

Mark Collyer Chelmer Site Investigation Laboratories Ltd Unit 15 East Hanningfield Industrial Estate Old Church Road East Hanningfield Essex CM3 8AB



QTS Environmental Ltd

Unit 1 Rose Lane Industrial Estate Rose Lane Lenham Heath Kent ME17 2JN **t:** 01622 850410 russell.jarvis@qtsenvironmental.com

QTS Environmental Report No: 15-35897

Site Reference:	76 Fleet Road
Project / Job Ref:	CGL5839
Order No:	5202
Sample Receipt Date:	28/09/2015
Sample Scheduled Date:	28/09/2015
Report Issue Number:	1
Reporting Date:	02/10/2015

Russell Jarvis

Authorised by:

Director **On behalf of QTS Environmental Ltd** Authorised by:

D KOL Kevin Old Director On behalf of QTS Environmental Ltd





Soil Analysis Certificate						
QTS Environmental Report No: 15-35897	Date Sampled	15/09/15	15/09/15	15/09/15	15/09/15	15/09/15
Chelmer Site Investigation Laboratories Ltd	Time Sampled	None Supplied				
Site Reference: 76 Fleet Road	TP / BH No	66594	66595	66597	66598	66600
Project / Job Ref: CGL5839	Additional Refs	BH1	BH1	BH1	BH2	BH2
Order No: 5202	Depth (m)	1.00	2.00	3.50	2.00	4.50
Reporting Date: 02/10/2015	QTSE Sample No	169283	169284	169285	169286	169287

Determinand	Unit	RL	Accreditation					
рН	pH Units	N/a	MCERTS	7.7	7.9	8.0	7.8	7.6
Total Sulphate as SO ₄	mg/kg	< 200	NONE	11240	2268	1051	983	12150
Total Sulphate as SO ₄	%	< 0.02	NONE	1.12	0.23	0.11	0.10	1.22
W/S Sulphate as SO_4 (2:1)	mg/l	< 10	MCERTS	1580	1140	656	283	2630
W/S Sulphate as SO_4 (2:1)	g/l	< 0.01	MCERTS	1.58	1.14	0.66	0.28	2.63
Total Sulphur	%	< 0.02	NONE	0.39	0.10	0.04	0.07	0.63
Ammonium as NH ₄	mg/kg	< 0.5	NONE	12	6.1	9	25.4	9.2
Ammonium as NH ₄	mg/l	< 0.05	NONE	1.20	0.61	0.90	2.54	0.92
W/S Chloride (2:1)	mg/kg	< 1	MCERTS	263	60	33	15	44
W/S Chloride (2:1)	mg/l	< 0.5	MCERTS	132	30.1	16.4	7.3	22
Water Soluble Nitrate (2:1) as NO ₃	mg/kg	< 3	MCERTS	1320	173	24	7	< 3
Water Soluble Nitrate (2:1) as NO ₃	mg/l	< 1.5	MCERTS	660	86.4	12.2	3.5	< 1.5
W/S Magnesium	mg/l	< 0.1	NONE	27	17	29	9.2	130

Analytical results are expressed on a dry weight basis where samples are dried at less than 30°C

Analysis carried out on the dried sample is corrected for the stone content

Subcontracted analysis ^(S)





Soil Analysis Certificate								
QTS Environmental Report No: 15-35897	Date Sampled	15/09/15						
Chelmer Site Investigation Laboratories Ltd	Time Sampled	None Supplied						
Site Reference: 76 Fleet Road	TP / BH No	66602						
Project / Job Ref: CGL5839	Additional Refs	BH2						
Order No: 5202	Depth (m)	8.00						
Reporting Date: 02/10/2015	QTSE Sample No	169288						

Determinand	Unit	RL	Accreditation			
рН	pH Units	N/a	MCERTS	7.8		
Total Sulphate as SO ₄	mg/kg	< 200	NONE	3037		
Total Sulphate as SO ₄	%	< 0.02	NONE	0.30		
W/S Sulphate as SO ₄ (2:1)	mg/l	< 10	MCERTS	1410		
W/S Sulphate as SO ₄ (2:1)	g/l	< 0.01	MCERTS	1.41		
Total Sulphur	%	< 0.02	NONE	0.34		
Ammonium as NH ₄	mg/kg	< 0.5	NONE	16.1		
Ammonium as NH ₄	mg/l	< 0.05	NONE	1.61		
W/S Chloride (2:1)	mg/kg	< 1	MCERTS	42		
W/S Chloride (2:1)	mg/l	< 0.5	MCERTS	21		
Water Soluble Nitrate (2:1) as NO ₃	mg/kg	< 3	MCERTS	< 3		
Water Soluble Nitrate (2:1) as NO ₃	mg/l	< 1.5	MCERTS	< 1.5		
W/S Magnesium	mg/l	< 0.1	NONE	63		

Analytical results are expressed on a dry weight basis where samples are dried at less than 30°C

Analysis carried out on the dried sample is corrected for the stone content

Subcontracted analysis ^(S)





Soil Analysis Certificate - Sample Descriptions	
QTS Environmental Report No: 15-35897	
Chelmer Site Investigation Laboratories Ltd	
Site Reference: 76 Fleet Road	
Project / Job Ref: CGL5839	
Order No: 5202	
Reporting Date: 02/10/2015	

QTSE Sample No	TP / BH No	Additional Refs	Depth (m)	Moisture Content (%)	Sample Matrix Description
\$ 169283	66594	BH1	1.00	8.7	Brown gravelly sand with rubble
\$ 169284	66595	BH1	2.00	4.7	Brown gravelly clay with stones
\$ 169285	66597	BH1	3.50	20.6	Brown clay
\$ 169286	66598	BH2	2.00	22.8	Grey clay
\$ 169287	66600	BH2	4.50	20.6	Brown clay with crystalline material
\$ 169288	66602	BH2	8.00	19.5	Brown clay with crystalline material

Moisture content is part of procedure E003 & is not an accredited test Insufficient Sample ^{I/S} Unsuitable Sample ^{U/S}

\$ samples exceeded recommended holding times





Soil Analysis Certificate - Methodology & Miscellaneous Information
QTS Environmental Report No: 15-35897
Chelmer Site Investigation Laboratories Ltd
Site Reference: 76 Fleet Road
Project / Job Ref: CGL5839
Order No: 5202
Reporting Date: 02/10/2015

