Glyn Munday

From:	Rob Cracknell [robert@tecconstruction.co.uk]
Sent:	17 November 2013 19:34
To:	Glyn Munday; Datoo Safder (NHS BARNET CCG)
Cc:	Terry Cracknell
Subject:	Fwd: Lordship Lane results
Attachments:	1-2-3 - CLEA METALS plus pg1.pdf; ATT41079.htm; 1-2-3 - CLEA METALS plus pg2.pdf; ATT41080.htm; asbestos.pdf; ATT41081.htm; PAH.pdf; ATT41082.htm; WACS.pdf; ATT41083.htm; KMBT_C20020131115171939.pdf; ATT41084.htm

Hi Glyn

Please see below details of survey taken last week with Lab results.

I think I will need to have a meeting with the company I have earmarked for Muck away to determine the best way of disposing of spoil as it would appear some is not classed as Inert?

I will try to contact them tomorrow and keep you informed.

Regards

ROBERT CRACKNELL
PROJECTS DIRECTOR

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Begin forwarded message:

From: <Michael.McCann@apgeotechnics.co.uk>
Date: 15 November 2013 16:28:55 GMT
To: <rob@tecconstruction.co.uk>
Subject: Lordship Lane results

Good afternoon Rob,

I have attached the results and my comments below:-

WACS: Only spoil heap HB was considered as **INERT** landfill
The remainders have only have higher levels of sulphate and total dissolved solids (TDS) placing them in **Stable non reactive HAZARDOUS waste in non – hazardous landfill.**

PAH: Only slightly high levels of PAH were found in TP5 @ 0.50 m depth, this was where the landfill was discovered.

Heavy Metals: Although there is not a threshold level published for lead, levels have been identified in TP1 @0.50, TP4@ 0.50 and HB @ 890 above 460 mg/kg which, in our opinion, consider high.

3 samples has revealed Amosite (Brown Asbestos) and Chrysotile (White Asbestos) to be present.

A location plan sketch is also attached.

Information from ESET NOD32 Antivirus, version of virus signature database 9058 (20131117)

The message was checked by ESET NOD32 Antivirus.

