS

Trial Pit TP9
Project No PN050946

EAH C12 - C16

Client ARCH MOTORS

Scale 1:50

Samples and Tests				Strata		
Depth	Type	Stratum No	Results	Description	Depth	Legend
0.00- 0.30	D			Pale brownish grey in places mottled pink and white sandy, locally clayey, gravel and cobbles. Gravel and cobbles include limestone and brick. Occasional fragments of wire, plastic, metal (hub cap)	G.L.	1
0.00- 0.30	ES				0.30	
0.30- 0.55	D			Black locally mottled grey clayey sandy (ash) gravel. Fragments of glass, ceramics. Faint hydrocarbon odour	0.55	2
0.30- 0.55	ES			Stiff brown becoming grey slightly sandy CLAY	0.60	3
0.55- 0.60	D			End of Excavation		
0.55- 0.60	ES					

Excavation

Plant Client supplied tracked mini
Date 12/03/2010
Shoring None.
Stability Stable during excavation.

Width (B) 0.75
Length (C) 4.00
Date Backfilled 11/03/2010

Groundwater

Depth Observed	Depth of Pit	Details

Remarks Excavated using client supplied mini excavator. Backfilled with arisings on completion Hole not as deep as previous holes due to presence of natural strata at relatively shallow depth

Logged by KHN

Figure 1 of 1
25/03/2010

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

geotechnics

TRIAL PIT RECORD — Trial Trench

Project: ARTHUR ROBERTS - SCRAP YARD, LLANDUDNO
Engineer: ARCH MOTORS
Trial Pit: TP9
Project No: PN050946

E.P.H C16 - C21

Client: ARCH MOTORS
Scale: 1:50

Samples and Tests				Strata		
Depth	Type	Stratum No	Results	Description	Depth	Legend
0.00- 0.30	D			Pale brownish grey in places mottled pink and white sandy, locally clayey, gravel and cobbles. Gravel and cobbles include limestone and brick. Occasional fragments of wire, plastic, metal (hub cap)	G.L.	1
0.00- 0.30	ES				0.30	2
0.30- 0.55	D			Black locally mottled grey clayey sandy (ash) gravel. Fragments of glass, ceramics. Faint hydrocarbon odour	0.55	3
0.30- 0.55	ES			Stiff brown becoming grey slightly sandy CLAY	0.60	
0.55- 0.60	D			End of Excavation		
0.55- 0.60	ES					

Excavation

Plant: Client supplied tracked mini
Date: 12/03/2010
Shoring: None.
Stability: Stable during excavation.
Width (B): 0.75
Length (C): 4.00
Date Backfilled: 11/03/2010

Groundwater

Depth Observed	Depth of Pit	Details

Remarks: Excavated using client supplied mini excavator. Backfilled with arisings on completion Hole not as deep as previous holes due to presence of natural strata at relatively shallow depth

Logged by: KHN
Figure: 1 of 1
25/03/2010

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

geotechnics

TRIAL PIT RECORD — Trial Trench

Project ARTHUR ROBERTS - SCRAP YARD, LLANDUDNO

Engineer ARCH MOTORS

Trial Pit TP9
Project No PN050946

EPH C21-C28

Client ARCH MOTORS

Scale 1:50

Samples and Tests				Strata		
Depth	Type	Stratum No	Results	Description	Depth	Legend
0.00- 0.30	D				G.L.	
0.00- 0.30	ES			Pale brownish grey in places mottled pink and white sandy, locally clayey, gravel and cobbles. Gravel and cobbles include limestone and brick. Occasional fragments of wire, plastic, metal (hub cap)	0.30	1
0.30- 0.55	D			Black locally mottled grey clayey sandy (ash) gravel. Fragments of glass, ceramics. Faint hydrocarbon odour	0.55	2
0.30- 0.55	ES			Stiff brown becoming grey slightly sandy CLAY	0.60	3
0.55- 0.60	D			End of Excavation		
0.55- 0.60	ES					

Excavation

Plant Client supplied tracked mini
Date 12/03/2010
Shoring None.
Stability Stable during excavation.

Width (B) 0.75
Length (C) 4.00
Date Backfilled 11/03/2010

Groundwater

Depth Observed	Depth of Pit	Details

Remarks Excavated using client supplied mini excavator. Backfilled with arisings on completion Hole not as deep as previous holes due to presence of natural strata at relatively shallow depth

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

Logged by KHN

Figure 1 of 1
25/03/2010

geotechnics

TRIAL PIT RECORD

Trial Trench

Project ARTHUR ROBERTS - SCRAP YARD, LLANDUDNO

Engineer ARCH MOTORS

Trial Pit TP9
Project No PN050946

EPH C35 -40

Client ARCH MOTORS

Scale 1:50

Samples and Tests				Strata		
Depth	Type	Stratum No	Results	Description	Depth	Legend
0.00- 0.30	D			Pale brownish grey in places mottled pink and white sandy, locally clayey, gravel and cobbles. Gravel and cobbles include limestone and brick. Occasional fragments of wire, plastic, metal (hub cap)	G.L.	1
0.00- 0.30	ES				0.30	
0.30- 0.55	D			Black locally mottled grey clayey sandy (ash) gravel. Fragments of glass, ceramics. Faint hydrocarbon odour	0.55	2
0.30- 0.55	ES			Stiff brown becoming grey slightly sandy CLAY	0.60	3
0.55- 0.60	D			End of Excavation		
0.55- 0.60	ES					

Excavation

Plant Client supplied tracked mini
Date 12/03/2010
Shoring None.
Stability Stable during excavation.