Matrix	Analysed On	Determinand	Brief Method Description			
Soil		Boron - Water Soluble	Determination of water soluble boron in soil by 2.1 bot water extract followed by ICP-OES	F012		
Soil		BUIGH - Water Soldble	Determination of RTEX by boadspace CC MS	E012		
Soil			Determination of otions in soil by agua rogia digestion followed by ICD OES	E007		
Soll	D	Chlorida - Water Soluble (2:1)	Determination of calibride by extraction with water 8, analysed by ion chromatography	E002		
3011	D		Determination of chloride by extraction with water & analysed by for chroniatography	E009		
Soil	AR	Chromium - Hexavalent	1.5 diphenylcarbazide followed by colorimetry	E016		
Soil	AR	Cvanide - Complex	Determination of complex cyanide by distillation followed by colorimetry	F015		
Soil	AR	Cvanide - Free	Determination of free cyanide by distillation followed by colorimetry	E015		
Soil	AR	Cvanide - Total	Determination of total cyanide by distillation followed by colorimetry	E015		
Soil		Cyclobexane Extractable Matter (CEM)	Gravimetrically determined through extraction with cyclobexane	F011		
Soil	AR	Diesel Range Organics (C10 - C24)	Determination of beyane/acetone extractable bydrocarbons by GC-EID	E011		
5011	7.112		Determination of electrical conductivity by addition of saturated calcium sulphate followed by	2004		
Soil	AR	Electrical Conductivity	electrometric measurement	E022		
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of water followed by electrometric measurement	E023		
Soll	D	Elemental Sulphur	Determination of elemental sulphur by solvent extraction followed by GC-MS	E020		
Soil	AR	EPH (C10 – C40)	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004		
Soil	AR	EPH Product ID	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004		
Soil	AR	EPH TEXAS (C6-C8, C8-C10, C10-C12,	Determination of acetone/hexane extractable hydrocarbons by GC-FID for C8 to C40. C6 to C8 by	F004		
		C12-C16, C16-C21, C21-C40)	headspace GC-MS			
Soil	D	Fluoride - Water Soluble	Determination of Fluoride by extraction with water & analysed by ion chromatography	E009		
Soil	D	FOC (Fraction Organic Carbon)	Determination of fraction of organic carbon by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010		
Soil	D	Loss on Ignition @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace	E019		
Soil	D	Magnesium - Water Soluble	Determination of water soluble magnesium by extraction with water followed by ICP-OES	E025		
Soil	D	Metals	Determination of metals by aqua-regia digestion followed by ICP-OES	E002		
Soil	AR	Mineral Oil (C10 - C40)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge	E004		
Soil	AR	Moisture Content	Moisture content; determined gravimetrically	E003		
Soil	D	Nitrate - Water Soluble (2:1)	Determination of nitrate by extraction with water & analysed by ion chromatography	E009		
Soil	D	Organic Matter	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010		
Soil	AR	PAH - Speciated (EPA 16)	Determination of PAH compounds by extraction in acetone and hexane followed by GC-MS with the use of surrogate and internal standards	E005		
Soil	AR	PCB - 7 Congeners	Determination of PCB by extraction with acetone and hexane followed by GC-MS	E008		
Soil	D	Petroleum Ether Extract (PEE)	Gravimetrically determined through extraction with petroleum ether	E011		
Soil	AR	Ĥq	Determination of pH by addition of water followed by electrometric measurement	E007		
Soil	AR	Phenols - Total (monohydric)	Determination of phenols by distillation followed by colorimetry	E021		
Soil	D	Phosphate - Water Soluble (2:1)	Determination of phosphate by extraction with water & analysed by ion chromatography	E009		
Soil	 D	Sulphate (as SO4) - Total	Determination of total sulphate by extraction with 10% HCl followed by ICP-OES	E013		
Soil	 D	Sulphate (as SO4) - Water Soluble (2:1)	Determination of sulphate by extraction with water & analysed by ion chromatography	F009		
Soil	D	Sulphate (as $SO4$) - Water Soluble (2:1)	Determination of water soluble sulphate by extraction with water followed by ICP-OES	E007		
Soil	AR	Sulnhida	Determination of sulphide by distillation followed by colorimetry	F018		
Soil	D	Sulphur - Total	Determination of total sulphur by extraction with aqua-regia followed by ICP-OFS	F024		
0011			Determination of semi-volatile organic compounds by extraction in acetone and hexane followed by GC-			
Soil	AR	SVOC	MS Determination of thiosyapate by extraction in caustic soda followed by acidification followed by	E006		
Soil	AR	Thiocyanate (as SCN)	addition of ferric nitrate followed by colorimetry	E017		
Soil		Toluene Extractable Matter (TEM)	Gravimetrically determined through extraction with toluene	F011		
5011			Determination of organic matter by oxidising with potassium dichromate followed by titration with iron	LOTT		
Soil	D	Total Organic Carbon (TOC)	(II) sulphate	E010		
Soil	AR	TPH CWG (ali: C5- C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C35. C5 to C8 by headspace GC-MS	E004		
Soil	AR	TPH LQM (ali: C5-C6, C6-C8, C8-C10, C10 C12, C12-C16, C16-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12- C16, C16-C21, C21-C35, C35-C44)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C44. C5 to C8 by headspace GC-MS	E004		
5011	AK	VOCs	Determination of volatile organic compounds by neadspace GC-MS	EUUT		
Soil	AR	VPH (C6-C8 & C8-C10)	Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID	E001		

D Dried AR As Received





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Where our involvement consists exclusively of testing samples, the results and comments (if provided) relate only to the samples tested.

Any samples that are deemed to be subject to deviation will be recorded as such within the test summary.



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QTS Environmental Ltd

Unit 1 Rose Lane Industrial Estate Rose Lane Lenham Heath Kent ME17 2JN **t:** 01622 850410 russell.jarvis@qtsenvironmental.com

QTS Environmental Report No: 15-37876

Site Reference:	76 Fleet Road, London, NW3
Project / Job Ref:	CGL5839-C
Order No:	5552
Sample Receipt Date:	19/11/2015
Sample Scheduled Date:	19/11/2015
Report Issue Number:	1
Reporting Date:	23/11/2015

Authorised by: Russell Jarvis

Director **On behalf of QTS Environmental Ltd** Authorised by:

D KOL Kevin Old Director On behalf of QTS Environmental Ltd





Soil Analysis Certificate					
QTS Environmental Report No: 15-37876	Date Sampled	13/11/15	13/11/15	13/11/15	
Chelmer Site Investigation Laboratories Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	
Site Reference: 76 Fleet Road, London, NW3	TP / BH No	67835	67836	37837	
Project / Job Ref: CGL5839-C	Additional Refs	BH1	BH2	BH2	
Order No: 5552	Depth (m)	1.50	1.00	1.50	
Reporting Date: 23/11/2015	QTSE Sample No	178629	178630	178631	

Determinand	Unit	RL	Accreditation				
рН	pH Units	N/a	MCERTS	6.6	6.8	6.9	
Total Cyanide	mg/kg	< 2	NONE	< 2	< 2	< 2	
Total Sulphate as SO ₄	mg/kg	< 200	NONE	8437	1723	1400	
Total Sulphate as SO ₄	%	< 0.02	NONE	0.84	0.17	0.14	
W/S Sulphate as SO_4 (2:1)	mg/l	< 10	MCERTS	1500	560	543	
W/S Sulphate as SO_4 (2:1)	g/l	< 0.01	MCERTS	1.50	0.56	0.54	
Elemental Sulphur	mg/kg	< 10	NONE	< 10	32	38	
Sulphide	mg/kg	< 5	NONE	< 5	53	48	
Arsenic (As)	mg/kg	< 2	MCERTS	13	14	14	
Cadmium (Cd)	mg/kg	< 0.2	MCERTS	< 0.2	< 0.2	< 0.2	
Chromium (Cr)	mg/kg	< 2	MCERTS	45	32	31	
Copper (Cu)	mg/kg	< 4	MCERTS	13	26	25	
Lead (Pb)	mg/kg	< 3	MCERTS	2160	167	116	
Mercury (Hg)	mg/kg	< 1	NONE	< 1	< 1	< 1	
Nickel (Ni)	mg/kg	< 3	MCERTS	15	22	21	
Selenium (Se)	mg/kg	< 3	NONE	< 3	< 3	< 3	
Zinc (Zn)	mg/kg	< 3	MCERTS	57	68	69	
Total Phenols (monohydric)	mg/kg	< 2	NONE	< 2	< 2	< 2	