http://www.eset.com

673 Lordship Lane,
London N22 5LA

Site plan showing field work locations

Scale as shown

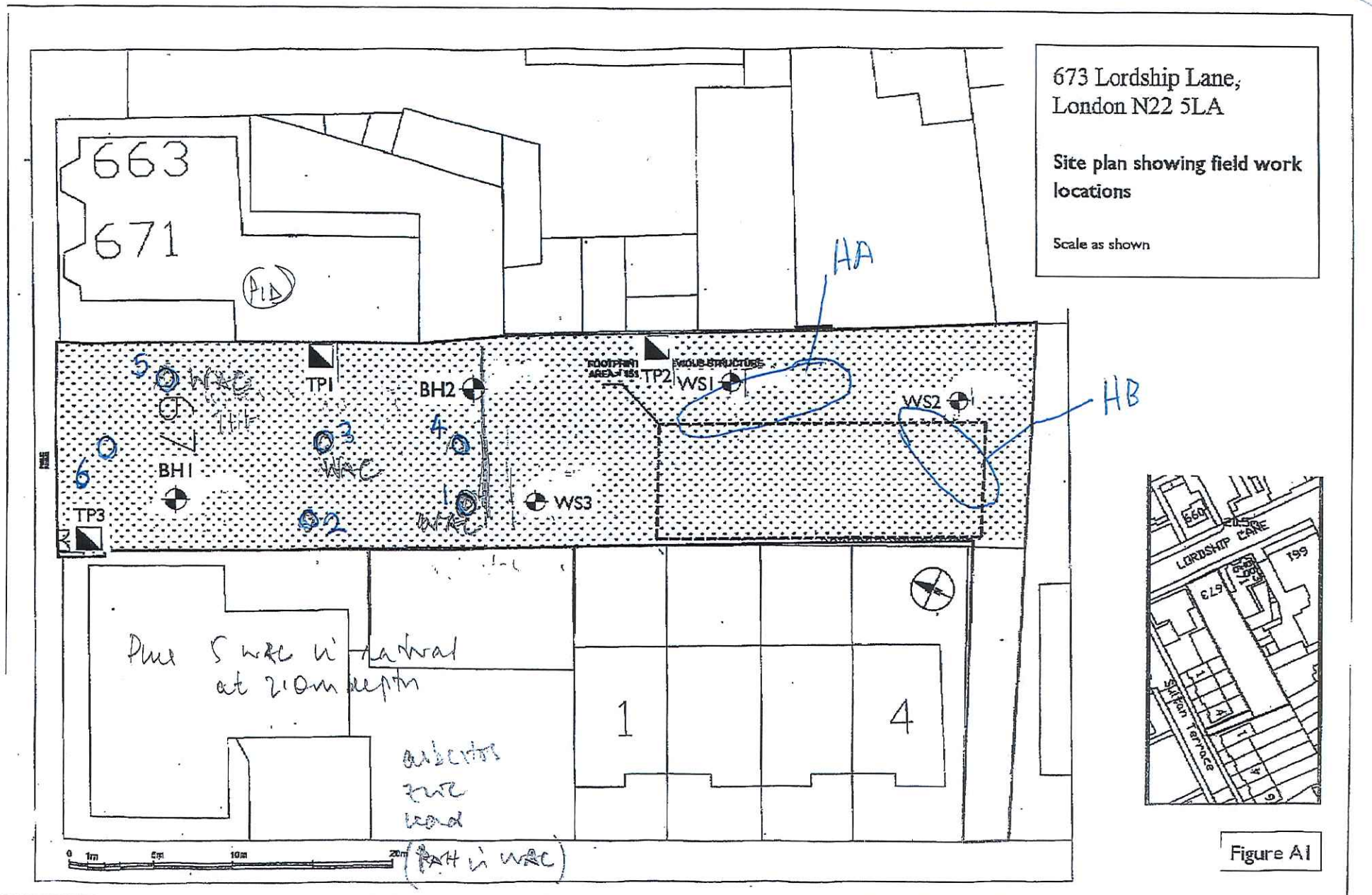


Figure A1

CONTAMINANTS IN SOIL

Project: LORDSHIP LANE, ADDITIONAL WORKS
Client: Tec Construction Limited

Project No: 3995
Sheet No: 1/2

Location	Sample	Depth	Arsenic	Cadmium	Chromium	Lead	Mercury	Nickel	Copper	Zinc	Selenium	Boron	Chromium	Phenols	Organic	TPH by GCMS						PAH	pH
		m			trivalent		inorganic					water sol.	hexavalent	tot. monohydric	content, %	C8 - C10	C10 - C12	C12 - C16	C16 - C21	C21 - C35	Total C8 - C35	Screen	value
TP1		0.50				570				281													
TP2		0.50				401				120													
TP3		1.00				173				110													
TP4		0.50				469				136													
TP5		0.50				158				117													
		1.20				24				95													
TP6		1.00				252				112													
GAC[1]	residential			3	627				2330	3750		291	4.3	210									
	commercial			348	8840				71700	665000		192000	35	1100000									
CLEA[2]	residential		32				170	130			350												
	commercial		640				3600	1800			13000												

Notes

1. LQM/CIEH GAC given at 1% soil organic matter
2. CLEA SGVs given at 6% soil organic matter

All units are mg/kg dry weight of soil unless otherwise stated, except for pH which is dimensionless

Exceptions denoted thus: Residential XX
Commercial XX

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CONTAMINANTS IN SOIL

Project: LORDSHIP LANE, ADDITIONAL WORKS
Client: Tec Construction Limited

Project No: 3995
Sheet No: 2/2

Location	Sample	Depth m	Arsenic	Cadmium	Chromium trivalent	Lead	Mercury inorganic	Nickel	Copper	Zinc	Selenium	Boron water sol.	Chromium hexavalent	Phenols tot. monohydric	Organic content, %	TPH by GCMS C8 - C10	TPH by GCMS C10 - C12	TPH by GCMS C12 - C16	TPH by GCMS C16 - C21	TPH by GCMS C21 - C35	TPH by GCMS Total C8 - C35	PAH Screen	pH value
HA						388				148													
HB						890				301													
GAC[1]	residential			3	627				2330	3750		291	4.3	210										
	commercial			348	8840				71700	665000		192000	35	1100000										
CLEA[2]	residential		32				170	130			350													
	commercial		640				3600	1800			13000													