Width (B) 0.75
Length (C) 4.00
Date Backfilled 11/03/2010

Groundwater

Depth Observed	Depth of Pit	Details

Remarks Excavated using client supplied mini excavator. Backfilled with arisings on completion Hole not as deep as previous holes due to presence of natural strata at relatively shallow depth

Logged by KHN

Figure 1 of 1
25/03/2010

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

geotechnics

TRIAL PIT RECORD — Trial Trench

Project ARTHUR ROBERTS - SCRAP YARD, LLANDUDNO

Engineer ARCH MOTORS

Trial Pit TP9

Project No PN050946

EPH C8-C35

Client ARCH MOTORS

Scale 1:50

Samples and Tests				Strata		
Depth	Type	Stratum No	Results	Description	Depth	Legend
0.00- 0.30	D			Pale brownish grey in places mottled pink and white sandy, locally clayey, gravel and cobbles. Gravel and cobbles include limestone and brick. Occasional fragments of wire, plastic, metal (hub cap)	G.L.	1
0.00- 0.30	ES				0.30	
0.30- 0.55	D			Black locally mottled grey clayey sandy (ash) gravel. Fragments of glass, ceramics. Faint hydrocarbon odour	0.55	2
0.30- 0.55	ES					
0.55- 0.60	D			Stiff brown becoming grey slightly sandy CLAY	0.60	3
0.55- 0.60	ES			End of Excavation		

Excavation

Plant Client supplied tracked mini

Date 12/03/2010

Shoring None.

Stability Stable during excavation.

Width (B) 0.75

Length (C) 4.00

Date Backfilled 11/03/2010

Groundwater

Depth Observed	Depth of Pit	Details

Remarks Excavated using client supplied mini excavator. Backfilled with arisings on completion Hole not as deep as previous holes due to presence of natural strata at relatively shallow depth

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

Logged by KHN

Figure 1 of 1

25/03/2010

geotechnics

TRIAL PIT RECORD

Trial Trench

Project ARTHUR ROBERTS - SCRAP YARD, LLANDUDNO

Engineer ARCH MOTORS

Trial Pit TP9

Project No PN050946

EPH RANGE C10 - C4

Client ARCH MOTORS

Scale 1:50

Samples and Tests

Depth	Type	Stratum No	Results
0.00- 0.30	D		
0.00- 0.30	ES		
0.30- 0.55	D		
0.30- 0.55	ES		
0.55- 0.60	D		
0.55- 0.60	ES		

Strata

Description	Depth	Legend
	G.L.	
Pale brownish grey in places mottled pink and white sandy, locally clayey, gravel and cobbles. Gravel and cobbles include limestone and brick. Occasional fragments of wire, plastic, metal (hub cap)	0.30	1
Black locally mottled grey clayey sandy (ash) gravel. Fragments of glass, ceramics. Faint hydrocarbon odour	0.55	2
Stiff brown becoming grey slightly sandy CLAY	0.60	3
End of Excavation		

Excavation

Plant Client supplied tracked mini

Date 12/03/2010

Shoring None.

Stability Stable during excavation.

Width (B) 0.75

Length (C) 4.00

Date Backfilled 11/03/2010

Groundwater

Depth Observed	Depth of Pit	Details

Remarks Excavated using client supplied mini excavator. Backfilled with arisings on completion Hole not as deep as previous holes due to presence of natural strata at relatively shallow depth

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

Logged by KHN

Figure 1 of 1

25/03/2010

geotechnics

TRIAL PIT RECORD — Trial Trench

Project ARTHUR ROBERTS - SCRAP YARD, LLANDUDNO

Engineer ARCH MOTORS

Trial Pit TP9
Project No PN050946

ARSENIC

Client ARCH MOTORS

Scale 1:50

Samples and Tests				Strata		
Depth	Type	Stratum No	Results 10 40	Description	Depth	Legend
0.00- 0.30	D			Pale brownish grey in places mottled pink and white sandy, locally clayey, gravel and cobbles. Gravel and cobbles include limestone and brick. Occasional fragments of wire, plastic, metal (hub cap)	G.L.	1
0.00- 0.30	ES				0.30	
0.30- 0.55	D			Black locally mottled grey clayey sandy (ash) gravel. Fragments of glass, ceramics. Faint hydrocarbon odour	0.55	2
0.30- 0.55	ES					
0.55- 0.60	D			Stiff brown becoming grey slightly sandy CLAY	0.60	3
0.55- 0.60	ES			End of Excavation		

Excavation

Plant Client supplied tracked mini
Date 12/03/2010
Shoring None.
Stability Stable during excavation.