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C

Analysis carried out on the dried sample is corrected for the stone content

Subcontracted analysis $^{\rm (S)}$





Soil Analysis Certificate - Speciated PAHs										
QTS Environmental Report No: 15-37876	Date Sampled	13/11/15	13/11/15	13/11/15						
Chelmer Site Investigation Laboratories Ltd	Time Sampled	None Supplied	None Supplied	None Supplied						
Site Reference: 76 Fleet Road, London, NW3	TP / BH No	67835	67836	37837						
Project / Job Ref: CGL5839-C	Additional Refs	BH1	BH2	BH2						
Order No: 5552	Depth (m)	1.50	1.00	1.50						
Reporting Date: 23/11/2015	QTSE Sample No	178629	178630	178631						

Determinand	Unit	RL	Accreditation				
Naphthalene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	
Acenaphthylene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	
Acenaphthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	
Fluorene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	
Phenanthrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	
Anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	
Fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	
Pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	
Chrysene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	
Benzo(a)pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	
Dibenz(a,h)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	
Benzo(ghi)perylene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	
Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	< 1.6	< 1.6	< 1.6	

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C

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Soil Analysis Certificate - TPH CWG Banded										
QTS Environmental Report No: 15-37876	Date Sampled	13/11/15	13/11/15	13/11/15						
Chelmer Site Investigation Laboratories Ltd	Time Sampled	None Supplied	None Supplied	None Supplied						
Site Reference: 76 Fleet Road, London, NW3	TP / BH No	67835	67836	37837						
Project / Job Ref: CGL5839-C	Additional Refs	BH1	BH2	BH2						
Order No: 5552	Depth (m)	1.50	1.00	1.50						
Reporting Date: 23/11/2015	QTSE Sample No	178629	178630	178631						

Determinand	Unit	RL	Accreditation				
Aliphatic >C5 - C6	mg/kg	< 0.01	NONE	< 0.01	< 0.01	< 0.01	
Aliphatic >C6 - C8	mg/kg	< 0.05	NONE	< 0.05	< 0.05	< 0.05	
Aliphatic >C8 - C10	mg/kg	< 2	MCERTS	< 2	< 2	< 2	
Aliphatic >C10 - C12	mg/kg	< 2	MCERTS	< 2	< 2	< 2	
Aliphatic >C12 - C16	mg/kg	< 3	MCERTS	< 3	< 3	< 3	
Aliphatic >C16 - C21	mg/kg	< 3	MCERTS	< 3	< 3	< 3	
Aliphatic >C21 - C34	mg/kg	< 10	MCERTS	< 10	< 10	< 10	
Aliphatic (C5 - C34)	mg/kg	< 21	NONE	< 21	< 21	< 21	
Aromatic >C5 - C7	mg/kg	< 0.01	NONE	< 0.01	< 0.01	< 0.01	
Aromatic >C7 - C8	mg/kg	< 0.05	NONE	< 0.05	< 0.05	< 0.05	
Aromatic >C8 - C10	mg/kg	< 2	MCERTS	< 2	< 2	< 2	
Aromatic >C10 - C12	mg/kg	< 2	MCERTS	< 2	< 2	< 2	
Aromatic >C12 - C16	mg/kg	< 2	MCERTS	< 2	< 2	< 2	
Aromatic >C16 - C21	mg/kg	< 3	MCERTS	< 3	< 3	< 3	
Aromatic >C21 - C35	mg/kg	< 10	MCERTS	< 10	< 10	< 10	
Aromatic (C5 - C35)	mg/kg	< 21	NONE	< 21	< 21	< 21	
Total >C5 - C35	mg/kg	< 42	NONE	< 42	< 42	< 42	

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C





Soil Analysis Certificate - BTEX / MTBE					
QTS Environmental Report No: 15-37876	Date Sampled	13/11/15	13/11/15	13/11/15	
Chelmer Site Investigation Laboratories Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	
Site Reference: 76 Fleet Road, London, NW3	TP / BH No	67835	67836	37837	
Project / Job Ref: CGL5839-C	Additional Refs	BH1	BH2	BH2	
Order No: 5552	Depth (m)	1.50	1.00	1.50	
Reporting Date: 23/11/2015	QTSE Sample No	178629	178630	178631	

Determinand	Unit	RL	Accreditation				
Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	
Toluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
Ethylbenzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	
p & m-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	
o-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	
MTBE	ug/kg	< 5	MCERTS	< 5	< 5	< 5	