Notes

1. LQM/CIEH GAC given at 1% soil organic matter
2. CLEA SGVs given at 6% soil organic matter

All units are mg/kg dry weight of soil unless otherwise stated, except for pH which is dimensionless

Exceptions denoted thus: Residential XX
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CONTAMINANTS IN SOIL

Project: LORDSHIP LANE, ADDITIONAL
Client: Tec Construction Limited

Project No: 3995
Sheet No: 1/1

Location	Sample	Depth	Asbestos identification		
		m	Description of matrix	Overall percentage of asbestos identified (approx.)	Type of asbestos identified
TP1		0.50	MADE GROUND		Chrysotile (White Asbestos)
TP2		0.50	MADE GROUND		Chrysotile (White Asbestos)
TP3		1.00	MADE GROUND		None identified
TP4		0.50	MADE GROUND		Amosite (Brown Asbestos)
TP5		0.50	MADE GROUND		None identified
TP5		1.20	MADE GROUND		None identified
TP6		1.00	MADE GROUND		None identified
HA			MADE GROUND		None identified
HB			MADE GROUND		None identified

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CONTAMINANTS IN SOIL

Project: LORDSHIP LANE, ADDITIONAL
Client: Tec Construction Limited

Project No: 3995
Sheet No: 1/1

Speciated Polyaromatic Hydrocarbons by GCMS

Location	TP1	TP1	TP2	TP3	TP5	TP5						LQM/CIEH GAC[3]		
Sample														
Depth, m	0.50	2.00	2.00	2.00	0.50	1.20						residential	allotments	commercial
Determinand														
PAH														
Naphthalene	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1						1.5	4.1	200
Acenaphthylene	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1						170	28	84000
Acenaphthene	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1						210	34	85000
Fluorene	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1						160	27	64000
Phenanthrene	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1						92	16	22000
Anthracene	<0.1	<0.1	<0.1	<0.1	0.9	<0.1						2300	380	530000
Fluoranthene	<0.1	<0.1	<0.1	<0.1	5.6	<0.1						260	52	23000
Pyrene	<0.1	<0.1	<0.1	<0.1	4.5	<0.1						560	110	54000
Benzo(a)anthracene	<0.1	<0.1	<0.1	<0.1	3.6	<0.1						3.1	2.5	90
Chrysene	<0.1	<0.1	<0.1	<0.1	3.2	<0.1						6.0	2.6	140
Benzo(b)fluoranthene	<0.1	<0.1	<0.1	<0.1	2.7	<0.1						5.6	3.5	100
Benzo(k)fluoranthene	<0.1	<0.1	<0.1	<0.1	2.9	<0.1						8.5	6.8	140
Benzo(a)pyrene	<0.1	<0.1	<0.1	<0.1	3.1	<0.1						0.83	0.6	14
Indeno(123-cd)pyrene	<0.1	<0.1	<0.1	<0.1	2.2	<0.1						3.2	1.8	60
Dibenzo(ah)anthracene	<0.1	<0.1	<0.1	<0.1	0.6	<0.1						0.76	0.76	13
Benzo(ghi)perylene	<0.1	<0.1	<0.1	<0.1	1.6	<0.1						44	70	650
Total PAH	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**30.9**	**<0.1**								

Notes

1. Total PAH = Sum of EPA16 identified components
2. The results are expressed as mg/kg dry weight soil after correction for moisture content
3. GAC given at 1% soil organic matter

Exceptions denoted thus: Residential XX
Commercial [redacted]

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THE ENVIRONMENTAL LABORATORY LTD