Width (B) 0.75
Length (C) 4.00
Date Backfilled 11/03/2010

Groundwater

Depth Observed	Depth of Pit	Details

Remarks Excavated using client supplied mini excavator. Backfilled with arisings on completion Hole not as deep as previous holes due to presence of natural strata at relatively shallow depth

Logged by KHN

Figure 1 of 1
25/03/2010

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

geotechnics

TRIAL PIT RECORD — Trial Trench

Project ARTHUR ROBERTS - SCRAP YARD, LLANDUDNO

Engineer ARCH MOTORS

Trial Pit TP9
Project No PN050946

CHROMIUM

Client ARCH MOTORS

Scale 1:50

Samples and Tests				Strata		
Depth	Type	Stratum No	Results 10 20 30	Description	Depth	Legend
0.00- 0.30	D			Pale brownish grey in places mottled pink and white sandy, locally clayey, gravel and cobbles. Gravel and cobbles include limestone and brick. Occasional fragments of wire, plastic, metal (hub cap)	G.L.	
0.00- 0.30	ES				0.30	1
0.30- 0.55	D			Black locally mottled grey clayey sandy (ash) gravel. Fragments of glass, ceramics. Faint hydrocarbon odour	0.55	2
0.30- 0.55	ES				0.60	3
0.55- 0.60	D			Stiff brown becoming grey slightly sandy CLAY		
0.55- 0.60	ES			End of Excavation		

Excavation

Plant Client supplied tracked mini
Date 12/03/2010
Shoring None.
Stability Stable during excavation.

Width (B) 0.75
Length (C) 4.00
Date Backfilled 11/03/2010

Groundwater

Depth Observed	Depth of Pit	Details

Remarks Excavated using client supplied mini excavator. Backfilled with arisings on completion Hole not as deep as previous holes due to presence of natural strata at relatively shallow depth

Logged by KHN

Figure 1 of 1
25/03/2010

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

geotechnics

TRIAL PIT RECORD — Trial Trench

Project ARTHUR ROBERTS - SCRAP YARD, LLANDUDNO

Engineer ARCH MOTORS

Trial Pit TP9
Project No PN050946

LEAD

Client ARCH MOTORS

Scale 1:50

Samples and Tests				Strata		
Depth	Type	Stratum No	Results	Description	Depth	Legend
					G.L.	
0.00- 0.30	D			Pale brownish grey in places mottled pink and white sandy, locally clayey, gravel and cobbles. Gravel and cobbles include limestone and brick. Occasional fragments of wire, plastic, metal (hub cap)	0.30	1
0.00- 0.30	ES					
0.30- 0.55	D			Black locally mottled grey clayey sandy (ash) gravel. Fragments of glass, ceramics. Faint hydrocarbon odour	0.55	2
0.30- 0.55	ES					
0.55- 0.60	D			Stiff brown becoming grey slightly sandy CLAY	0.60	3
0.55- 0.60	ES					
				End of Excavation		

Excavation

Plant Client supplied tracked mini
Date 12/03/2010
Shoring None.
Stability Stable during excavation.

Width (B) 0.75
Length (C) 4.00
Date Backfilled 11/03/2010

Groundwater

Depth Observed	Depth of Pit	Details

Remarks Excavated using client supplied mini excavator. Backfilled with arisings on completion Hole not as deep as previous holes due to presence of natural strata at relatively shallow depth

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

Logged by KHN

Figure 1 of 1
25/03/2010

geotechnics

TRIAL PIT RECORD

Trial Trench

Project ARTHUR ROBERTS - SCRAP YARD, LLANDUDNO

Engineer ARCH MOTORS

Trial Pit TP9

Project No PN050946

NICKEL

Client ARCH MOTORS

Scale 1:50

Samples and Tests

Depth	Type	Stratum No	Results 25 50 75
0.00- 0.30	D		
0.00- 0.30	ES		
0.30- 0.55	D		
0.30- 0.55	ES		
0.55- 0.60	D		
0.55- 0.60	ES		

Strata

Description	Depth	Legend
	G.L.	
Pale brownish grey in places mottled pink and white sandy, locally clayey, gravel and cobbles. Gravel and cobbles include limestone and brick. Occasional fragments of wire, plastic, metal (hub cap)	0.30	1
Black locally mottled grey clayey sandy (ash) gravel. Fragments of glass, ceramics. Faint hydrocarbon odour	0.55	2
Stiff brown becoming grey slightly sandy CLAY	0.60	3
End of Excavation		

Excavation

Plant Client supplied tracked mini

Date 12/03/2010

Shoring None.

Width (B) 0.75

Length (C) 4.00

Date Backfilled 11/03/2010

Stability Stable during excavation.

Groundwater

Depth Observed	Depth of Pit	Details

Remarks Excavated using client supplied mini excavator. Backfilled with arisings on completion Hole not as deep as previous holes due to presence of natural strata at relatively shallow depth

Logged by KHN

Figure 1 of 1

25/03/2010

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

geotechnics

Thomas Arthur Roberts
(trading as Arch Motors)
(Claimant)

and

Conwy Borough Council
(Defendant)

EXHIBIT KHN 6

PHOTOGRAPHS