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C

QTS Environmental Ltd - Registered in England No 06620874





Waste Acceptance Criteria A	Analytical Ce	rtificate - BS EN	12457/3						
QTS Environmental Report No:	15-37876	Date Sampled	13/11/15			Landfill Was	te Acceptance (Criteria Limits	
Chelmer Site Investigation Lab	oratories Ltd	Time Sampled	None Supplied						
Site Reference: 76 Fleet Road,	London, NW3	TP / BH No	67835				Stable Non-		
Project / Job Ref: CGL5839-C		Additional Refs	BH1			Inert Waste	reactive HAZARDOUS	Hazardous	
Order No: 5552 Reporting Date: 23/11/2015		Depth (m)	1.50			Landfill	waste in non- hazardous	Waste Landfill	
		QTSE Sample No	178629				Landfill		
Determinand	Unif	MDL							
TOC ^{MU}	%	< 0.1	0.3			3%	5%	6%	
Loss on Ignition	%	< 0.01	1.40					10%	
BTEX ^{MU}	mg/kç	< 0.05 <	< 0.05			6			
Sum of PCBs	mg/kg	< 0.1	< 0.1			1			
Mineral Oil ^{MU}	mg/kg	, 10	< 10			500			
Total PAH ^{MU}	mg/kç	ر = 1.7	< 1.7			100			
рН ^{MU}	pH Units	ز N/a	6.6				>6		
Acid Neutralisation Capacity	mol/kg (+/-)	< 1	< 1				To be evaluated	To be evaluated	
Eluate Analysis			2:1	8:1	Cumulative 10:1	Limit values using BS I	Limit values for compliance le using BS EN 12457-3 at L/		
			mg/l	mg/l	mg/kg		(mg/kg)		
Arsenic ^u			< 0.01	< 0.01	< 0.2	0.5	2	25	
Barium ^u			0.16	0.04	0.6	20	100	300	
Cadmium ^u			< 0.0005	< 0.0005	< 0.02	0.04	1	5	
Chromium ^U			< 0.005	< 0.005	< 0.20	0.5	10	70	
Copper ^u			0.01	< 0.01	< 0.5	2	50	100	
Mercury ^U			< 0.005	< 0.005	< 0.01	0.01	0.2	2	
Molybdenum ^u			0.020	0.012	0.1	0.5	10	30	
Nickel ^u			0.009	< 0.007	< 0.2	0.4	10	40	
Lead ^U			0.033	0.012	< 0.2	0.5	10	50	
Antimony ^u			0.007	< 0.005	< 0.06	0.06	0.7	5	
Selenium ^u			0.024	< 0.005	< 0.1	0.1	0.5	7	
Zinc ^U			0.011	< 0.005	< 0.2	4	50	200	
Chloride ^U			61	5	120	800	15000	25000	
Fluoride ^U			< 0.5	< 0.5	< 1	10	150	500	
Sulphate ^U			1351	138	2976	1000	20000	50000	
TDS			1270	241	3771	4000	60000	100000	
Phenol Index			0.02	< 0.01	< 0.5	1	-		
DOC			34.5	6.3	100	500	800	1000	
Leach Test Information									
	_	⁻		·					
	⊥	<u> </u>	↓	·					
			1						
			 	·		4			
			0.10	·	 				
Sample Mass (kg)			0.18	·					
Dry Matter (%)			95.3	·		4			
Moisture (%)			5	·		4			
			0.24		 	4			
Volume Eluate L2 (litres)			0.34	·		4			
Filtered Eluate VE1 (litres)			0.23	 					
	·					1			
Results are expressed on a dry weight b	asis, after correcti	ion for moisture content	where applicable						
Stated limits are for guidance only and (21S Environmenta	I cannot be held respon	isible for any discr	epencies with current lec	jislation				
M Denotes ISO17025 accredited test									
o Denotes 15017025 accredited test									





Waste Acceptance Criteria A	Analytical Ce	rtificate - BS EN	12457/3					
QTS Environmental Report No:	15-37876	Date Sampled	13/11/15			Landfill Was ^a	te Acceptance (Criteria Limits
Chelmer Site Investigation Lab	oratories Ltd	Time Sampled	None Supplied					
Site Reference: 76 Fleet Road,	London, NW3	TP / BH No	37838				Stable Non-	
Project / Job Ref: CGL5839-C		Additional Refs	BH2			Inert Waste	reactive HAZARDOUS	Hazardous
Order No: 5552 Reporting Date: 23/11/2015		Depth (m)	2.00			Landfill	waste in non- hazardous	Waste Landfill
		QTSE Sample No	178632				Landfill	
Determinand	Unif	MDL	<u> </u>					
TOC ^{MU}	%	< 0.1	1.3			3%	5%	6%
Loss on Ignition	%	< 0.01	3.30					10%
BTEX ^{MU}	mg/kç	< 0.05 <	< 0.05			6		
Sum of PCBs	mg/kg	< 0.1	< 0.1			1		
Mineral Oil ^{MU}	mg/kg	, < 10	< 10			500		
Total PAH ^{MU}	mg/kg	, < 1.7	< 1.7			100		
pH ^{MU}	pH Units	, N/a	7.0				>6	
Acid Neutralisation Capacity	mol/kg (+/-)	, < 1	< 1				l o be evaluated	To be evaluated
	<u> </u>	<u> </u>	2.4		Cumulative	Limit values	for compliance	leaching test
Eluate Analysis			2:1	8:1	10:1	using BS EN 12457-3 at L/S 10 l/kg		
			mg/l	mg/l	mg/kg		(mg/kg)	
Arsenic ^u			< 0.01	< 0.01	< 0.2	0.5	2	25
Barium ^u]		0.19	0.07	0.7	20	100	300
Cadmium ^u]		< 0.0005	< 0.0005	< 0.02	0.04	1	5
Chromium ^u			< 0.005	< 0.005	< 0.20	0.5	10	70
Copper ^U]		< 0.01	< 0.01	< 0.5	2	50	100
Mercury ^u			< 0.005	< 0.005	< 0.01	0.01	0.2	2
Molybdenum ^u			0.008	0.005	< 0.1	0.5	10	30
Nickel ^U			< 0.007	< 0.007	< 0.2	0.4	10	40
Lead ^u	-		< 0.005	< 0.005	< 0.2	0.5	10	50
Antimony ^U			< 0.005	< 0.005	< 0.06	0.06	0.7	5
Selenium ^u			< 0.005	< 0.005	< 0.1	0.1	0.5	7
Zinc ^u	-		0.019	< 0.005	< 0.2	4	50	200
Chloride ^u			6	1	16	800	15000	25000
Fluoride ^U			< 0.5	< 0.5	< 1	10	150	500
Sulphate ^u			706	129	1735	1000	20000	50000
TDS			714	200	2399	4000	60000	100000
Phenol Index]		< 0.01	< 0.01	< 0.5	1	-	-
DOC			15.7	3.7	46.5	500	800	1000
Leach Test Information								
	_	<u> </u>	└─── /			1		
		<u></u>	↓ /			4		
			1 1			1		
			↓	 	[_]	4		
			0.00			4		
Sample Mass (kg)			0.22			4		
Dry Matter (%)			80.4		I	4		
Moisture (%)			24.4			4		
Stage 1			0.21		<u> </u>	4		
Filtered Eluste VE1 (litres)			0.31	·				
Fillered Eluale VET (Illres)			0.14	·				
			├ ───┦			1		
						L		
Results are expressed on a dry weight b	asis, after correct	ion for moisture conten	t where applicable					
Stated limits are for guidance only and C	2TS Environmenta	I cannot be held respon	sible for any discr	epencies with current leg	gislation			
M Denotes MCERTS accredited test								
U Denotes ISU17025 accredited test								





Soil Analysis Certificate - Sample Descriptions	
QTS Environmental Report No: 15-37876	
Chelmer Site Investigation Laboratories Ltd	
Site Reference: 76 Fleet Road, London, NW3	
Project / Job Ref: CGL5839-C	
Order No: 5552	
Reporting Date: 23/11/2015	

QTSE Sample No	TP / BH No	Additional Refs	Depth (m)	Moisture Content (%)	Sample Matrix Description
178629	67835	BH1	1.50	4.7	Grey sandy clay with concrete and stones
178630	67836	BH2	1.00	24	Brown sandy loam
178631	37837	BH2	1.50	23.8	Brown sandy loam
178632	37838	BH2	2.00	19.6	Brown sandy loam

Moisture content is part of procedure E003 & is not an accredited test Insufficient Sample ^{I/S}

Unsuitable Sample ^{U/S}





il Analysis Certificate - Methodology & Miscellaneous Information	
S Environmental Report No: 15-37876	
elmer Site Investigation Laboratories Ltd	
e Reference: 76 Fleet Road, London, NW3	
oject / Job Ref: CGL5839-C	
der No: 5552	
porting Date: 23/11/2015	