Waste Acceptance Criteria ANALYTICAL *RESULTS*

Report No:	ANALYTICAL REPORT No. AR51596				Page 8 of 16		
					CLIENT:	AP Geotechnics Limited	
Project Name:	Location: Lordship Lane						
Lab Reference	90099				Landfill Waste Acceptance Criteria Limits		
Sampling Date	---				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID	TP1						
Depth	0.50						
Solid Waste Analysis							
TOC (%)	0.9				3%	5%	6%
Loss on Ignition (%)**	5.3				--	--	10%
BTEX (mg/kg)**	<0.01				6	--	--
Sum of PCBs (mg/kg)**	<0.01				1	--	--
Mineral Oil (mg/kg)**	<5				500	--	--
Total PAH (mg/kg)**	2.5				100	--	--
pH (Units)**	9.8				--	--	--
Acid Neutralisation Capacity (mol/kg)	<0.1				--	To be evaluated	To be evaluated
Eluate Analysis	2:1	8:1		Cumulative 10:1	Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg (mg/kg)		
	mg/l	mg/l		mg/kg			
Arsenic*	<0.005	<0.005		<0.1	0.5	2	25
Barium*	0.084	0.034		0.2	20	100	300
Cadmium*	<0.001	<0.001		<0.01	0.04	1	5
Chromium*	0.008	<0.005		<0.1	0.5	10	70
Copper*	0.008	<0.005		<0.1	2	50	100
Mercury*	<0.0001	<0.0001		<0.001	0.01	0.2	2
Molybdenum*	0.015	<0.005		<0.1	0.5	10	30
Nickel*	<0.005	<0.005		<0.1	0.4	10	40
Lead*	<0.005	0.019		<0.1	0.5	10	50
Antimony	<0.005	<0.005		<0.01	0.06	0.7	5
Selenium*	<0.005	<0.005		<0.01	0.1	0.5	7
Zinc*	0.007	0.007		<0.1	4	50	200
Chloride*	10	24		88	800	15000	25000
Fluoride*	<1	<1		<1	10	150	500
Sulphate*	562	1333		4850	1000	20000	50000
TDS	2390	960		6058	4000	60000	100000
Phenol Index	<0.5	<0.5		<0.5	1	-	-
DOC	<0.001	<0.001		<1	500	800	1000
Leach Test Information							
pH *	7.7	8.2					
EC*	2440	1109					
Sample Mass (kg)	0.225						
Dry Matter (%)	78						
Moisture (%)	30						
Stage 1							
Volume Eluate L2 (litres)	0.297						
Filtered Eluate VE1 (litres)	0.226						

Results are expressed on a dry weight basis, after correction for moisture content where applicable
Stated limits are for guidance only and ELAB cannot be held responsible for any discrepencies with current legislation

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Waste Acceptance Criteria ANALYTICAL *RESULTS*

Report No:	ANALYTICAL REPORT No. AR51596				Page 7 of 16		
					CLIENT:	AP Geotechnics Limited	
Project Name:	Location: Lordship Lane						
Lab Reference	90100				Landfill Waste Acceptance Criteria Limits		
Sampling Date	---				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID	TP1						
Depth	2.00						
Solid Waste Analysis							
TOC (%)	0.2				3%	5%	6%
Loss on Ignition (%)**	6.6				--	--	10%
BTEX (mg/kg)**	<0.01				6	--	--
Sum of PCBs (mg/kg)**	<0.01				1	--	--
Mineral Oil (mg/kg)**	26				500	--	--
Total PAH (mg/kg)**	<0.5				100	--	--
pH (Units)**	7.7				--	--	--
Acid Neutralisation Capacity (mol/kg)	<0.1				--	To be evaluated	To be evaluated
Eluate Analysis	2:1	8:1		Cumulative 10:1	Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg (mg/kg)		
	mg/l	mg/l		mg/kg			
Arsenic*	<0.005	<0.005		<0.1	0.5	2	25
Barium*	0.007	<0.005		<0.1	20	100	300
Cadmium*	<0.001	<0.001		<0.01	0.04	1	5
Chromium*	<0.005	<0.005		<0.1	0.5	10	70
Copper*	<0.005	<0.005		<0.1	2	50	100
Mercury*	<0.0001	<0.0001		<0.001	0.01	0.2	2
Molybdenum*	<0.005	<0.005		<0.1	0.5	10	30
Nickel*	<0.005	<0.005		<0.1	0.4	10	40
Lead*	<0.005	<0.005		<0.1	0.5	10	50
Antimony	<0.005	<0.005		<0.01	0.06	0.7	5
Selenium*	<0.005	<0.005		<0.01	0.1	0.5	7
Zinc*	0.005	0.007		<0.1	4	50	200
Chloride*	4	7		27	800	15000	25000
Fluoride*	<1	<1		<1	10	150	500
Sulphate*	99	337		1168	1000	20000	50000
TDS	590	170		1045	4000	60000	100000
Phenol Index	<0.5	<0.5		<0.5	1	-	-
DOC	<0.001	<0.001		<1	500	800	1000
Leach Test Information							
pH *	8.1	8.1					
EC*	777	269					
Sample Mass (kg)	0.226						
Dry Matter (%)	77						
Moisture (%)	31						
Stage 1							
Volume Eluate L2 (litres)	0.296						
Filtered Eluate VE1 (litres)	0.148						

Results are expressed on a dry weight basis, after correction for moisture content where applicable
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Waste Acceptance Criteria ANALYTICAL ***RESULTS***

Report No:	ANALYTICAL REPORT No. AR51596				Page 8 of 16		
					CLIENT:	AP Geotechnics Limited	
Project Name:	Location: Lordship Lane						
Lab Reference	80102				Landfill Waste Acceptance Criteria Limits		
Sampling Date	---				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID	TP2						
Depth	2.00						
Solid Waste Analysis							
TOC (%)	0.2				3%	5%	6%
Loss on Ignition (%)**	5.6				--	--	10%
BTEX (mg/kg)**	<0.01				6	--	--
Sum of PCBs (mg/kg)**	<0.01				1	--	--
Mineral Oil (mg/kg)**	<5				500	--	--
Total PAH (mg/kg)**	<0.5				100	--	--
pH (Units)**	7.8				--	--	--
Acid Neutralisation Capacity (mol/kg)	<0.1				--	To be evaluated	To be evaluated
Eluate Analysis	2:1	8:1		Cumulative 10:1	Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg (mg/kg)		
	mg/l	mg/l		mg/kg			
Arsenic*	<0.005	<0.005		<0.1	0.5	2	25
Barium*	<0.005	<0.005		<0.1	20	100	300
Cadmium*	<0.001	<0.001		<0.01	0.04	1	5
Chromium*	<0.005	<0.005		<0.1	0.5	10	70
Copper*	<0.005	<0.005		<0.1	2	50	100
Mercury*	<0.0001	<0.0001		<0.001	0.01	0.2	2
Molybdenum*	<0.005	<0.005		<0.1	0.5	10	30
Nickel*	<0.005	<0.005		<0.1	0.4	10	40
Lead*	<0.005	<0.005		<0.1	0.5	10	50
Antimony	<0.005	<0.005		<0.01	0.06	0.7	5
Selenium*	<0.005	<0.005		<0.01	0.1	0.5	7
Zinc*	<0.005	0.017		<0.1	4	50	200
Chloride*	6	21		72	800	15000	25000
Fluoride*	<1	<1		<1	10	150	500
Sulphate*	123	276		1010	1000	20000	50000
TDS	620	210		1352	4000	60000	100000
Phenol Index	<0.5	<0.5		<0.5	1	-	-
DOC	<0.001	<0.001		<1	500	800	1000
Leach Test Information							
pH *	7.9	7.6					
EC*	857	336					
Sample Mass (kg)	0.225						
Dry Matter (%)	78						
Moisture (%)	30						
Stage 1							
Volume Eluate L2 (litres)	0.298						
Filtered Eluate VE1 (litres)	0.194						