Matrix	Analysed On	Determinand	Determinand Brief Method Description				
Soil	D	Boron - Water Soluble	Determination of water soluble boron in soil by 2.1 hot water extract followed by ICP-OES	F012			
Soil	AR	BTFX	Determination of BTEX by headspace GC-MS	E012			
Soil	D	Cations	Determination of cations in soil by aqua-regia digestion followed by ICP-OES	E002			
Soil	D	Chloride - Water Soluble (2:1)	Determination of chloride by extraction with water & analysed by ion chromatography	E002			
Soil	AR	Chromium - Hexavalent	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of	E007			
	7		1,5 diphenylcarbazide followed by colorimetry	2010			
Soil	AR	Cyanide - Complex	Determination of complex cyanide by distillation followed by colorimetry	E015			
Soil	AR	Cyanide - Free	Determination of free cyanide by distillation followed by colorimetry	E015			
Soil	AR	Cyanide - Total	Determination of total cyanide by distillation followed by colorimetry	E015			
Soil	D	Cyclohexane Extractable Matter (CEM)	Gravimetrically determined through extraction with cyclohexane	E011			
Soil	AR	Diesel Range Organics (C10 - C24)	Determination of hexane/acetone extractable hydrocarbons by GC-FID	E004			
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement	E022			
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of water followed by electrometric measurement	E023			
Soil	D	Elemental Sulphur	Determination of elemental sulphur by solvent extraction followed by GC-MS	E020			
Soil	AR	EPH (C10 – C40)	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004			
Soil	AR	EPH Product ID	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004			
		EPH TEXAS (C6-C8, C8-C10, C10-C12,	Determination of acetone/hexane extractable hydrocarbons by GC-FID for C8 to C40. C6 to C8 by				
Soil	AR	C12-C16, C16-C21, C21-C40)	headspace GC-MS	E004			
Soil	D	Eluoride - Water Soluble	Determination of Eluoride by extraction with water & analysed by ion chromatography	F009			
0011			Determination of fraction of organic carbon by oxidising with potassium dichromate followed by	2007			
Soil	D	FOC (Fraction Organic Carbon)	titration with iron (II) sulphate	E010			
Soil	D	Loss on Ignition @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muttle furnace	E019			
Soil	D	Magnesium - Water Soluble	Determination of water soluble magnesium by extraction with water followed by ICP-OES	E025			
Soil	D	Metals	Determination of metals by aqua-regia digestion followed by ICP-OES	E002			
Soil	AR	Mineral Oil (C10 - C40)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge	E004			
Soil	AR	Moisture Content	Moisture content; determined gravimetrically	E003			
Soil	D	Nitrate - Water Soluble (2:1)	Determination of nitrate by extraction with water & analysed by ion chromatography	E009			
Soil	D	Organic Matter	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010			
Soil	AR	PAH - Speciated (EPA 16)	Determination of PAH compounds by extraction in acetone and hexane followed by GC-MS with the use of surrogate and internal standards	E005			
Soil	AR	PCB - 7 Congeners	Determination of PCB by extraction with acetone and hexane followed by GC-MS	E008			
Soil	D	Petroleum Ether Extract (PEE)	Gravimetrically determined through extraction with petroleum ether	E011			
Soil	AR	Ηα	Determination of pH by addition of water followed by electrometric measurement	E007			
Soil	AR	Phenols - Total (monohydric)	Determination of phenols by distillation followed by colorimetry	E021			
Soil	D	Phosphate - Water Soluble (2:1)	Determination of phosphate by extraction with water & analysed by ion chromatography	E009			
Soil	D	Sulphate (as SO4) - Total	Determination of total sulphate by extraction with 10% HCl followed by ICP-OES	E013			
Soil	D	Sulphate (as SO4) - Water Soluble (2:1)	Determination of sulphate by extraction with water & analysed by ion chromatography	E009			
Soil	D	Sulphate (as SO4) - Water Soluble (2:1)	Determination of water soluble sulphate by extraction with water followed by ICP-OES	E014			
Soil	AR	Sulphide	Determination of sulphide by distillation followed by colorimetry	E018			
Soil	D	Sulphur - Total	Determination of total sulphur by extraction with agua-regia followed by ICP-OES	E024			
Soil	AR	SVOC	Determination of semi-volatile organic compounds by extraction in acetone and hexane followed by GC-	E006			
Soil	AR	Thiocyanate (as SCN)	Determination of thiocyanate by extraction in caustic soda followed by acidification followed by addition of ferric pitrate followed by colorimetry.	E017			
Soll		Toluono Extractable Matter (TEM)	Cravimetrically determined through extraction with tolyone	E011			
	D		Determination of organic matter by evidicing with netossium disbromate followed by titration with iron	EUTI			
Soil	D	Total Organic Carbon (TOC)	(II) sulphate	E010			
Soil	AR	TPH CWG (ali: C5- C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C35. C5 to C8 by headspace GC-MS	E004			
Soil	AR	TPH LQM (ali: C5-C6, C6-C8, C8-C10, C10 C12, C12-C16, C16-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12- C16, C16-C21, C21-C35, C35-C44)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C44. C5 to C8 by headspace GC-MS	E004			
5011	AK	VUCS	Determination of volatile organic compounds by neadspace GC-MS	EUU I			
Soil	AR	VPH (C6-C8 & C8-C10)	Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID	E001			

D Dried AR As Received



Mark Collyer Chelmer Site Investigation Laboratories Ltd Unit 15 East Hanningfield Industrial Estate Old Church Road East Hanningfield Essex CM3 8AB



QTS Environmental Ltd

Unit 1 Rose Lane Industrial Estate Rose Lane Lenham Heath Kent ME17 2JN **t:** 01622 850410 russell.jarvis@qtsenvironmental.com

QTS Environmental Report No: 15-37936

Site Reference:	76 Fleet Road, London, NW3
Project / Job Ref:	CGL5839-C
Order No:	5552
Sample Receipt Date:	19/11/2015
Sample Scheduled Date:	20/11/2015
Report Issue Number:	1
Reporting Date:	24/11/2015

Authorised by: Russell Jarvis

Director **On behalf of QTS Environmental Ltd** Authorised by:

D KOL Kevin Old Director On behalf of QTS Environmental Ltd





Soil Analysis Certificate				
QTS Environmental Report No: 15-37936	Date Sampled	13/11/15		
Chelmer Site Investigation Laboratories Ltd	Time Sampled	None Supplied		
Site Reference: 76 Fleet Road, London, NW3	TP / BH No	67683		
Project / Job Ref: CGL5839-C	Additional Refs	BH2		
Order No: 5552	Depth (m)	2.50		
Reporting Date: 24/11/2015	QTSE Sample No	178886		