Results are expressed on a dry weight basis, after correction for moisture content where applicable
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Waste Acceptance Criteria ANALYTICAL *RESULTS*							
Report No:	ANALYTICAL REPORT No. AR61586						Page 9 of 16
					CLIENT:	AP Geotechnics Limited	
Project Name:	Location: Lordship Lane						
Lab Reference	90104				Landfill Waste Acceptance Criteria Limits		
Sampling Date	---				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID	TP3						
Depth	2.00						
Solid Waste Analysis							
TOC (%)	6.2				3%	5%	6%
Loss on Ignition (%)**	7.8				--	--	10%
BTEX (mg/kg)**	<0.01				6	--	--
Sum of PCBs (mg/kg)**	<0.01				1	--	--
Mineral Oil (mg/kg)**	<5				500	--	--
Total PAH (mg/kg)**	<0.5				100	--	--
pH (Units)**	7.7				--	--	--
Acid Neutralisation Capacity (mol/kg)	<0.1				--	To be evaluated	To be evaluated
Eluate Analysis	2:1	8:1		Cumulative 10:1	Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg (mg/kg)		
	mg/l	mg/l		mg/kg			
Arsenic*	<0.005	<0.005		<0.1	0.5	2	25
Barium*	0.015	0.020		<0.1	20	100	300
Cadmium*	<0.001	<0.001		<0.01	0.04	1	5
Chromium*	<0.005	<0.005		<0.1	0.5	10	70
Copper*	<0.005	<0.005		<0.1	2	50	100
Mercury*	<0.0001	<0.0001		<0.001	0.01	0.2	2
Molybdenum*	<0.005	<0.005		<0.1	0.5	10	30
Nickel*	<0.005	<0.005		<0.1	0.4	10	40
Lead*	<0.005	<0.005		<0.1	0.5	10	50
Antimony	<0.005	<0.005		<0.01	0.06	0.7	5
Selenium*	<0.005	<0.005		<0.01	0.1	0.5	7
Zinc*	0.011	0.012		<0.1	4	50	200
Chloride*	5	23		83	800	15000	25000
Fluoride*	<1	1		4	10	150	500
Sulphate*	1055	1504		6064	1000	20000	50000
TDS	2930	1770		8563	4000	60000	100000
Phenol Index	<0.5	<0.5		<0.5	1	-	-
DOC	<0.001	<0.001		<1	500	800	1000
Leach Test Information							
pH *	8.2	7.4					
EC*	2950	1932					
Sample Mass (kg)	0.221						
Dry Matter (%)	79						
Moisture (%)	28						
Stage 1							
Volume Eluate L2 (litres)	0.302						
Filtered Eluate VE1 (litres)	0.148						

Results are expressed on a dry weight basis, after correction for moisture content where applicable
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Waste Acceptance Criteria ANALYTICAL *RESULTS*

Report No:	ANALYTICAL REPORT No. AR51596				Page 10 of 16		
					CLIENT:	AP Geotechnics Limited	
Project Name:	Location: Lordship Lane						
Lab Reference	90107				Landfill Waste Acceptance Criteria Limits		
Sampling Date	—				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID	TP5						
Depth	0.50						
Solid Waste Analysis							
TOC (%)	0.2				3%	5%	6%
Loss on Ignition (%)**	7.7				--	--	10%
BTEX (mg/kg)**	<0.01				6	--	--
Sum of PCBs (mg/kg)**	<0.01				1	--	--
Mineral Oil (mg/kg)**	15				500	--	--
Total PAH (mg/kg)**	40.2				100	--	--
pH (Units)**	7.7				--	--	--
Acid Neutralisation Capacity (mol/kg)	<0.1				--	To be evaluated	To be evaluated
Eluate Analysis	2:1	8:1		Cumulative 10:1	Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg (mg/kg)		
	mg/l	mg/l		mg/kg			
Arsenic*	<0.005	<0.005		<0.1	0.5	2	25
Barium*	0.038	0.035		0.1	20	100	300
Cadmium*	<0.001	<0.001		<0.01	0.04	1	5
Chromium*	<0.005	<0.005		<0.1	0.5	10	70
Copper*	<0.005	<0.005		<0.1	2	50	100
Mercury*	<0.0001	<0.0001		<0.001	0.01	0.2	2
Molybdenum*	<0.005	<0.005		<0.1	0.5	10	30
Nickel*	<0.005	<0.005		<0.1	0.4	10	40
Lead*	<0.005	<0.005		<0.1	0.5	10	50
Antimony	<0.005	<0.005		<0.01	0.06	0.7	5
Selenium*	<0.005	<0.005		<0.01	0.1	0.5	7
Zinc*	0.008	0.010		<0.1	4	50	200
Chloride*	3	25		88	800	15000	25000
Fluoride*	<1	<1		<1	10	150	500
Sulphate*	407	846		3113	1000	20000	50000
TDS	1540	690		3615	4000	60000	100000
Phenol Index	<0.5	<0.5		<0.5	1	-	-
DOC	<0.001	<0.001		<1	500	800	1000
Leach Test Information							
pH *	8.0	7.7					
EC*	1700	858					
Sample Mass (kg)	0.225						
Dry Matter (%)	78						
Moisture (%)	30						
Stage 1							
Volume Eluate L2 (litres)	0.298						
Filtered Eluate VE1 (litres)	0.156						

Results are expressed on a dry weight basis, after correction for moisture content where applicable
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THE ENVIRONMENTAL LABORATORY LTD

Waste Acceptance Criteria **ANALYTICAL *RESULTS***

Report No:	ANALYTICAL REPORT No. AR51596				Page 11 of 16		
					CLIENT:	AP Geotechnics Limited	
Project Name:	Location: Lordship Lane						
Lab Reference	90111				Landfill Waste Acceptance Criteria Limits		
Sampling Date	—				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID	TP5						
Depth	2.50						
Solid Waste Analysis							
TOC (%)	0.4				3%	5%	6%
Loss on Ignition (%)**	8.6				--	--	10%
BTEX (mg/kg)**	<0.01				6	--	--
Sum of PCBs (mg/kg)**	<0.01				1	--	--
Mineral Oil (mg/kg)**	<5				500	--	--
Total PAH (mg/kg)**	<0.5				100	--	--
pH (Units)**	7.6				--	--	--
Acid Neutralisation Capacity (mol/kg)	<0.1				--	To be evaluated	To be evaluated
Eluate Analysis	2:1	8:1		Cumulative 10:1	Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg (mg/kg)		
	mg/l	mg/l		mg/kg			
Arsenic*	<0.005	<0.005		<0.1	0.5	2	25
Barium*	0.013	0.026		0.1	20	100	300
Cadmium*	<0.001	<0.001		<0.01	0.04	1	5
Chromium*	<0.005	<0.005		<0.1	0.5	10	70
Copper*	<0.005	<0.005		<0.1	2	50	100
Mercury*	<0.0001	<0.0001		<0.001	0.01	0.2	2
Molybdenum*	<0.005	<0.005		<0.1	0.5	10	30
Nickel*	<0.005	<0.005		<0.1	0.4	10	40
Lead*	<0.005	<0.005		<0.1	0.5	10	50
Antimony	<0.005	<0.005		<0.01	0.06	0.7	5
Selenium*	<0.005	<0.005		<0.01	0.1	0.5	7
Zinc*	0.009	0.010		<0.1	4	50	200
Chloride*	7	52		187	800	15000	25000
Fluoride*	<1	<1		<1	10	150	500
Sulphate*	1120	1341		5620	1000	20000	50000
TDS	2700	1880		8835	4000	60000	100000
Phenol Index	<0.5	<0.5		<0.5	1	-	-
DOC	<0.001	<0.001		<1	500	800	1000
Leach Test Information							
pH *	7.9	7.3					
EC*	2860	2060					
Sample Mass (kg)	0.220						
Dry Matter (%)	79						
Moisture (%)	27						
Stage 1							
Volume Eluate L2 (litres)	0.303						
Filtered Eluate VE1 (litres)	0.148						

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THE ENVIRONMENTAL LABORATORY LTD