Determinand	Unit	RL	Accreditation			
На	pH Units	N/a	MCERTS	8.5		
Total Cyanide	mg/kg	< 2	NONE	< 2		
Total Sulphate as SO ₄	mg/kg	< 200	NONE	1644		
Total Sulphate as SO ₄	%	< 0.02	NONE	0.16		
W/S Sulphate as SO_4 (2:1)	mg/l	< 10	MCERTS	495		
W/S Sulphate as SO_4 (2:1)	g/l	< 0.01	MCERTS	0.50		
Elemental Sulphur	mg/kg	< 10	NONE	< 10		
Sulphide	mg/kg	< 5	NONE	< 5		
Arsenic (As)	mg/kg	< 2	MCERTS	14		
Cadmium (Cd)	mg/kg	< 0.2	MCERTS	< 0.2		
Chromium (Cr)	mg/kg	< 2	MCERTS	47		
Copper (Cu)	mg/kg	< 4	MCERTS	23		
Lead (Pb)	mg/kg	< 3	MCERTS	48		
Mercury (Hg)	mg/kg	< 1	NONE	< 1		
Nickel (Ni)	mg/kg	< 3	MCERTS	33		
Selenium (Se)	mg/kg	< 3	NONE	< 3		
Zinc (Zn)	mg/kg	< 3	MCERTS	76		
Total Phenols (monohydric)	mg/kg	< 2	NONE	< 2		

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C

Analysis carried out on the dried sample is corrected for the stone content

Subcontracted analysis $^{\rm (S)}$





Soil Analysis Certificate - Speciated PAHs										
QTS Environmental Report No: 15-37936	Date Sampled	13/11/15								
Chelmer Site Investigation Laboratories Ltd	Time Sampled	None Supplied								
Site Reference: 76 Fleet Road, London, NW3	TP / BH No	67683								
Project / Job Ref: CGL5839-C	Additional Refs	BH2								
Order No: 5552	Depth (m)	2.50								
Reporting Date: 24/11/2015	QTSE Sample No	178886								

Determinand	Unit	RL	Accreditation		
Naphthalene	mg/kg	< 0.1	MCERTS	< 0.1	
Acenaphthylene	mg/kg	< 0.1	MCERTS	< 0.1	
Acenaphthene	mg/kg	< 0.1	MCERTS	< 0.1	
Fluorene	mg/kg	< 0.1	MCERTS	< 0.1	
Phenanthrene	mg/kg	< 0.1	MCERTS	< 0.1	
Anthracene	mg/kg	< 0.1	MCERTS	< 0.1	
Fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	
Pyrene	mg/kg	< 0.1	MCERTS	< 0.1	
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	
Chrysene	mg/kg	< 0.1	MCERTS	< 0.1	
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	
Benzo(a)pyrene	mg/kg	< 0.1	MCERTS	< 0.1	
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	< 0.1	
Dibenz(a,h)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	
Benzo(ghi)perylene	mg/kg	< 0.1	MCERTS	< 0.1	
Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	< 1.6	

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C

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Soil Analysis Certificate - TPH CWG Banded									
QTS Environmental Report No: 15-37936	Date Sampled	13/11/15							
Chelmer Site Investigation Laboratories Ltd	Time Sampled	None Supplied							
Site Reference: 76 Fleet Road, London, NW3	TP / BH No	67683							
Project / Job Ref: CGL5839-C	Additional Refs	BH2							
Order No: 5552	Depth (m)	2.50							
Reporting Date: 24/11/2015	QTSE Sample No	178886							

Determinand	Unit	RL	Accreditation			
Aliphatic >C5 - C6	mg/kg	< 0.01	NONE	< 0.01		
Aliphatic >C6 - C8	mg/kg	< 0.05	NONE	< 0.05		
Aliphatic >C8 - C10	mg/kg	< 2	MCERTS	< 2		
Aliphatic >C10 - C12	mg/kg	< 2	MCERTS	< 2		
Aliphatic >C12 - C16	mg/kg	< 3	MCERTS	< 3		
Aliphatic >C16 - C21	mg/kg	< 3	MCERTS	< 3		
Aliphatic >C21 - C34	mg/kg	< 10	MCERTS	< 10		
Aliphatic (C5 - C34)	mg/kg	< 21	NONE	< 21		
Aromatic >C5 - C7	mg/kg	< 0.01	NONE	< 0.01		
Aromatic >C7 - C8	mg/kg	< 0.05	NONE	< 0.05		
Aromatic >C8 - C10	mg/kg	< 2	MCERTS	< 2		
Aromatic >C10 - C12	mg/kg	< 2	MCERTS	< 2		
Aromatic >C12 - C16	mg/kg	< 2	MCERTS	< 2		
Aromatic >C16 - C21	mg/kg	< 3	MCERTS	< 3		
Aromatic >C21 - C35	mg/kg	< 10	MCERTS	< 10		
Aromatic (C5 - C35)	mg/kg	< 21	NONE	< 21		
Total >C5 - C35	mg/kg	< 42	NONE	< 42		

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C





Soil Analysis Certificate - BTEX / MTBE										
QTS Environmental Report No: 15-37936	Date Sampled	13/11/15								
Chelmer Site Investigation Laboratories Ltd	Time Sampled	None Supplied								
Site Reference: 76 Fleet Road, London, NW3	TP / BH No	67683								
Project / Job Ref: CGL5839-C	Additional Refs	BH2								
Order No: 5552	Depth (m)	2.50								
Reporting Date: 24/11/2015	QTSE Sample No	178886								

Determinand	Unit	RL	Accreditation	
Benzene	ug/kg	< 2	MCERTS	< 2
Toluene	ug/kg	< 5	MCERTS	< 5
Ethylbenzene	ug/kg	< 2	MCERTS	< 2
p & m-xylene	ug/kg	< 2	MCERTS	< 2
o-xylene	ug/kg	< 2	MCERTS	< 2
MTBE	ug/kg	< 5	MCERTS	< 5

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C

QTS Environmental Ltd - Registered in England No 06620874





Soil Analysis Certificate - Sample Descriptions	
QTS Environmental Report No: 15-37936	
Chelmer Site Investigation Laboratories Ltd	
Site Reference: 76 Fleet Road, London, NW3	
Project / Job Ref: CGL5839-C	
Order No: 5552	
Reporting Date: 24/11/2015	

QTSE Sample No	TP / BH No	Additional Refs	Depth (m)	Moisture Content (%)	Sample Matrix Description
178886	67683	BH2	2.50	21.1	Brown clay with stones

Moisture content is part of procedure E003 & is not an accredited test

Insufficient Sample

Unsuitable Sample ^{U/S}





il Analysis Certificate - Methodology & Miscellaneous Information	
S Environmental Report No: 15-37936	
elmer Site Investigation Laboratories Ltd	
e Reference: 76 Fleet Road, London, NW3	
oject / Job Ref: CGL5839-C	
der No: 5552	
porting Date: 24/11/2015	