Waste Acceptance Criteria ANALYTICAL RESULTS

Report No:	ANALYTICAL REPORT No. AR51596				Page 12 of 16		
					CLIENT:	AP Geotechnics Limited	
Project Name:	Location: Lordship Lane						
Lab Reference	90110				Landfill Waste Acceptance Criteria Limits		
Sampling Date	---				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID	TP6						
Depth	2.00						
Solid Waste Analysis							
TOC (%)	0.2				3%	5%	6%
Loss on Ignition (%)**	7.2				--	--	10%
BTEX (mg/kg)**	<0.01				6	--	--
Sum of PCBs (mg/kg)**	<0.01				1	--	--
Mineral Oil (mg/kg)**	<5				500	--	--
Total PAH (mg/kg)**	<0.5				100	--	--
pH (Units)**	7.9				--	--	--
Acid Neutralisation Capacity (mol/kg)	<0.1				--	To be evaluated	To be evaluated
Eluate Analysis	2:1	8:1		Cumulative 10:1	Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg (mg/kg)		
	mg/l	mg/l		mg/kg			
Arsenic*	<0.005	<0.005		<0.1	0.5	2	25
Barium*	0.007	0.007		<0.1	20	100	300
Cadmium*	<0.001	<0.001		<0.01	0.04	1	5
Chromium*	<0.005	<0.005		<0.1	0.5	10	70
Copper*	<0.005	<0.005		<0.1	2	50	100
Mercury*	<0.0001	<0.0001		<0.001	0.01	0.2	2
Molybdenum*	<0.005	<0.005		<0.1	0.5	10	30
Nickel*	<0.005	<0.005		<0.1	0.4	10	40
Lead*	<0.005	<0.005		<0.1	0.5	10	50
Antimony	<0.005	<0.005		<0.01	0.06	0.7	5
Selenium*	<0.005	<0.005		<0.01	0.1	0.5	7
Zinc*	0.007	0.015		<0.1	4	50	200
Chloride*	12	68		239	800	15000	25000
Fluoride*	<1	1		3	10	150	500
Sulphate*	677	904		3696	1000	20000	50000
TDS	1680	660		3891	4000	60000	100000
Phenol Index	<0.5	<0.5		<0.5	1	-	-
DOC	<0.001	<0.001		<1	500	800	1000
Leach Test Information							
pH *	8.1	7.5					
EC*	2090	1352					
Sample Mass (kg)	0.222						
Dry Matter (%)	79						
Moisture (%)	28						
Stage 1							
Volume Eluate L2 (litres)	0.301						
Filtered Eluate VE1 (litres)	0.176						

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Waste Acceptance Criteria ANALYTICAL *RESULTS*

Report No:	ANALYTICAL REPORT No. AR51596				Page 13 of 16		
					CLIENT:	AP Geotechnics Limited	
Project Name:	Location: Lordship Lane						
Lab Reference	90098				Landfill Waste Acceptance Criteria Limits		
Sampling Date	---				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID	HB						
Depth	---						
Solid Waste Analysis							
TOC (%)	0.2				3%	5%	6%
Loss on Ignition (%)**	6.3				--	--	10%
BTEX (mg/kg)**	<0.01				6	--	--
Sum of PCBs (mg/kg)**	<0.01				1	--	--
Mineral Oil (mg/kg)**	<5				500	--	--
Total PAH (mg/kg)**	16.2				100	--	--
pH (Units)**	10.2				--	--	--
Acid Neutralisation Capacity (mol/kg)	<0.1				--	To be evaluated	To be evaluated
Eluate Analysis	2:1	8:1		Cumulative 10:1	Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg (mg/kg)		
	mg/l	mg/l		mg/kg			
Arsenic*	0.013	0.012		<0.1	0.5	2	25
Barium*	0.024	0.021		0.1	20	100	300
Cadmium*	<0.001	<0.001		<0.01	0.04	1	5
Chromium*	<0.005	<0.005		<0.1	0.5	10	70
Copper*	<0.005	<0.005		<0.1	2	50	100
Mercury*	<0.0001	<0.0001		<0.001	0.01	0.2	2
Molybdenum*	<0.005	<0.005		<0.1	0.5	10	30
Nickel*	<0.005	<0.005		<0.1	0.4	10	40
Lead*	0.011	0.020		<0.1	0.5	10	50
Antimony	0.009	<0.005		0.01	0.06	0.7	5
Selenium*	<0.005	<0.005		<0.01	0.1	0.5	7
Zinc*	0.010	0.015		<0.1	4	50	200
Chloride*	3	10		41	800	15000	25000
Fluoride*	<1	<1		<1	10	150	500
Sulphate*	8	22		89	1000	20000	50000
TDS	190	<100		248	4000	60000	100000
Phenol Index	<0.5	<0.5		<0.5	1	-	-
DOC	<0.001	<0.001		<1	500	800	1000
Leach Test Information							
pH *	8.2	8.0					
EC*	246	157					
Sample Mass (kg)	0.213						
Dry Matter (%)	82						
Moisture (%)	23						
Stage 1							
Volume Eluate L2 (litres)	0.310						
Filtered Eluate VE1 (litres)	0.228						

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