Matrix	Analysed On	Determinand	Brief Method Description	Method No
Soil	D	Boron - Water Soluble	Determination of water soluble boron in soil by 2.1 hot water extract followed by ICP-OES	F012
Soil	AR	BUIGHT Water BUIGHT	Determination of BTEX by headspace GC-MS	E001
Soil	D	Cations	Determination of cations in soil by agua-regia digestion followed by ICP-OES	E002
Soil	D	Chloride - Water Soluble (2:1)	Determination of chloride by extraction with water & analysed by ion chromatography	E009
Soil			Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of	E016
3011	АК		1,5 diphenylcarbazide followed by colorimetry	LUIU
Soil	AR	Cyanide - Complex	Determination of complex cyanide by distillation followed by colorimetry	E015
Soil	AR	Cyanide - Free	Determination of free cyanide by distillation followed by colorimetry	E015
Soil	AR	Cyanide - Total	Determination of total cyanide by distillation followed by colorimetry	E015
Soil	D	Cyclohexane Extractable Matter (CEM)	Gravimetrically determined through extraction with cyclohexane	E011
Soil	AR	Diesel Range Organics (C10 - C24)	Determination of hexane/acetone extractable hydrocarbons by GC-FID	E004
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement	E022
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of water followed by electrometric measurement	E023
Soil	D	Elemental Sulphur	Determination of elemental sulphur by solvent extraction followed by GC-MS	E020
Soil	AR	EPH (C10 – C40)	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR	EPH Product ID	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
	15	EPH TEXAS (C6-C8, C8-C10, C10-C12,	Determination of acetone/hexane extractable hydrocarbons by GC-FID for C8 to C40. C6 to C8 by	
Soil	AR	C12-C16, C16-C21, C21-C40)	headspace GC-MS	E004
Soil	D	Fluoride - Water Soluble	Determination of Fluoride by extraction with water & analysed by ion chromatography	E009
Soil	D	FOC (Fraction Organic Carbon)	Determination of fraction of organic carbon by oxidising with potassium dichromate followed by titration with iron (11) subpate	E010
Soil	D	Loss on Ignition @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace	E019
Soil	D	Magnesium - Water Soluble	Determination of water soluble magnesium by extraction with water followed by ICP-OES	E025
Soil	D	Metals	Determination of metals by aqua-regia digestion followed by ICP-OES	E002
Soil	AR	Mineral Oil (C10 - C40)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge	E004
Soil	AR	Moisture Content	Moisture content: determined gravimetrically	E003
Soil		Nitrate - Water Soluble (2·1)	Determination of nitrate by extraction with water & analysed by ion chromatography	E000
Soil	D	Organic Matter	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	AR	PAH - Speciated (EPA 16)	Determination of PAH compounds by extraction in acetone and hexane followed by GC-MS with the use of surrogate and internal standards	E005
Soil	AR	PCB - 7 Congeners	Determination of PCB by extraction with acetone and hexane followed by GC-MS	E008
Soil	D	Petroleum Ether Extract (PEE)	Gravimetrically determined through extraction with petroleum ether	E011
Soil	AR	На	Determination of pH by addition of water followed by electrometric measurement	E007
Soil	AR	Phenols - Total (monohydric)	Determination of phenols by distillation followed by colorimetry	E021
Soil	D	Phosphate - Water Soluble (2:1)	Determination of phosphate by extraction with water & analysed by ion chromatography	E009
Soil	D	Sulphate (as SO4) - Total	Determination of total sulphate by extraction with 10% HCI followed by ICP-OES	E013
Soil	D	Sulphate (as SO4) - Water Soluble (2:1)	Determination of sulphate by extraction with water & analysed by ion chromatography	E009
Soil	D	Sulphate (as SO4) - Water Soluble (2:1)	Determination of water soluble sulphate by extraction with water followed by ICP-OES	E014
Soil	AR	Sulphide	Determination of sulphide by distillation followed by colorimetry	E018
Soil	D	Sulphur - Total	Determination of total sulphur by extraction with aqua-regia followed by ICP-OES	E024
Soil	AR	SVOC	Determination of semi-volatile organic compounds by extraction in acetone and hexane followed by GC- MS	E006
Soil	AR	Thiocyanate (as SCN)	Determination of thiocyanate by extraction in caustic soda followed by acidification followed by addition of ferric nitrate followed by colorimetry	E017
Soil	D	Toluene Extractable Matter (TEM)	Gravimetrically determined through extraction with toluene	E011
Soil	D	Total Organic Carbon (TOC)	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (11) suppate	E010
Soil	AR	TPH CWG (ali: C5- C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C35. C5 to C8 by headspace GC-MS	E004
Soil	AR	TPH LQM (ali: C5-C6, C6-C8, C8-C10, C10 C12, C12-C16, C16-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12- C16, C16-C21, C21-C35, C35-C44)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C44. C5 to C8 by headspace GC-MS	E004
Soil	AR	VOCs	Determination of volatile organic compounds by headspace GC-MS	EU01
Soil	AR	VPH (C6-C8 & C8-C10)	Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID	E001

D Dried AR As Received



Contamination Test Results on Soil Samples

Location: 76 Fleet Ro	bad	Date : January 2016				Job No. : 5839 Sheet 1 of 1				
Borehole No.		BH1	BH2	BH2	BH2	ATRISK C	ontaminated	Land Screen	ing Values	
Sample No.		178629	178630	178631	178886	(337) dei	ived using Cl	LEA V1.04 101	101.041010/03000	
Depth (m)	Units	1.50 MADE	1.00 MADE	1.50 MADE	2.50 MADE	Residential with plant	Residential without plant	Allotments	Commercial/	
Material Type		GROUND	GROUND	GROUND	GROUND	uptake	uptake		muusunai	
	>C5-C7	< 0.01	< 0.01	< 0.01	< 0.01	0.33	0.988	0.07	95	
	>C7-C8	< 0.05	< 0.05	< 0.05	< 0.05	610	2710	120	420000	
Aromatic Hydrocarbons	>C8-C10	< 2	< 2	< 2	< 2	177	233	64.5	64100	
(ma/ka)	>C10-C12	< 2	< 2	< 2	< 2	389	1080	86.4	68300	
(3 5)	>C12-C16	< 2	< 2	< 2	< 3	687	2040	160	65600	
	>C16-C21	< 3	< 3	< 3	< 3	804	1330	288	28400	
	>C21-C35	< 10	< 10	< 10	< 10	1220	1330	1550	28400	
	>C5-C6	< 0.01	< 0.01	< 0.01	< 0.01	259	261	<i>5120</i>	>1000000	
Aliphatic Hydrocarbons (mg/kg)	>C6-C8	< 0.05	< 0.05	< 0.05	< 0.05	14700	49400	16600	>100000	
	>C8-C10	< 2	< 2	< 2	< 2	144	144	2130	170000	
	>C10-C12	< 2	< 2	< 2	< 2	4140	4340	8870	171000	
	>C12-C16	< 3	< 3	< 3	< 3	5260	5310	15900	171000	
	>C16-C21	< 3	< 3	< 3	< 3	88200	146000	462000	>1000000	
	>021-035	< 10	< 10	< 10	< 10	88200	146000	462000	>1000000	
Naphthalene	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	8.71	9.22	23.4	22700	
Acenaphthylene	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	-	-	-	-	
Acenaphthene	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	2130	4770	612	106000	
Fluorene	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	1930	3100	725	72100	
Phenanthrene	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	-	-	-	-	
Anthracene	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	18300	24000	10400	545000	
Fluoranthene	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	2160	3210	924	72700	
Pyrene	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	1550	2400	620	54500	
Benzo(a)anthracene	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	8.54	9.04	15.1	142	
Chrysene	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	927	1010	1170	14300	
Benzo(b)fluoranthene	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	9.86	10.3	18.6	144	
Benzo(k)fluoranthene	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	100	104	227	1440	
Benzo(a)pyrene	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	0.998	1.04	2.10	14.4	
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	9.75	10.3	16.6	144	
Dibenz(a,h)anthracene	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	1.00	1.03	2.57	14.4	
Benzo(ghi)perylene	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	103	104	342	1450	
TOTAL PAH	mg/kg	< 1.6	< 1.6	< 1.6	< 1.6					
Cyanide (Free)	mg/kg	< 2	< 2	< 2	<2	34	34	34	34	
рН	unit	6.6	6.8	6.9	8.5	-	-	-	-	
Copper (Total)	mg/kg	13	26	25	23	4020	8370	1110	109000	
Lead (Total)	mg/kg	2160	167	116	48	200	310	80	2330	
Zinc (Total)	mg/kg	57	68	69	76	17200	46800	3990	>1000000	
						LQM/C	IEH Generic .	Assessment	Criteria	
Chromium (Total)	mg/kg	45	32	31	47	3000	3000	34600	30400	
						CLE	A Soil Guidel	ine Values (S	GV)	
Arsenic (Total)	mg/kg	13	14	14	14	32	35	43	640	
Cadmium (Total)	mg/kg	< 0.2	< 0.2	< 0.2	<0.2	10	83.6	1.8	230	
Mercury (Total)	mg/kg	< 1	< 1	< 1	<1	170	238	80	3600	
Nickel (Total)	mg/kg	15	22	21	33	130	130	230	1800	
Phenols (Total)	mg/kg	< 2	< 2	< 2	<2	420	519	280	3200	
Selenium (Total)	mg/kg	< 3	< 3	< 3	<3	350	595	120	13000	
Total Sulphate as SO4	mg/kg	8437	1723	1400	1644	-	-	-	-	
Total Sulphate as SO4	%	0.84	0.17	0.14	0.16	-	-	-	-	
W/S Sulphate as SO4 (2:1)	mg/l	1500	560	543	495	-	-	-	-	
Elemental Sulphur	ma/ka	< 10	32	38	< 10	-	-	-	-	
Sulphide	mg/kg	< 5	53	48	< 5	-	-	-	-	

Key PAH - Polyaromatic Hydrocarbons TPH - Total Petroleum Hydrocarbons - Not determined

Result exceeds ATRISK screening value Result exceeds EQS/CIEH generic assessment criteria Result exceeds CLEA Soil Guideline Value (SGV)



Groundwater/Ground Gas Monitoring Results Sheet

Site Ref:5839Site Name:76 Fleet Road, London.

Well	Date	Methane Peak	Methane Steady	Methane GSV	Carbon Dioxide Peak	Carbon Dioxide Steady	Carbon Dioxide GSV	Oxygen	Atmos.	Flow	Response Zone	Depth to Water	со	H2S
		%v/v	%v/v	l/hr	%v/v	%v/v	l/hr	%v/v	mbar	l/hr	m bgl	m bgl	ppm	ppm
BH1 (House)	26/10/2015	0.0	0.0	0.0000	0.2	0.1	0.0012	21.1	1008	0.6	10 E 1	3.60	0	0
	04/11/2015	0.0	0.0	0.0000	2.4	0.1	0.0120	20.6	1008	0.5	1.0 - 5.1	3.27	0	0
BH2 (Garden)	26/10/2015	0.0	0.0	0.0000	3.8	3.8	0.0228	17.7	1007	0.6	1.0 - 6.0	2.26	0	0
	04/11/2015	0.0	0.0	0.0000	2.8	2.8	0.0168	18.2	1008	0.6		1.45	0	0













General Notes

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Existing Section Scale 1:50

Metres 0 1 2 3 4 5 1:50

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Mr. Matt Godfrey

				A1 SHEET
zone A	DISCIPLINE ARCHITECTURE		STATUS SURVEY	TAL ARC LTD.
level A	DRAWING NUMBER 76FR-PP1-02		REVISION	
PAPER SIZE	A1 SHEET			33BA REGENT'S PARK ROAD 2ND FLOOR LONDON N3 2LN, U.K.
				T. 020 8349 4338
DRAWING TITLI	^E Existing Se	ction		E. INFO@TALARC.CO.UK W. www.talarc.co.uk
SCALE 1:50	DATE DRAWN CHECKED 07/08/2015 KM YS			PROJECT TITLE 76 Fleet Road, NW3



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Existing Rear Elevation Scale 1:50





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DRAWING TITLE Elevations Sections				E. INFO@TALARC.CO.UK W. WWW.TALARC.CO.UK	
SCALE 1:50	DATE 07/08/2015	DRAWN KM	CHECKED YS	PROJECT TITLE 76 Fleet Road, NW3	



Proposed Basement Floor Scale 1:50



Proposed Ground Floor Scale 1:50

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PROJECT TITLE 76 Fleet Road, NW3

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DATE

07/08/2015 KM

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Proposed Section Scale 1:50

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30 degree line - see drawing No. 06 for area

					A1 SHEET			
zone A	DISCIPLINE ARCHITEC	TURE	status PLANNING	TAL ARC LTD.				
LEVEL A	DRAWING NUMBER 76FR-PP1-05		REVISION					
PAPER SIZE A1 SHEET				338A REGENT'S PARK ROAD 2ND FLOOR LONDON N3 2LN, U.K.				
DRAWING TITL	^E Proposed S	Section		E. INFO@TALARC.CO.UK W. WWW.TALARC.CO.UK				
SCALE 1:50	DATE 07/08/2015	DRAWN KM	CHECKED YS	PROJECT TITLE 76 Fleet Road, NW3				



Proposed Front Elevation Scale 1:50

> Metres 0 1:50

2

3

4

5

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Proposed schematic of the added volume:





in height towards no. 78

Proposed Rear Elevation Scale 1:50

10

Additional Notes	REV DATE Initials	REVISION	PROJECT Extensions and alterations at 76 Fleet Road	ZONE A LEVEL A	DISCIPLINE ARCHITEC DRAWING NUN 76FR-PP1-(TURE IBER 06	STATUS PLANNING REVISION	TAL ARC LTD. Architecture Design	
			CLIENT Mr. Matt Godfrey	PAPER SIZE DRAWING TITL	A1 SHEET		СНЕСКЕР	338A REGENT'S PARK ROAD 2nd Floor London N3 2LN, U.K. T. 020 8349 4338 E. INFO@TALARC.CO.UK W. WWW.TALARC.CO.UK	
				1:50	07/08/2015	KM	YS	PROJECT TITLE 76 Fleet Road, NW3	

• Top floor to continue the building line of the neighbour

• Ground and First floor to extend to side only and abut the existing party wall (depicted in dashed line) over 7m